

EVERY CONFERENCE BRINGS NEW HORIZONS



INTERNATIONAL CONFERENCE ON NEW HORIZONS IN EDUCATION



INTERNATIONAL DISTANCE EDUCATION CONFERENCE



INTERNATIONAL TRENDS AND ISSUES IN COMMUNICATION & MEDIA CONFERENCE

JULY 18-20, 2018, PARIS, FRANCE

Proceedings Book Volume 2

ISSN: 2146-7358

Editors

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Published Date: December, 2018

Dear Guests...

Welcome to the 9th INTE, ITICAM & IDEC -2018.

International Conference on New Horizons (INTE), International Trends and Issues in Communication & Media Conference (ITICAM) and International Distance Education Conference (IDEC) are international academic conferences for academics, teachers and educators. They promote the development and dissemination of theoretical knowledge, conceptual research, and professional knowledge through conferences activities, the conference proceedings books and TOJET, TOJDEL and TOJNED Journals. Their focus is to create and disseminate knowledge about new developments in these academic fields.

INTE, ITICAM & IDEC conferences are now well-known international academic events and the number of paper submissions and attendees are increasing every year. This year our conferences have received more than 900 applications. The Conference Academic Advisory Board has accepted approximately 600 papers to be presented in Paris, France.

We would like to thank Prof. Dr. Mehmet Ali YALÇIN, Rector of Sakarya University and the President of the Association of Quality in Higher Education Prof. Dr. Muzaffer ELMAS, for their support of organizing these conferences.

We also would like to thank our distinguished guests, keynote speakers for their collaborations and contributions for the success of these conferences.

And finally, we would like to thank to all of our participants who have presented their academic works in INTE, ITICAM and IDEC- 2018, Paris, France.

Without their participation, INTE, ITICAM & IDEC-2018 would, of course, have been impossible.

We would like to sincerely thank all of you for coming, presenting, and joining in the academic activities.

We would also like to thank all of those who have contributed to the reviewing process of INTE, ITICAM & IDEC conference papers, which will be also published in TOJET, TOJNED, TOJDEL and TOJCAM.

Finally, we would like to wish you all a successful conference, pleasant stay in Paris, France.

Thank you

July 18, 2018 - Paris, France

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Quality in Turkish Higher Education

Prof. Dr. Muzaffer ELMAS

President of Higher Education Quality Council, Turkey



Leading Academic Change: Vision, Strategy, Transformation

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Creating the Next in Education: A Vision for 2040

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Material Design And Teaching Technologies Course To The Teacher Candidates

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Abstract

The aim of this research is to examine the views of the students taking Instructional Technology and Material Design course. In this study, one of the qualitative research approaches, "special case study method was used, and the obtained data were collected by" semi-structured student interview form. The analysis of the qualitative data was evaluated by the content analysis method.

The aim of this course is social development, the perspective of educational environment, material development project, material use competencies and the reasons for seeing the teacher training program. It also analyzes the demographics.

The study group of this research consists of a total of 200 students studying at the faculties of Near East University, Sports Sciences.

Introduction

Nowadays, the candidates in the teaching department of the universities are taking courses in the education faculties they study in order to gain the skills and behaviors required in their professional life after graduation. These courses offered in the faculties aim to provide students with the necessary competencies for their own fields as well as having sufficient equipment and confidence in the field. It is seen that one of the educational courses, Instructional Technology and Material Design course is one of the important courses in the teaching formation.

Teaching is the regulation of information and the environment to create learning in general. The environment includes not only the place where teaching is, but also the methods, techniques and tools necessary to convey information and direct the student's work. Information and the environment may also vary depending on the teaching objective in the program. Learning is a product of life and a relatively permanent track behavior change.

There should be an environment for learning-teaching. It is important to create appropriate environments in order to provide training that is considered as a process of behavior change. The field of learning-teaching is called the training environment (Soytekini & Yinal, 2017). Educational environments should be differentiated according to the conditions of the individuals to be educated. A different educational environment should be established for the courses in each level of schools, programs and programs in schools. It can easily be said that if the school, building classrooms and laboratories and the teaching technology and materials are not available or if they are inadequate and almost identical, the educational environment is not suitable.

In general terms, the communication between the sender and the receiver is called a communication that is shared with a shared shopping relationship. This process starts with the message being sent to the recipient by the source and ends with the recipient receiving and evaluating this message and reacting accordingly. A number of behaviors must be performed to achieve communication. There are five basic elements to be considered when examining the communication process. These; source, message, channel, receiver, and return. The source of the communication process in education is the teacher and the recipient. The content of the message program is the textbook or the voice of the teacher, the teaching process of the channel or the methods, technical tools and materials used in the process. Teachers benefit from three types of communication methods. These types of communication are communication with the help of oral, non-verbal and other technological equipment. In order to be a good educator in the education system, it is necessary to know the communication process very well. In the teaching-learning process, a trainer needs to establish a healthy communication with his / her students in order to teach an issue effectively. Communication related to education is related to the interaction of the student and the environment. Detection occurs when the student's senses respond to the message and the effect of the message. As long as individuals reach the consciousness of themselves and the world, it is called perception.

Technology and materials can be made more economical. With the teaching of technology and materials, less time is spent to determine the needs of students and to adjust the teaching accordingly. Less time spent by teachers and students positively affects the speed and cost of schooling. Fast and more economical schooling means that students should leave the school earlier and learn more about the time they stay at school.

If teachers are uninterested or inadequate about using technology and materials, it can be said that the education program will not be successful in ensuring students' learning. Teachers' attitudes and abilities related to technology and material use are effective in students' learning. Some teachers may not have sufficient knowledge of using technology and materials in their courses. Some teachers may also be reluctant to use new technology and materials. In addition, some teachers feel that it is difficult to use technology and materials, they may feel under pressure, or they can rely more on traditional strategies and traditional technologies and

materials. In order to eliminate all these drawbacks, teachers should be given the necessary information on how to benefit from the products of educational technology. In order to meet the three basic requirements in educational applications, educational technologies and materials are used.

In the faculties of education, pre-service teachers are enabled to feel ready for the profession with affective aspects along with cognitive gains. For this reason, it is important that teacher candidates have positive attitudes towards the ÖTMT course which is one of the teaching professional knowledge courses and they are important in terms of designing materials for their own fields and transferring them to students as appropriate (Akay ve Argün, 2006).

It is thought that the use of a skill that includes complex mental processes in this process by the trainee teachers will contribute positively to the future professional lives of the students and the success of the students. For this purpose, it is considered important to examine the relationship between creativity perception and attitude variables towards the course.

Purpose of the Research

In this research, it is aimed to examine the opinions of prospective teachers about the teaching of Instructional Technology and Material Design (SCT) course in different aspects. For this purpose, the following questions were sought;

1. What are the perceptions of teacher candidates who take Teaching Technologies and Material Design course?
2. What are the material design, self-efficacy belief levels of teacher candidates who take Teaching Technologies and Material Design course?
3. What are the attitude levels of prospective teachers who take Teaching Technologies and Material Design course towards the ÖTMT course?
4. Do the teacher candidates' perceptions of creativity differ according to the department?
5. Are the teacher candidates who take Teaching Technology and Material Design course differentiate according to the department?
6. Is there a meaningful relationship between the creativity perceptions of the prospective teachers who take Teaching Technologies and Material Design course and their attitudes towards Instructional Technology and Material Design course?

Method

Research Model

The aim of this study is to examine the opinions of prospective teachers about the teaching of Instructional Technology and Material Design (ITCT). In order to present the views given in this sense, one of the qualitative research approaches, el Special Case Study i method was used.

In this study, it was carried out with the holistic single case design of the special case study because it was the subject of Instructional Technology and Material Design as a single unit of analysis (Yıldırım & Şimşek, 2005). The case study is carried out in a natural environment, such as a class or an organization, and aims to take a holistic approach to the events and environments that are the subject of the study (Phillips and Burbules, 2000).

Working group

Working group; It is comprised of 300 students studying at Lefke European University in the Turkish Republic of Northern Cyprus. As a sample representing the universe, undergraduate students from the Faculty of Sport Sciences of the European University of Lefke were enrolled.

Data collection tool

In order to determine the attitudes of pre-service teachers who took STSM courses towards ÖTMT course, 2013 Attitude Scale for Instructional Technologies and Material Design Course mek which was developed by Çetin, Bahçeci, Kınay and Şimşek (2013) was used.

Attitude Scale Validity

The first step in the development of the ÖTMTDYTÖ was to examine the literature by the researchers and form a pool of substances with statements indicating attitudes towards the instructional technologies and material design course. The item pool consisted of 46 items. Then, 5 experts in the field of educational sciences were interviewed for the superficial (appearance) and scope validity of the scale. According to expert opinions, 5 items were removed from the scale and 3 items were changed (Çetin, Bahçeci, Kınay and Şimşek, 2013). After these processes, the scale was finalized with a 5-point Likert-type rating, which I strongly disagree (1), I disagree (2), I am undecided (3), I agree (4) and I strongly agree (5). The validity and reliability studies of the scale were conducted on three different groups of students who studied at Ziya Gökalp Faculty of Education in Dicle University in 2012-2013 Fall Semester and who successfully completed the course.

The first group consisted of 358 (174 males, 184 females) in which the construct validity, internal consistency reliability and item analyzes of the Attitude Scale for Instructional Technology and Material Design Course were conducted, and the second group of 79 (42 males, 37 females) in which the compliance validity study was conducted, and the test was repeated. The third group consisted of 106 (52 male, 54 female) students. In order to

conduct the validity study of the scale, Attitude Scale for Instructional Technologies (ÖTYTÖ) which was developed by Metin, Kaleli Yılmaz, Coşkun and Birişçi (2012) was used (Çetin, Bahçeci, Kınay and Şimşek, 2013) Explanatory Factor Analysis for construct validity studies. and Confirmatory Factor Analysis (CFA). The KMO value of the scale was found to be .948 and the Barlett Sphericity test was significant ($p < .05$, $Df = 528$). According to these results, it was determined that the data set was suitable for factor analysis. After the data set was found to be suitable for factor analysis, it was seen that 33 items were collected under 3 dimensions explaining 53,83% of the total variance by AFA as a result of principal components technique and direct oblimin rotation technique. The first dimension is defined as usefulness ve, the second dimension is eci liking etin and the third dimension is called olarak denial boyut (Çetin, Bahçeci, Kınay and Şimşek, 2013). The correlation between the Attitude Scale for Attitudes towards Instructional Technologies and the Correlation Scale for Instructional Technologies were examined. A positive and significant correlation between the two scales was found. 535. The calculated internal consistency (Cronbach Alpha) coefficient was .94 for the whole scale and .78 to .95 for the sub-dimensions of the scale; test-retest reliability was calculated as .90 for the whole scale and .76 to .88 for the sub-dimensions of the scale. The findings obtained from the item analysis show that the corrected item total correlations of the subscales ranged from .319 to .710. (Çetin, Bahçeci, Kınay and Şimşek, 2013)

Data Analysis

Descriptive statistics were used to determine attitude levels and creativity perceptions.

One-dimensional analysis of variance (ANOVA) and multi-dimensional analysis of variance (MANOVA) were used to determine whether there was a significant difference between the attitude levels and creativity perceptions of the students. Pearson correlation coefficient analyzes were performed to determine whether there was a significant relationship between the scores of the scales.

Findings And Comment

In this section, the findings related to the sub-problems of the study were presented and then comments on the findings were discussed and compared with the results obtained in the literature.

The views of prospective teachers studying in the Department of Physical Education and Sports in the instructional technologies and material design course were examined in different dimensions. "Professional (, ili contribution to individual and social development alma," material development project esi, "material use competencies değişim," the necessity of taking the course in the program ", instructional technologies and material design (ÖTMT) has been tried to determine the opinions about the course.

Table 1. Descriptive Statistics On The Creativity Perceptions Of Prospective Teachers Taking Instructional Technologies And Materials Design Course

Creativity scale	N	\bar{x}	SS
The whole scale total score	200	44,07	14,70

When Table 1 is examined, it is seen that the teacher candidates who take the ÖTMT course have arithmetical average value (\bar{x} alan = 44,07) of the points they get from the ar How Much of Your Creator den scale. Based on this finding, when the inin How Much Creativity Scale (score is taken into consideration (0-116), the mean of the answers of the teacher candidates who took the ITMT course on the scale of how much creative they have (\bar{x} = 44,07) is higher than the mean (40-64 points). They have a level of creativity perception.

Table 2. Descriptive Statistics Related To The Attitude Levels Of Teacher Candidates Who Took Instructional Technologies And Materials Design Course Towards ÖTMT Course

Courses at ÖTMT			
	N	\bar{x}	SS
Attitude Scale			
Delectatn	200	3,44	0,85
Abnegatn	200	4,07	0,95
Benefit	200	3,75	0,67
Full Scale	200	3,72	0,63

When Table 2 is examined, the arithmetical average value of the attitude scale for the Instructional Technology and Material Design course (= 3.44); It is observed that the arithmetic mean value (= 4.07) of the sub-dimension and the arithmetic mean value (= 3.75) for the usefulness sub-dimension. Based on these findings, "Attitude Scale for Instructional Technology and Material Design Course boyut is a 5-point Likert-type scale.

It can be said that the average values of the items are positive because the values that can be taken by the items of scale (1) vary between T Strongly Disagree and (5) M Totally Agree and therefore teacher candidates who take the ÖTMT course have developed a positive attitude towards ÖTMT lesson.

Table 3. ANOVA Results Showing Whether Teacher Candidates' Creativity Perception Scores Differ According To Their Sections

Variance Source	Squares	sd	Squares	F	p
	Total		Average		
intergroup	901,916	10	90,192	,410	,941
inter-group	81301,171	190	219,733		
Total	82203,087	200			

$p < 0.05$

Table 3 is examined, it is seen that there is no significant difference between the perception of creativity perception of teacher candidates who took Instructional Technology and Material Design course according to the part studied $F(10, 200) = 0.41$ $p > 0.05$. It can be stated that the teacher candidates' scores on the perception of creativity are not affected by the department variable they study. It is possible to explain the reason for this situation as the teacher candidates are being trained in a similar education system in the faculties of education.

Table 4. MANOVA results showing that teacher candidates' attitude levels towards ÖTMT course differ according to their departments.

ÖTMT Attitude
For The Course
Section

		N	\bar{x}	SS	sd	F	p	d
useful	Social Knowledge.							
	Inst.	17	72,6	14,13				
	Classroom Teacher	36	77,5	10,12				
	English Teacher	20	66,86	15,63				
	Painting Teacher	7	70,5	8,89				
	Science Inst.	16	69,45	11,31				
	Special Education							
	Inst.	25	68,37	17,33	10-370	2,74	0,00	0,07
	Turkish Teacher	18	71,97	13,65				
	Mathematics Teachr	8	74,55	11,09				
	Bote teacher	20	70,09	11,63				
	Music Teaching	11	70	6,21				
	Preschool Teacher	22	67,55	12,66				
Abnegatin	Social Knowledge.							
	Inst.	17	21,02	4,76				
	Classroom Teacher	36	21,94	5,59				
	English Teacher	20	19,96	3,65				
	Painting Teacher	7	20,66	3,78				
	Science Inst.	16	18,85	3,3				
	Special Education							
	Inst.	25	19,72	5,61	10-370	1,35	0,20	0,04
	Turkish Teacher	18	20,11	4,76				

Mathematics Teacher	8	20,36	4,68
Bote teacher	20	20,25	4,73
Music Teaching	11	19,42	5,35
Preschool Teacher	22	20,7	4,54

Dimensions

Social Knowledge. Inst.	17	34,34	9,96				
Classroom Teacher	36	36,1	5,83				
English Teacher	20	28,13	8,03				
Painting Teacher	7	28,38	4,92				
Science Inst.	16	29,07	5,6				
Special Education Inst.	25	30,54	9,37	10-370	5,76	0,00	0,14
Turkish Teacher	18	30,54	6,04				
Mathematics Teacher	8	31,52	7,18				
Bote teacher	20	28,12	7,39				
Music Teaching	11	29,15	6,3				
Preschool Teacher	22	28,61	6,84				

Table 5. Education Technologies and According to aAttitude Points to Intended Material Desing Turkey Test Findings

Sub-dimensions of the scale	(I) Section	(J) Section	Averages	p
			Difference (I-J)	
useful	Classroom	Social Knowledge. Inst.	4,9032	,735
		English Teacher	10,6464*	,010
		Painting Teacher	7,0085	,602
		Science Teacher	8,0561	,061
		Special Education	9,1301*	,025
		Turkish Teacher		
		Mathematics Teacher	5,5370	,606
		Bote teaching	2,9558	,989
		Music Teaching	7,4147	,212
		Preschool Teacher	7,5085	,464
		Turkish Teacher	9,9497*	,012
		Classroom Teacher	-1,7596	,986
		English Teacher	6,2042*	,024
		Painting Teacher	5,9532	,136
delectatin	Social Knowledge. Inst.	Science Teacher	5,2707*	,048
		Special Education		
		Turkish Teacher	3,8016	,456
		Mathematics Teacher	3,7992	,479
		Bote teacher	2,8158	,838
		Music Teaching	6,2171*	,017
		Preschool Teacher	5,1842	,281
		Classroom Teacher	5,7245*	,036
		Social Knowledge. Inst.		
		English Teacher		
		Painting Teacher	1,7596	,986
		Science Teacher	7,9638*	,000
		Special Education	7,7128*	,004
		Classroom Teacher	7,0303*	,000
		Turkish Teacher	5,5612*	,013
		Mathematics Teacher	5,5588*	,016
		Bote teacher	4,5754	,089
		Music Teaching	7,9767*	,000
		Preschool Teacher	6,9438*	,014
		Social Knowledge. Inst.	7,4840*	,000

p<0,01

Table 5 is examined, it is seen that the teacher candidates' attitude points towards Instructional Technology and Material Design course show a significant difference according to the departments they study [Wilks Lambda (λ) = 0.823; $F(3, 368) = 2.49$ $p < 0.01$. When the usefulness subscale of the Attitude Scale for Instructional Technology and Material Design Course is examined, it is seen that the attitude points of the teacher candidates towards the Instructional Technology and Material Design course show a significant difference according to the departments they studied [$F(10, 370) = 2.74$ $p < 0.01$, $d = 0.07$]. Similarly, when the sub-dimension of the Attitude Scale for Instructional Technology and Material Design Course is analyzed, it is seen that the attitude points of the teacher candidates towards the Instructional Technology and Material Design course show a significant difference according to the departments they studied [$F(10, 370) = 5.76$ $p < 0.01$, $d = 0.14$]. Finally, when the subscale of the Attitude Scale for Instructional Technology and Material Design Course is examined, it is seen that the attitude scores of the teacher candidates towards the Instructional Technology and Material Design course did not show a significant difference according to the departments they studied [$F(10, 370) = 1.35$ $p > 0.05$, $d = 0.04$]. Within the frame of these findings, it is possible to say that teacher candidates who

study in different departments and who take Instructional Technologies and Material Design course have differences in teaching technologies and material design, and find differences in their level of enjoyment.

Table 6. Pearson Correlation Analysis Results Showing Whether There Is A Significant Relationship Between The Teachers' Perceptions Of Creativity And Their Attitudes Towards Instructional Technologies And Material Design Course.

	NKY	YD
NKY	-	
YD	,070	
H	,057	,312**
YR	,046	,247**
BMH	,121*	,121*
ÜBMT	,068	,155**
BMT	,149**	,085

*p< .05; **p< .01

Not: NKY: How creative are you; YD: repudiation; H: Ho lanma; YR: Yararlılık

When Table 6 is examined, it is seen that there is a low, positive and significant relationship between the self-efficacy belief levels and the creativity scores of two-dimensional material design from the sub-dimensions of düzey Material Design Self-Efficacy Belief Scale boyut. = 0.15, $p < 0.01$); Although it was seen that “Material Design Self-Efficacy Scale δ was a positive and significant relation between self-efficacy belief levels and creativity levels about computer material preparation sub-dimension ($r = 0.12$, $p < 0.05$). There is no significant relation between self-efficacy belief levels and creativity levels for three-dimensional material design ($r = 0.07$, $p > 0.05$) (see Table 4.9). According to this, it can be said that pre-service teachers have an increase in their level of creativity, or that an increase in their level of creativity affects the level of self-efficacy belief in material design.

Discussion, Conclusion And Suggestions

In an accreditation study conducted in the USA, the awareness of the technology and materials used in the teaching of the faculty members in the university and the evaluation made in the course of the course showed that the instructors' technology awareness and use on the basis of fields differed (Hora and Holden, 2013). This result is effective in the emergence of differences in the application of ÖTMT course which teacher candidates receive by field educators or educational sciences expert.

Uncovered in studies with teachers in Turkey; negative results such as inadequacy, self-confidence and lack of knowledge, theoretical method and similar results were also observed in studies conducted abroad. As a result of a study conducted by the Office of Technology Assessment in America, teachers and candidates stated that they felt they were inadequate in instructional technologies, did not receive effective training in in-service training, and did not learn the technologies to be included in the teaching (Yanpar, 2011). In addition to this evaluation, it was found that 75% of the universities in the study conducted by the researchers in some states was not a subject related to instructional technology in teacher education (Yanpar, 2011).

Yaman materyalin (2007) in his study with the Turkish teachers stated that they felt inadequate in terms of material design in their fields. It should be noted that the field educator's contributions to the candidates on their professional gains. English teachers who take the ÖTMT course from the education sciences specialist and the other instructors are the most ineffective gain of the course. Erol (2012) 's) Elementary Education II. In this study, it was found that there was no significant difference between the use of instructional technologies and the use of instructional technologies according to gender variable. It is thought that male teachers in the sample may be more interested in using technology than women, and this situation is reflected in education-training environments.

In his study, farklılık A Study of the Instructor of Technology Integration in the Classroom. Draheim and Weber, (2005). he found no significant difference in the use and integration of technology according to gender variable. This result may be due to the fact that 84% of the participants were male and 16% were female. As a result of the study of Dobbins, (2009) there was a difference between teachers' views in terms of gender variable. In the study there is a difference between the use of educational technologies and differences in the use of computers, books, multimedia, audio cassettes, tapes and data projections. According to this, it is concluded that male teachers say that they use more new technologies such as computers and multimedia compared to female teachers.

In a study by Dikici and Sağnak (2010), it was found that the teaching proficiency scale had a positive but low correlation ($r = .126$) between the general teaching sub-dimension and attitudes towards teaching profession, and this correlation decreased when other variables were controlled ($r = .125$).). In addition, it was found that there was a low negative relation between the sub-dimensions of the competency scale and the attitude towards individual teaching and teaching profession ($r = -.124$) and a low negative relationship between the self-confidence of the other sub-dimension and the attitude towards the teaching profession ($r = -.007$). Similarly, in a study conducted by Çelikkaleli and Akbaş (2007), it was found that teacher candidates' self-efficacy beliefs about science teaching accounted for 39% of the attitude variance towards science lesson. In addition, in a study by Özkal (2013), it was found that 6th and 7th grade students' self-efficacy beliefs towards Social Studies course were a strong predictor of positive attitudes. It was found that the self-efficacy belief scores for the Social Studies course could explain 16% to 22% of the variance in the positive attitude towards the Social Studies course. In this context, it is possible to say that there is a similarity between the findings of the eighth sub-problem and the findings from the literature.

References

- Akay, H. ve Argün, Z. (2006). Farklı öğretim süreçlerindeki fen bilgisi öğretmen adaylarının yaratıcılıklarının cinsiyete ve mezun olunan lise türüne göre karşılaştırılması. *Gazi Eğitim Fakültesi Dergisi*, 30 (1), 17-37.
 Boston: Rowman and Littlefield Publisher
 Çelikkaleli, Ö. ve Akbaş, A. (2007). Sınıf öğretmeni adaylarının fen bilgisi dersine yönelik tutumlarını yordamada fen bilgisi öğretimi öz-yeterlik inançları. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 3 (1), 21-34.

- Dikici, A. ve Sağnak, M. (2010, Eylül). *Öğretmen adaylarının öğretmenlik mesleğine karşı tutumlarının ve yeterliklerinin incelenmesi*. Sözlü bildiri, 19. Eğitim Bilimleri Kurultayı, Uluslararası Kıbrıs Üniversitesi, Kıbrıs.
- Dobbins, K.(2009). Teacher creativity within the current education system: Case study of the perceptions of primary teachers. *Education*, 3 (13), 95–104.
- Draheim, D. and Weber, G. (2005). *Form-oriented analysis: A new methodology to*
- Erol, O. ve Taş, S. (2012). MYO öğrencilerinin bilgi ve iletişim teknolojilerini kullanma sıklıkları ile yaratıcılık algıları arasındaki ilişkinin incelenmesi. *Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 4 (7), 82-104.
- Lesinger, F. Y., Altınay, F., Altınay, Z., & Dagli, G. Examining the role of leadership, trust for school culture and policy. *Quality & Quantity*, 1-24.
- model form-based applications*. Berlin: Springer.
- Özkal, N. (2013). Sosyal bilgiler dersine yönelik olumlu tutumların özyeterlik inançlarına göre yordanması. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 9(2), 399-408.
- Phillips, D. C. and Burbules, N. (2000). *Postpositivism and educational research*.
- Soytekini N & Yınal, A. (2017). New Approach to Entrepreneurship Education in Primary Schools: The BGENTL.
- Yaman, H. (2007). Türkçe öğretmeni adaylarının öğretim teknolojileri ve materyal geliştirme dersi bağlamında Türkçe öğretiminde teknoloji kullanımına ilişkin yeterlilik ve algıları. *Hasan Ali Yücel Eğitim Fakültesi Dergisi*, 7 (1), 57-71.
- Yanpar, T. (2011). *Öğretim teknolojileri ve materyal geliştirme*. Ankara: Anı Yayıncılık.

Mathematical Reasoning of Vocational School Students

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Abstract

Educational research has pointed out the problem of rote-learning and the effect of concerning conceptual teaching and learning. Lecture activities in this environment students need to consider this aspect while constructing any task by themselves and teachers must develop teaching activities where this is possible in classes. We present in this study analysis of the classifications with creative reasoning applied to vocational school students. This study focused the model established by Lithner (2008) that discriminates between derivative reasoning that linked to efficient learning of algorithms and concepts, and creative reasoning that includes conceivable math originated opinions. The study includes the investigation of records, lecture textbook, coursework and examinations applied to basic mathematics classes in from different three universities in Turkey with the view to classifying the types of reasoning expected of the students. More over explaining of our application model to Lithner's method, also we focuses validity of the method used a basic factor in this study for categorizing reasoning alternative conditions in our mathematics classes.

Keywords: vocational school, mathematical reasoning, lithner's method

Introduction

There are many mental abilities for students that has a powerful role directly to affect students' mathematics learning but powerful and useful mental activities and non-classic problem-solving skill that known to be closely connected to math accomplishment (Swanson & Alloway, 2012). Educational studies of students' mathematical proving had also positive effected conceptual context of mathematical verifying for better presentation of the different views of students' ability in mathematical demonstrating. The other way involved in students' assessment of math confirmations and rational understanding of many confirmation styles (Antonini & Mariotti, 2008; Harel & Sowder, 1998; Selden & Selden, 2003; Stylianides & Stylianides, 2009). The reporting studies has partial effects of logic training, but, didn't discover the use of arithmetical and algebraic examples as an different of logic training and the effects of such an education program on students' justification of mathematica proofs and rational information of different proof approaches (Bhairst at all., 2008; Unsworth and Engle, 2005).

Calculating skills and routine learning of mathematical rules also necessary for an efficient problem-solving process, since the focus can be settled in the task at widely changing of each small subjects. The connection between some reasoning procedures and math reasoning is basic motif of the results of our experiments in this study (Norqvist, 2016). Lithner (2008) gives reasoning as 'the line of thought adopted to produce assertions and reach conclusions in task - solving'. This description has powerful and ordered or simple points and could not be limited to general analyze of mat theorems. The method is suitable in working the mental analyse procedures needed to explain difficulties in basic mathematics classes, that usually confirmations of the theorem are not presented, in this step learners should compose a simple configuration to make reasonable opinions and decisions during their tasks. Lithner give main differences between imitative reasoning that is connected to repetition education and impression of numerical calculating and imaginative reasoning that includes reasonable math-based opinions. In this study, it is applied the context to categorize the reasoning prospects obtainable in the context of business mathematics offered in the three universities (Bhairst at all., 2008). We are using classes for expert and non-expert students, More over essential and non-essential modules.

Many process and procedure in mathematics are remembered for fast and unforced in lecture. For example, the command of basic operations can be completed to have rapid operation to go to final step. But this operational format can also convert to a big problematic situation if it happens without understanding the main idea. Rote learning can be defined as a mechanical repetition of the learning concept (Mullis, Martin and Arora, 2012).

According to the education researchers, transition from high school (or college) to university is generally recognized as a difficult and painful process and learners usually accept that the transition in mathematics and science classes is especially difficult and a challenging journey (Boesen and Lithner, 2010). Students' problems in first year mathematics turn out to be conceptual approach rather than concrete presentation of mathematics teacher (Gueudet, 2008; Fucawa-Connelly, 2005). Students' problems are especially cognitive understanding of the concepts such as complex numbers, special function, derivative, and deeply analyzing of definition of these concepts and their long and abstract proofs. These basic concepts of vocational school mathematics are also used extensively from the students with the departments such as engineering, physics, biology, some social programs. It is a well-known and famous math approach that the study of mathematics be efficient step by step with the development of abstract thinking skills (Clark and Lovric, 2009; Lithner, 2008; Bhaird et al., 2008).

Conceptual Framework

When rote learned notions convert the core information, learners would not answer problems that have changed views from instructor's sample or textbook's application (Weber, 2001). Mathematical proofs are crops of mathematical demonstrating. Moreover, we prefer to use the term "Mathematical Proving" in this study had used with proof constructions (Harel & Sowder, 1998; Weber, 2001). This skill had been planned as a significant for students' proof and demonstrating (Alcock & Weber, 2005; Selden & Selden, 2003; Bhaird et al., 2008).

In this study, some kind of questions is learners' work equipment's during the investigation period. Lithner (2008) clarified differences between imitative and creative reasoning. Imitative reasoning has the following key forms: memorized and algorithmic. In order to be grouped as memorized a reasoning technique should have involved the following steps: a). The tactic choice is investigated on focusing a whole response. b) The tactic application wants to have the recording version (Bhaird et al., 2008).

The reasoning endorsed by the mission is connecting on the learners' previous information and the textbook, direction, or examples. Learners' reasoning classification going on with the presented mission by their teacher and going on to a response that is the creation of the mission (Norqvist, 2016). The creative reasoning organization can be separated into two subclasses (Dreyfus, 1991): Local creative reasoning; and Global creative reasoning. A problem set is recognized "need local creative reasoning" if it is answerable using any math algorithm but the it wants to be adapted by a math algorithm locally. A problem group is recognized "need global creative reasoning" if the problem doesn't have an explanation that is created on any math algorithm and requires creative reasoning. This kind of reasoning is usually presented at the vocational school level when students are requested to remember a math concept, to state an axiom and a proof of specific theorem (Bhaird et al., 2008). Lithner (2008) gives a reasoning application for creative view if it has the following three types:

- i. An original reasoning arrangement is activated: Novelty
- ii. Performing of opinions is essential to study on a strategy. This inspires learners be aware of that the decisions are true or not true: Plausibility.
- iii. Background level of student's ideas for the accomplishment of the strategies: Mathematical foundation.

Method

In this study, we applied a question paper from mathematics classes of the different departments of three vocational schools in Turkey. The classes contain the mathematics elements. These modules were constructed from the mathematics classes presented to vocational school students. The data in the study contain of the next kinds of question models: classroom notes, textbooks problems, exercises and different questions types. It was grouped all the information with the collaboration of the module lecturers. The data analysis of every element is being directed by the authors of this article (Bhaird et al., 2008).

The exploration method confirms consistency of the analysis of the lecture material from the modules used for this study. We first made the analyzing of the categorization of the examples and problems from our lecture textbook, in order to gain some experience and test our classification methods. These procedures were presented by Lithner (2008). He first constructs an answer to the task and later related them to the lecture papers and text exercises. By focusing his/her context, we examine that the task would be answered by means of algorithmic reasoning and the creative reasoning is required for the analysis. In this period, we observed that the most problematic choices are related about the organization of tasks into the local creative reasoning and we planned the framework as the way that: we define that we could modify a problem as local creative reasoning if the local creative reasoning was settled on an mathematical algorithm (Bhaird et al., 2008; Norqvist, 2016).

Analyses and Findings

We present some examples of tasks designed by the researcher classified using the Lithner reasoning framework. We concentrate on a main subject to be comprehensible status and to be more confidence to relating groups. We select the topic of rational equations, that is important in many basic mathematics classes. In the course for a question, the classroom documents and the textbook examples of rational equations using the quadratic formulas (Bhaird et al., 2008). Moreover, we present some examples that exemplify the methods planned for this study.

Task 1: Solve the following rational equations, give your answers with different format if it is possible.

- (a) $x^2 - 12x + 35 = 0$;
- (b) $x^2 - 4x - 1 = 0$;
- (c) $6x^2 - 24 = 0$;
- (d) $x^2 - 10x + 25 = 0$;
- (e) $x^2 + 6x + 10 = 0$;
- (f) $x^2 - 12x + 150 = 8x + 54$.

Analysis of the parts of the Task 1:

In this question, students are expected to use the quadratic formula or factorization of the rational equations.

- a) $x^2 - 12x + 35 = (x - 5)(x - 7)$, then the solutions are $x = 5, 7$;
- b) by using of the quadratic formula of rational equations, then the final step of the solution is $x = 2 \pm \sqrt{5}$, with other expression, $x = 4.236$, and $x = -0.236$;
- c) $6x^2 - 24 = 4(x^2 - 4) = 2(x - 2)(x + 2)$, so the solutions are $x = -2, 2$;
- d) $x^2 - 10x + 25 = (x - 5)^2$, so there is just unique solution at $x = 5$;
- e) using the quadratic formula we have $x = -3 \pm \sqrt{-1}$, so there are no real solution;
- f) subtracting $8x + 54$ from both sides gives $x^2 - 20x + 96 = 0$ and since $x^2 - 20x + 96 = (x - 8)(x - 12)$, the solutions are $x = 10, 14$.

Result

Mathematics students employed much time to apply of the tasks. It is significant to study with these tasks from a learning perspective. It is vital the advance of basic math abilities such as creative reasoning of student that transfer students to powerful and solid mental levels and their assignation with the educational procedure. In this paper, it was focused, to understand student mental processing, an analysis of the classifications study for creative reasoning approach applied to vocational school students. We need to note that the analysis of all questions used for this research for the different classrooms has not been presented in this paper. Thus, we don't give full finding of the research question in the section of findings (Bhaird at all., 2008).

References

- Alcock, L., & Weber, K. (2005). Proof validation in real analysis: Inferring and checking warrants. *Journal of Mathematical Behavior*, 24, 125-134.
- Antonini, S., & Mariotti, M. (2008). Indirect proof: what is specific to this way of proving? *ZDM*, 40(3), 401-412.
- Bhaird, C., Nolan, B., O'Shea, A., & Pfeiffer, K. (2008). An analysis of the opportunities for creative reasoning in undergraduate calculus classes. <https://www.dcu.ie/sites/default/files/smec/pdfs/CMacAnBhaird-analysis-of-opportunities-for-creative-reasoning-in-undergraduate-calculus-course.pdf>
- Boesen, J., Lithner, J., & Palm, T. (2010). The relation between types of assessment tasks and the mathematical reasoning students use. *Educational Studies in Mathematics*, 75, 89-105.
- Clark, M. & Lovric, M. (2009). Understanding secondary-tertiary transition in mathematics. *International Journal of Mathematical Education in Science and Technology*, 40 (6), 755-776.
- Dreyfus, T. 1991. *Advanced Mathematical Thinking Processes*, in Tall D. (ed) *Advanced Mathematical Thinking*. Kluwer Academic Publishers.
- Fukawa-Connelly, T. 2005. Thoughts on learning advanced mathematics. *For the Learning of Mathematics*, 25, 33-35.
- Harel, G., & Sowder, L. (1998). Students' Proof Schemes. In A. H. Schoenfeld, J. Kaput & E. Dubinsky (Eds.), *Research in College Mathematics Education III* (pp. 234 - 283). Providence, R.I.: American Mathematical Society.
- Lithner, J. (2008). A research framework for creative and imitative reasoning. *Educational Studies in Mathematics*, 67, 255-276.
- Mullis, I. V., Martin, M. O., Foy, P., & Arora, A. (2012). TIMSS 2011 international results in mathematics. International Association for the Evaluation of Educational Achievement. Herengracht 487, Amsterdam, 1017 BT, The Netherlands.
- Norqvist, M. (2016). On Mathematical Reasoning. <http://umu.diva-portal.org/smash/get/diva2:954413/FULLTEXT01.pdf>
- Selden, A., & Selden, J. (2003). Validations of Proofs Considered as Texts: Can Undergraduates Tell Whether an Argument Proves a Theorem? *Journal for Research in Mathematics Education*, 34(1), 4-36.
- Stylianides, A., & Stylianides, G. (2009a). Proof constructions and evaluations. *Educational Studies in Mathematics* Retrieved from <http://www.springerlink.com/content/v2611945638x1763>. doi:10.1007/s10649-009- 9191-3.
- Swanson, H. L., & Alloway, T. P. (2012). Working memory, learning, and academic achievement. In K. R. Harris, S. Graham, T. Urdan, C. B. McCormick, G. M. Sinatra, & J. Sweller (Eds.), *APA educational psychology handbook, Vol 1: Theories, constructs, and critical issues* (pp. 327-366). Washington, DC, US: American Psychological Association.
- Unsworth, N., & Engle, R. W. (2005). Working Memory Capacity and Fluid Abilities: Examining the Correlation between Operation Span and Raven. *Intelligence*, 33(1), 67-81.
- Weber, K. (2001). Student difficulty in constructing proofs: The need for strategic information. *Educational Studies in Mathematics*, 48(1), 101 - 119.

Mathematics and Vocational School Students

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Abstract

In this paper, we analyse the situation that what are the ways of finding of vocational schools of young students, children and people, if there is a relation between academic study level and determining the schools or is not a main factor, what is the creating of mathematical idea for vocational school students. This paper underlined regular research discipline research type with a methodological approach. The analyse way declined research design of Likert-type questionnaires for the account department student's selectin for this study from a vocational school in Turkey. A total 225 students were the study group of this study. The findings coming from this special school showed that there was a necessary and vital for a special curriculum program for students focusing on basic knowledge taught in their school and skills and organising the context of the mathematics curriculum applicable towards students' situation. As a result of this analyse, teachers face some important and tedious problems specific to the student group in their department in their school. They usually need to compose more applicable and more efficient schedules for working students in any special work area connection their school program or not. The school Atmosphere as imitated by students' own relation to learning in the classes area the views of the classroom, teachers' teaching, outlooks appears to be non-positive related item. All these necessities may not easy to determine an effective program for school administration. In this paper we have focusing some problems of student that need rectification in mathematics teaching program and learning level in the classroom. Finally we can say that specific teaching approaches of education and working life for vocational school students; focus on teaching for working students' to make more clear of basic knowledge and skills.

Keywords: vocational schools, mathematics, academic problems, students' beliefs

Introduction

Mathematics and all science disciplines are important and vital to the social life, economical conditions and, so progress of modern life a country for all time period of education. The teaching of accounting needs effective and powerful planning to make useful for students and ensure quality education system for the citizen of the country (Bakar at all, 2010; Kılıçaslan at all, 2018; Şeneldir at all, 2017b). While concerted necessities should be taken to educate the every body, we should not lover sight of the motivation of the vocational students. Learning mathematics in their program for vocational students is a phenomenon and interesting subject for some perspectives and does not often occur with clarity (Bakar at all, 2010)

Different factors and elements may cause to learning problems and understanding difficulties coming from student consultation level or motivation problems in mathematics for the students for their education life (Bakar at all, 2010). In all these items are: the scientific knowledge, mathematical language, symbols, difficulties and learning problems relating social conditions in processing mathematics, some visual confusions related to mathematics learning of students, and working life conditions memory and many difficulties, also unusually high anxiety in education life (Bakar at all, 2010; Şeneldir at all, 2017c; Valencia and Black, 2002). Understanding math for vocational students is a start point to feel attention and many schedules have designed learning conditions in all level of education environment which are more insprings even though the process of determining the difficulties of the problems come from all above factors are still at a uploading way (Bakar at all, 2010). Moreover, it is clearly pointed that there are specific needs, and all educational plans should be presented a real and long period of study by researchers ((Bakar at all, 2010).

Research studies for all education programs and especially vocational school education classes show that some difficulties in teaching strategies for learning mathematics are possible with low or much level in the classrooms (Bakar at all, 2010 Wheelage & Rutter, 1989). The all educational problem are, for example, insufficient points that students have relevant background basic knowledge for learning the lesson and rapid rate for introducing many of the concepts. Also, lack of logical level in the presentation of mathematics strategies in the classroom and poor communication and a lack of corporation activity in many instructional activities. Many authors mentioned this lack of motivation a basic negative factor in their studies. Moreover, insufficient teaching practice of teachers to help the students learning from the initial teaching level to make their teaching more effective and interesting to independent learning and insufficient analyse of their teaching periods to motivate them to students awae of that what they have learned at the lectures (Bakar at all, 2010; Koparan at all, 2018; Of at all, 2017; Tola at all, 2017; Şeneldir at all, 2017a; Seit, 2004).

The instructional approaches recommended from mathematic education researchers that implementation of interesting students' learning and to motivate their student learning, understanding levels and learning styles (Bakar at all, 2010; Of at all, 2018; Kahraman at all, 2018; Ernest, 2004; Dalby and Noyes, 2015). Also, application of powerful and effective teaching targets (Battal at all., 2017; Bostan, and Durmuş, 2016; Bostan, and Durmuş, 2017; Durmuş, 2016). The underlined points in this research are:

- To define problems connect to mathematics learning of students
- To determine problems effect to the teaching and learning of mathematics
- To understand learning atmosphere for students in learning the subjects
- To formulate some effective teaching strategies that are known not efficient for the math teaching for this course teachers.

Method

It is used a quantitative, descriptive examination analyzing method, having accounting department students in a vocational school in Turkey. Vocational school students usually refer to students with future academic planning problems and low academic achievement. 225 accounting department students from 1st year and 2nd year class level was used for this study. The students answered two separate 5-point Likert scale questionnaires indicating their level of agreement to specified items in each questionnaire for learning mathematics (Bakar at all, 2010).

Findings

By using of the questionnaire, the data was classified and it was settled that much of the students were male about 60% and the other were female 40%. The classification level of students who had good level academic of academic exam point in the course exams or tests were not good level, mean that 18.41%. Moreover, with the interesting points of student level who passed the tests were not god level, most of them believe that Mathematics were lovable to stud and understand. Our data analyses result showed that approximately 11.0% of student respondents negative feeling for Mathematics (Table 1).

Table 1: Students observation on mathematics

Perception category	Mathematics	
	Frequency	Percentage
Enjoy	136	60.4%
Moderate	61	27.1%
Dislike	28	12.5%
Total	225	100%

The accepting level to questioner items of students totally, they present positive attitudes for the learning conditions in their registered schools (Bakar at all, 2010). According to their basic points, the item which has the maximum level of coordination was 'Most of my teachers taught us with enthusiasm (mean=3.73). This finding give us when lo point students usually would attempt to reach the maximum score possible. Also, a positive answer on the way to the item 'My discipline teacher takes good care of students' (41.5% agreed). In a confident learning environment was produced to questionnaires items to several items, for example 'Almost all of my friends in my class tried to get the best score' (42.2% agreed). 'Teachers always want us to produce good work' (53.6% agreed), 'Students in my school integrate well among them' (52.2% agreed), and 'Most of my teachers taught us with enthusiasm' (41.7% agreed). Most of the finding in this step are less or more confident the result of our scale reference (Bakar at all, 2010). Generally, the findings showed that the students' feelings on the way to the learning enviroment of their schools was the direction of confident level (Table 3).

Result

With this study, it was tried to analyse vocational student feeling or perception against to their learning environment. The result connected to students' feeling of their learning atmosphere explain that most of students are confident or good level score way towards their learning atmosphere as the same the result of our scale reference (Bakar at all, 2010). More over, when items of question are related to students that showed to the negative feelings are detailed the study gave the result that meaningfully minimum level ability their explanations related to the abnormal expressions related to the maximum performance group of accounting department students.

The data give us that students focusing on basic knowledge and abilities and presenting a normal level the content of the mathematics lectures turned the way of students. Moreover, presentation for teaching and practice subjects should be get to students' motivation to their school life. Explicit teaching methods for students were suggested that give more concentration to teaching for the anaFlyse of their information and ability performance, teacher presentation with effective student's active positions, teachers be given additional pedagogical training for teaching of mathematics. Teaching mathematic to vocational school student should be given focusing with regards

to school program and teaching approaches as expressed the same the result of our scale reference (Bakar at all, 2010) .

References

- Bakar, Kamariah Abu, Rohani Ahmad Tarmizi, Sharifah Md Nor, Wan Zah Wan Ali, Ramlah Hamzah, Arshad Abdul Samad, and Abdul Rashid Jamian (2010). "Teachers and Learner's Perspectives on Learning Mathematics for At-Risks Students", *Procedia - Social and Behavioral Sciences*.
- Battal, F. Durmuş, İ. ve Çınar, İ. (2017). The Effects Organizational Citizenship Behaviours and Decision-Making Styles on Transformational Leadership Behavior. *International Periodical for the Languages, Literature and History of Turkish or Turkic*, 12 (31), pp. 1-28.
- Bostan, S. ve Durmuş, İ. (2016). Yöneticilerin Karar Sürecinde Zamanı Kullanması Üzerine Bir Araştırma. *Journal of Administrative Sciences*, 14 (27), pp. 277-307.
- Bostan, S. ve Durmuş, İ. (2017), "An Attemp to Develop A Scale on the Decision Process: The Manager Decision Time Scale", *Hacettepe Sağlık İdaresi Dergisi*, 20 (2), pp. 125-141.
- Durmuş, İ. (2016). TV Reklamlarının Tüketicilerin Tutum ve Motivasyonları Üzerindeki Sosyo-Ekonomik Etkileri: Üniversite Öğrencileri Üzerine Bir Uygulama. *The Journal of International Scientific Researches*, 1 (1), pp. 28-40.
- Dalby, D., & Noyes, A. (2015). Connecting Mathematics Teaching with Vocational Learning. *Adults Learning Mathematics: An International Journal*, 10(1), 40-49.
- Ernest, P. (2004). Relevance versus Utility. In B. Clarke, D. M. Clarke, G. Emanuelson, B. Johansson, D. Lambin, F. Lester, A. Wallby & K. Wallby (Eds.), *International Perspectives on Learning and Teaching Mathematics* (pp. 313-327). Goteborg: National Center for Mathematics Education
- Jan H. Van Driel, Onno De Jong Nico Verloo, (2012). The development of preservice chemistry teachers' pedagogical content knowledge. *Science Teacher Education*, Vol 86, 4.
- Kamariah, A.B., Rohani A.T., Sharifah M.N., Wan Zah Wan A., Ramlah H., Arshad A. and, Abdul Rashid, J., (2010). Teachers and Learners' Perspectives on Learning Mathematics for At-Risks Students. *Procedia Social and Behavioral Sciences*, 8(C), 393-402.
- Kılıçaslan, I., Aydin, S., Türkeri, K. and Soydaş, H. (2018). Attitudes towards Online Web Assisted Learning: Accounting and Tax Students. *The Online Learning of Distance Education and e-learning*, 6(2), 27-33.
- Koparan, B., Akça, Ü., Köş Aydin, F. and Aydin, S. (2018). On the Attitudes of Construction Technology Students towards Information and Communication Technology. *The Online Learning of Distance Education and e-learning*, 6(2), 67-73.
- Seita, J. (2004), Strength-based Approaches Expand into Leadership, *Reclaiming Children and Youth*, Vol. 13 No.1, 22-5.
- Şeneldir, O., Soydaş, H., Genel, Y., Akça, Ü., Kudu, M. And Aydin, S. (2017a). Emotional and Social Intelligence Against Inertia. *Turkish Online Journal of Educational Technology*, SI, pp.229-234.
- Şeneldir, O., Kudu, M., Genel, Y., Akça, Ü., Soydaş, Aydin., S. (2017b). Types of Behavior in Businesses and Resistance to Individual Change. *Turkish Online Journal of Educational Technology*, SI, pp.843-848.
- Şeneldir, O., Aydın, S., Kudu, M., Kılıçaslan, İ., Of, M. & Mutlu, C. (2017c). Kaizen and Intuition in Stress Management. *The Turkish Online Journal of Educational Technology*, SI, pp. 345-349.
- Tola Y., Aydın S., Şeneldir O., Mutlu C., Koparan B., Of M. (2017). Meslek Yüksekokulu Öğrencilerinin Memnuniyet Düzeyleri Üzerine Bir Araştırma. *Turkish Online Journal of Educational Technology*, SI, 607-610.
- Valencia, R., Black, M (2002). "Mexican Americans Don't Value Education! The Basis of the Myth, Mythmaking, and Debunking", *Journal of Latinos and Education*, Vol. 1 No.2, pp.81-103.
- Wehlage, G.G & Rutter, R.A (1986). Dropping Out: How Much Do Schools Contribute to the Problem? *Teachers College Record*. 87(3), available at <http://www.tcrecord.org/PDF/660.pdf>

Mathematics Becomes Painting Creations

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Abstract

A joint experience, in teaching Mathematics, of the Architectural and Engineering Schools of the Politecnico di Milano and Universidad de Granada is presented.

The results, proposed in Informatics Laboratory, are the applications of the basic knowledge related to the definition and behavior of two-variable functions and of the language of Parametric Geometry. Precisely, mathematical methods providing metamorphosis of tridimensional objects are considered.

The goal is to show how mathematical topics, of a certain difficulty, are actually justified in a historical context and are, therefore, made appreciable through graphic applications of remarkable vivacity and unpredictability.

Keywords: *Laboratory activity; functions of two variables; parametric surfaces*

Introduction

When thinking of Mathematics, one can often think of an arid, however precise composition of numbers, formulas, theorem proofs.

If one is more open minded, one can also think of mathematics as of an indispensable support to the applied sciences, such as Physics, Biology and Chemistry for the observed phenomena simulation.

One rarely considers Mathematics as a free expression of an idea allowing space for imagination and the aesthetic sense. Yet Mathematics means also this, and, mainly this, for some mathematicians. Thus, a certain kind of Mathematics - inasmuch as it is free and abstract - is much closer to Poetry and Music than to the exact and experimental sciences, to which it is commonly associated: *The poet must be able to see what others do not see, he must see more deeply than other people, and the mathematician must do the same ...* (Sofia Kovalevskaya, 1850-1891)

The most significant turning points concerning mathematical thought emerged out of simple but deeply innovative ideas. One example of mathematical expression, certainly originated by imagination more than by logic, is Analytic Geometry. To imagine and to invent how curves, surfaces could be represented not only with the help of drawing instruments and the brush, but also through a few simple mathematical equations, demanded a kind of sensitivity which neither the architect nor the poet possessed, yet still one which, for its characteristics, we can name artistic.

One can naturally make a different use of what has been imagined and then proposed to him/her. (In Poetry, for example, metrics can be considered both as a binding law that, since it must be respected, can lead to correct, irreproachable, albeit sterile results, and as starting point, a hint to create literary masterpieces: it all depends on how somebody's principles are interpreted and elaborated by somebody else). Analytic Geometry, just as metrics, can be used as a means to classify and manipulate acknowledged shapes, but, above all, to elaborate new ones, either already looked for or still unpredictable, thus opening the way to new creative horizons.

Supported by the idea that mathematics can be deemed intrinsically beautiful and creative and that it can project its aesthetic and artistic taste on what it creates, we would like to show, in this paper, how the mathematical ideas acquired in Analysis and Geometry courses from young students in Architecture or Engineering can offer, thanks also to modern technologies, graphic results beautiful and very unusual results.

Through these results it is our belief that students succeed in sympathizing with Mathematics, but above all they are able to become familiar with the real three-dimensional space and be concretely aware of the shape qualities of 3D objects.

Experiments in computer laboratory come from the experiences of two different Universities: Schools of Architecture and Design of Politecnico di Milano and University of Granada Schools of Civil Engineering and Building Engineering.

Functions Of Two Variables: Short Historical Excursus

The history of Mathematics is as fascinating as the life of man, since it has accompanied him throughout his life. We take a quick tour of History, to find out how the concept of function has been developed.

The instrumental nature of Mathematics appears naturally in the Babylonian culture, a group of peoples who lived in Mesopotamia, for the resolution of everyday economic problems: numerical record of assets deposited in temples, geometric calculations, construction of algorithms. In their astronomical studies, they tried to predict certain events, from the observation of various phenomena. We have found tables with squares, cubes and inverses of natural numbers. Undoubtedly, implicitly, these tables define functions of N in N and of N in R .

From the Egyptian Mathematics, the oldest data we have, come from two documents: the Moscow papyrus and the Rhind papyrus (also called by the name of its scribe, papyrus of Ahmes) from about 1800 b.C and 1650 b.C, respectively, and whose contents could be dated to approximately 3000 b.C There is evidence of a table with the decomposition of $2/n$ into unit fractions for odd numbers n from 5 to 101.

In classic Greece some relations between the elements of two sets were also used, the closest thing to the concept of function. What stands out most is the use of proportions of numerical character, with magnitudes of the same type.

Ptolemy introduces the sine function, with a string table, although in reality there is still no idea of a variable or function.

In the Middle Ages, not enough was advanced in the concept of function due to the disproportion between the level of abstraction, which was already had and the lack of adequate mathematical symbolism.

In the fourteenth century the French mathematician and astronomer Nicolas Oresme stands out, for geometrically approaching the study of changing phenomena, by means of rectilinear segments, which reminds us of the graphic representation of a function, but with the lack of the current sense of dependence.

The schools of Oxford and Paris have played a fundamental role in the development of the general notion of function.

In the Modern Age, the formation of the concept of function, is located in the seventeenth century with Galileo, Descartes, Fermat, Newton, Leibnitz.

Due to Newton, among others, the development of functions in infinite series of powers is studied, which makes possible the analytical representation of the vast majority of functions studied then.

Leibnitz in his manuscript of 1673, *Methodus inverse tangentium, seu de functionibus*, uses the term function for the first time.

In the eighteenth century, Jean Bernouilli uses the word function with a meaning closer to the current.

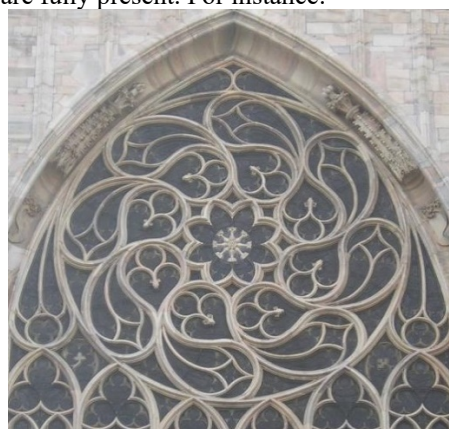
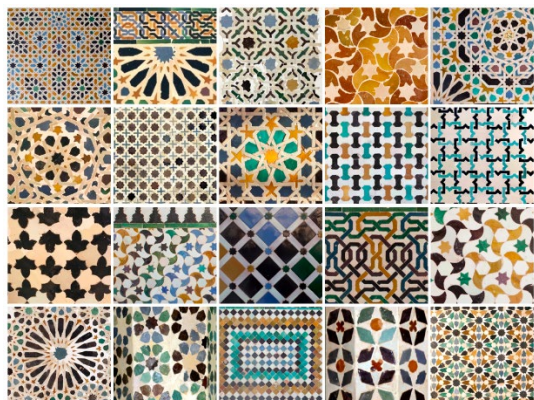
It will be Euler in his work *Introduction in Analysis Infinitorum* (1748) where he makes a detailed study of the concept of function, classifies the different types and we owe him the current notation.

Lagrange in the *Théorie des fonctions analytiques* (1797) systematically developed and applied widely the differential and integral calculus of multivariable functions.

Functions Of Two-Variables: The Teaching Environment

We put special emphasis on the fundamental role played by function of two variables concept in Architecture, Sculpture, ornamentation of some buildings, as well as in the construction of great works, such as bridges.

It is important that the student is aware and knows how to see in the Art, in the great works of Engineering, even more in Nature, the beauty of Mathematics. For this reason we propose to students a brief visual review of some emblematic buildings, constructions, etc. in which the mathematics are fully present. For instance:





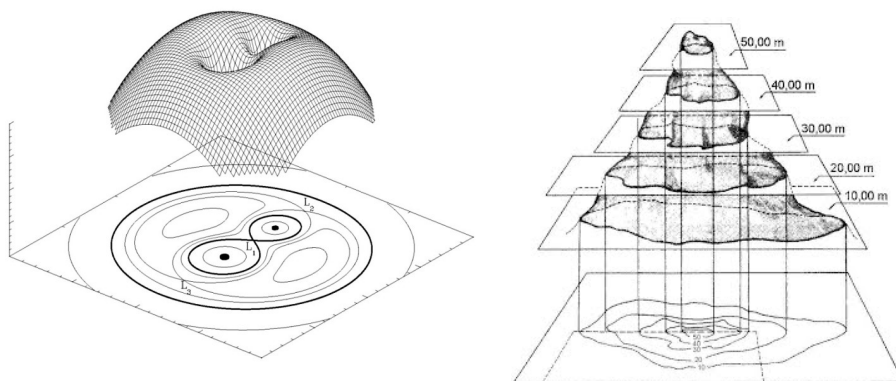
Function Of Two Variables: Some Topics In The Didactic Course

Here in the following we present a short summary of program of the courses:

- The concept of Cartesian product is remembered, and as a particular case R^2 .
- The concept of real function of two real variables is introduced.
- Analogous to the functions of a variable, the domain, the maximum domain and the image of a function of several variables are defined.
- The different types of functions are studied, among them: the polynomial functions of several variables, functions of separate variables, ... etc.
- Continuity of functions.
- As a particular case of polynomial functions, quadratic forms are studied in detail, whose incidence is fundamental for the study of optimization.
- Matrix and polynomial expressions of a quadratic form, as well as the relationship between both. The classification by minors and eigenvalues is studied.
- Theorems of continuity.
- Level sets.
- Obtaining the sense of the growth of a function, from the level sets.
- Drawing of the feasible region of an optimization problem with inequality constraints.
- Resolution of optimization problems with inequality restrictions.
- Resolution of linear programming problems.

In the computer classroom, with a specific program, students learn to draw the functions of the variables and their level curves. It is one of the clearest ways to identify absolute maximums and minimums, provided that the appropriate conditions are met (Weierstrass Theorem). They can solve using the graphical method problems with inequality constraints.

Let's see these examples of contour lines:



Given the difficulty of the topic, it seems to us that it is opportune to preliminarily observe the graphic representation of functions with two variables of various types to highlight the problems of regularity that will be treated in a rigorous way in the second half.

We therefore pose the problem of 3D function graphics.

Parametric Surfaces

Most surfaces and curves in Greek geometry are defined through characteristic properties valid only for them, which are generated, with the help of drawing instruments, through *ad hoc* methods.

In order to overcome this restricted method of operating, one needs a radically different point of view, a method that can be applied to curves and surfaces, without being distinctive of any of them, but rather more concerned with the main and general features of the process than with its refinement and precision.

A decisive step was made with the introduction of the Cartesian coordinates by the philosopher and mathematician Descartes (1596-1650). Descartes publishes his great work "La Geometrie" in 1637, where the birth and expansion of Analytical Geometry is established, which will allow the interpretation of curves and surfaces and the idea of dependence between two variables is expressed for the first time. Along with Descartes it is fair to mention Fermat, who formalized the equation of a line (with the notations of Viète).

A point, in the tridimensional space, is characterized by its x, y and z coordinates: if these vary without restrictions, the point describes the entire space, but if instead the coordinates are bound by a mathematical law, the corresponding point generally describes curves or surfaces. Complicated and intricate curves have already been described since the end of the seventeenth century: among them are the *geometrical flowers* by the Italian mathematician Grandi (1671,1742), a real *virtuoso*.

In analytical or Cartesian Geometry curves and surfaces are graphed by plotting points, being thus totally independent from a curve or specific surface, which is defined only by its equation.

This is not a new Geometry, but it is a new language. Cartesian formulation is therefore more powerful and agile than that of classical Geometry.

A further greater flexibility is then obtained from the Cartesian coordinates system with the introduction of parametric equations, that is using the language of Parametric Geometry. The coordinates of the "moving" point on a surface are described as a function of two parameters, which changes linearly. For instance the Cartesian equation $z=f(x,y)$ can become:

$$\begin{cases} x = u \\ y = v \\ z = f(u, v) \end{cases}$$

These equations are more easily computable and therefore lend themselves well to a graphic usage (particularly if computerized).

In conclusion, through the graphic representation, the characteristics of regularity of the functions are therefore highlighted to the students who can, consequently, observe and deepen their study.

Goals Of Proposal

Suppose that the student has understood the basic language with which to describe a function of two variables and that, through this knowledge, is able to use the language of parametric geometry, understanding its potential, to interpret and draw surfaces.

At this point our goal is to put the student in front of the ability to view, apply their knowledge and also have fun, with the use of simple computer tools for graphics.

The experiment carried out in an informatics laboratory is of a graphic type, thus giving back an image, making a synthesis between the use of the parameterization of a surface and the knowledge of the graphs of classical functions of two variables, .

The result is incredible and suggestive images, which the student will judge, not only in terms of mathematical characteristics, but also of beauty.

Activity Description

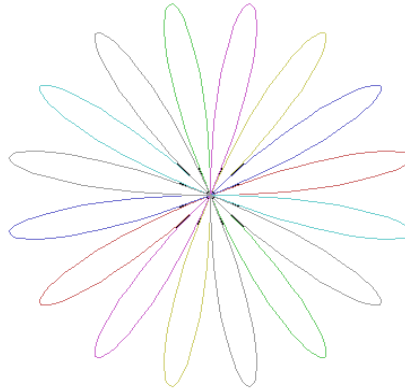
More precisely we will try and show how a plane figure, which may be generated and expressed through formulas, can develop, either arbitrarily or according to a set aim, into various three-dimensional shapes. A precise mathematical rule, one which is apt to preserve through mutations those characteristics that can be defined, even if not always appropriately, topological of the basic figure, will be required here.

Let us take into consideration a basic geometrical shape, namely a flower shape similar to a *rodonea* by Grandi.

The parametric equations of the curve tracing the contour of the flower are the following:

$$\begin{cases} x = r \sin(8t) \cos t \\ y = r \sin(8t) \sin t \\ z = 0 \end{cases} \quad 0 \leq t < 2\pi \quad (1)$$

where the parameter t is the angle (measured counterclockwise) between horizontal and the line through the center of the flower and the current point of the contour of each petal, and r is the maximum of distance of this point from the center of flower.

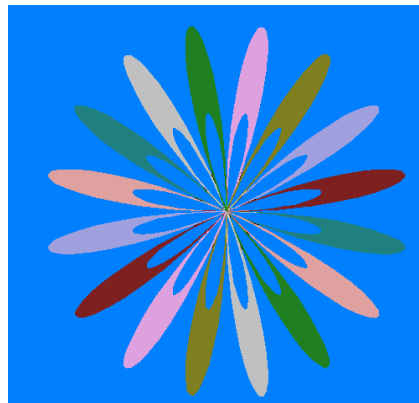
**Figure 1**

Let us notice from Fig.1 how the flower has 16 petals; actually the distance of the point of flower contour from the flower center is zero for the angles $t = k \frac{\pi}{8}$ ($k = 0, 1, \dots, 16$).

A flat surface results from filling a proper area inside the contour of the flower; we obtain its equation by introducing a second parameter characterizing, in a variable way, the variability of the distance from the flower center. That is:

$$\begin{cases} x = r v \sin(8t) \cos t \\ y = r v \sin(8t) \sin t \\ z = 0 \end{cases} \quad 0 \leq t < 2\pi, \quad a \leq v \leq 1$$

in Fig. 2 $a = \frac{8}{15}$.

**Figure 2**

The central idea to the process consists now in developing this basic shape according to a fixed mathematical law, although leaving the results a large margin of unpredictability. Obviously the law which links two parameters is a real function of two independent variables

We have thought of a metamorphosis law leading the flat-planed shape within the three-dimensional space, through its projection upon different surfaces. From a mathematical point of view this means that the third coordinate in the parametrization, describing the developing surface, must be properly subjected to variations.

A first example (see Fig.3) shows the projection of the basic figure upon a saddle surface (hyperbolic paraboloid) of parametric equations:

$$\begin{cases} x = v \\ y = u \\ z = v^2 - u^2 \end{cases} \quad v, u \text{ real parameters}$$

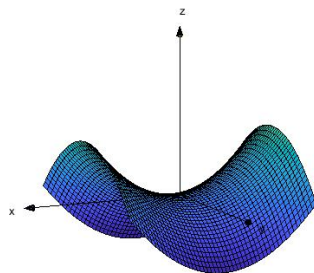


Figure 3

on which the basic figure is projected (see fig.4).

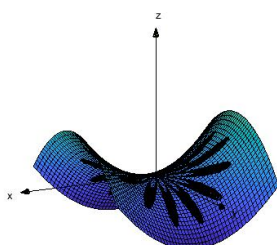


Figure 4

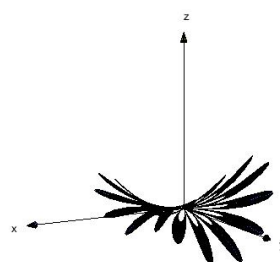


Figure 5

The projection (see fig.5) has the following parametric equations:

$$\begin{cases} x = rv \sin(8t) \cos t \\ y = rv \sin(8t) \sin t \\ z = (rv \sin(8t))^2 ((\cos t)^2 - (\sin t)^2) \end{cases} \quad 0 \leq t < 2\pi, \quad a \leq v \leq 1$$

In this first example the chosen surface is very regular as a consequence of the regularity of the function that defines it.

You can then choose less regular surfaces with the presence of discontinuity (or weakening of the derivability) of the function.

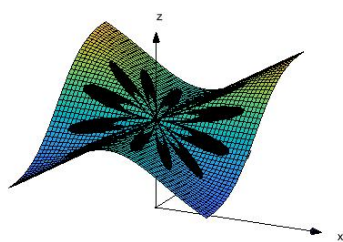
For instance in fig. 6 the basis form is projected on the surface of parametric equations:

$$\begin{cases} x = v \\ y = u \\ z = \frac{v^2 u}{v^2 + u^2} + 10 \end{cases} \quad v, u \text{ real parameters (except } v = u = 0)$$

which for $v=u=0$ has a weak discontinuity and partial derivation discontinuous.

The resulting surface equations are:

$$\begin{cases} x = rv \sin(8t) \cos t \\ y = rv \sin(8t) \sin t \\ z = 10 + rv \sin(8t) \sin t (\cos t)^2 \end{cases} \quad 0 \leq t < 2\pi \quad a \leq v \leq 1$$

**Figure 6**

In conducting the proposed laboratory activity, it is therefore evident how the student is stimulated to deepen the study of the characteristics of functions of two variables, finalizing the enhancement of their creativity.

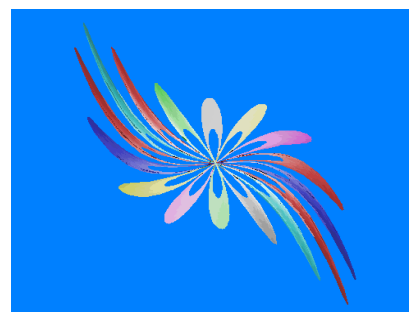
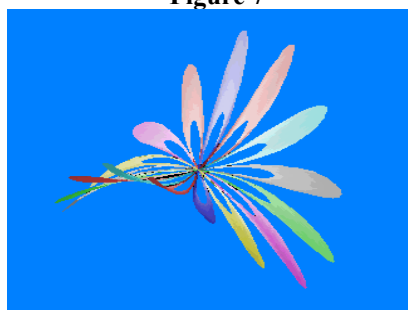
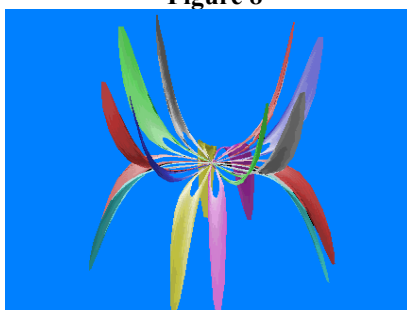
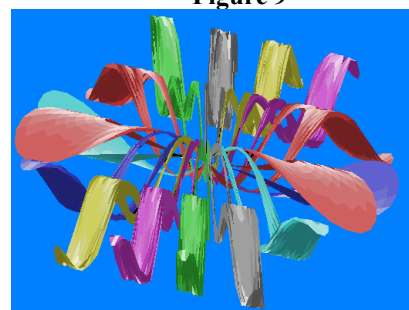
Results

Hence our imagination was let loose ; the projection surfaces have been progressively chosen for their greater geometric complexity and the figures we obtained have taken unbelievable shapes, now light, subtle and elegant, now strong and aggressive ; at times we can recognize them from their basic shapes, at times we can't, since they look absolutely different, but, full of harmony or confused as they may turn out to be, they are nevertheless always in tune with the geometry appearing on the chosen projection surface.

The colors themselves, which have never been modified by graphic programs, fade or become more intense according to the shape alterations, spontaneously contributing to the aesthetical research of the final shape.

One can remark how the symmetry and the regularity of the projection surface are reflected on the symmetry and regularity of the projected shape and how, on the contrary, the discontinuities, the harshness and the asymmetries of the projection shape can alter the original symmetry and regularity.

In the first instance we obtain continuous and smooth shapes (Figs. 7-13), while folds or edges become evident when irregularities arise in the derivatives of the function used. Discontinuities in the function and in its derivatives determine the examples in Figs. 14-18. The surfaces in Figs. 19-27 show examples of “paintings” obtained from the same basis form by the composition of different surfaces with different regularities.

**Figure 7****Figure 8****Figure 9****Figure 10****Figure 11****Figure 12**

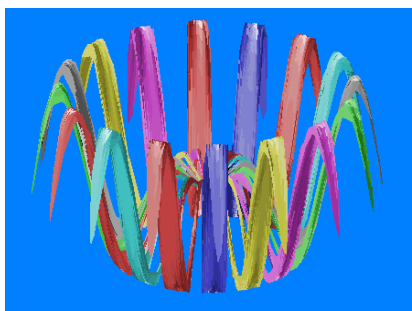


Figure 13

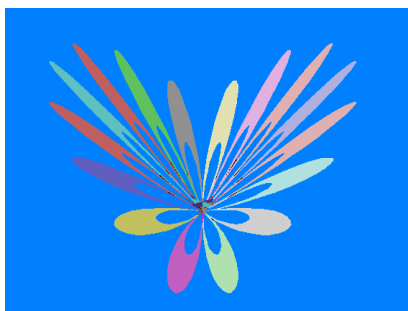


Figure 14



Figure 15



Figure 16

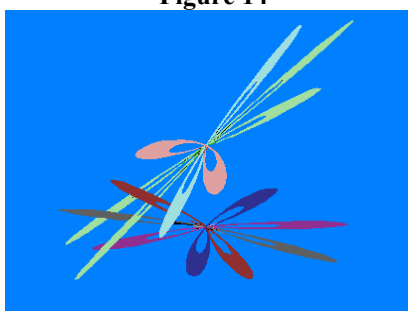


Figure 17

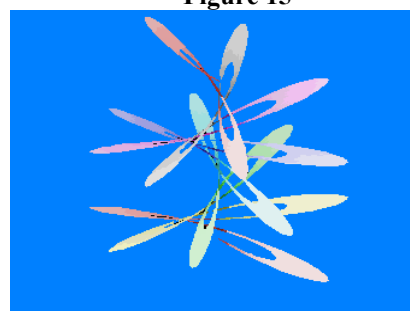


Figure 18

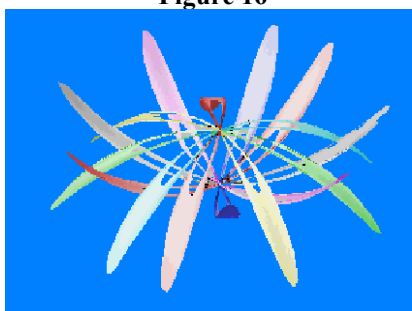


Figure 19



Figure 20

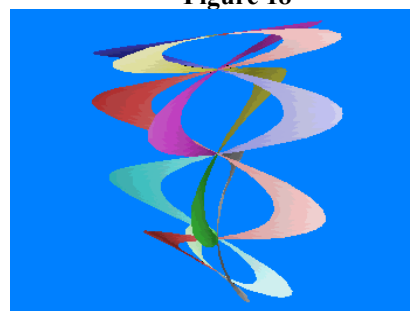


Figure 21

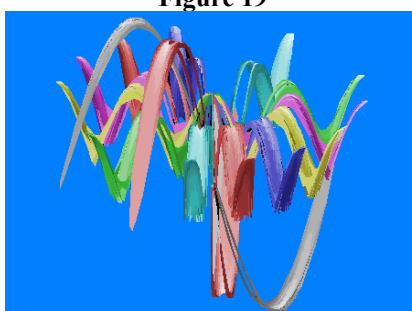


Figure 22

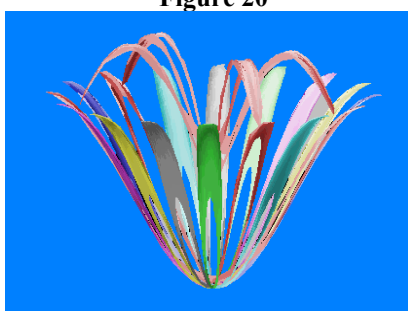


Figure 23

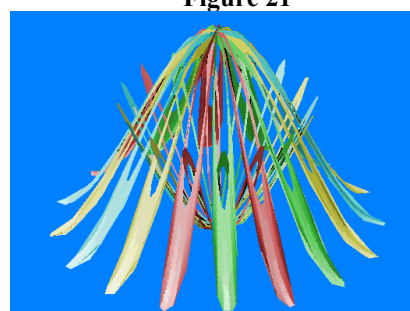


Figure 24

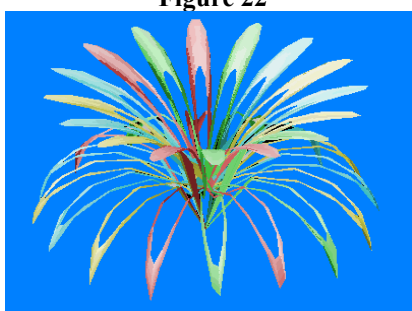


Figure 25



Figure 26

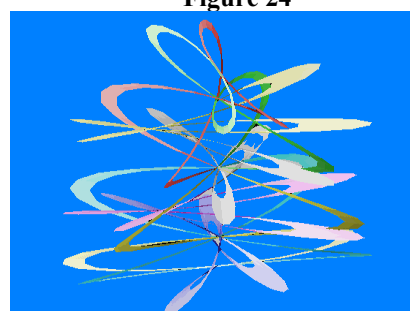


Figure 27

Final Remarks

All figures have been produced with the help of a graphics animation program, simple to use, that is structured in such a way as to allow us to deal with the parametric shapes in the best way. The program has been elaborated by our research group. Any other graphics program that can see the parametric shape of the surface as an input can be used for this purpose.

The results of our work are to be seen in the images here reproduced, which at times have pleasantly surprised even ourselves. Above all they have stimulated us and suggested the way to single out further potentialities of the mathematical and data processing instruments.

Those, who may like to use it, will decide how to deal with this typology of results. If a mathematician, he/she could study geometry on a particular form; if a designer, he/she could devise an object to which the resulting shape may function as a support, or more simply, if he/she feels like it, one could simply enjoy its aesthetic quality.

REFERENCES

- Boyer, C. B. (1999) *Historia de la Matemática*. Madrid, ES: Alianza Editorial.
- Caliò, F. & Marchetti, E. (2017). *Curves and Surfaces: Method and Creativity in Design Process* (pp. 688-693). Tojet special issue for INTE 2017.
- Calio' F., E. Marchetti & Scarazzini E. (1996) *Operazioni e trasformazioni su vettori* Milano, IT: Citta'StudiEdizioni.
- Calio' F., Lazzari A., Argeri M. & Sesana D. (2011) *Geometria vettoriale per la grafica* Milano, IT: Citta'StudiEdizioni.
- Calio' F. & A. Lazzari A. (2017) *Elements of Mathematics* Bologna, IT: Società Editrice Esculapio.
- Grandi G. (1728) *Flores Geometrici, ex Rhodonearum, et Cloeliarum Curvarum descriptione resultantes*
- Marchetti E. (1998) *Linee e superfici* Milano IT: Citta'StudiEdizioni, Milano

Mathematics Curriculum for Vocational Schools in Turkey

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Abstract

Every pure mathematicians and mathematics educations researchers have an idea about mathematical abilities, and this point haven't regularly argued subject between them. Also, people know that subject is one of the very essential main abilities and performance. Many mathematics educators believe that the center problems of students has not about effectively apply to their scientific background to social areas or in their work. Mathematical activities for laboratory studies of our vocational students and their branch studies has an important aspects for these department students. Moreover, we can see many problems of our students when they are learning and making different area activities at the vocational school in our country. In this paper, we are focusing the analyzing of mathematics curricula of our students. Moreover, we analyses our subject and its environment which is essential for the technical programs in these school. As a result of this study, it is difficult to say that there are a unique basic fundamental math lecture program for technical and social programs of vocational school. Also, every department should organize their special mathematical curriculum needed for them and should focus to mathematics subject in its special curriculum.

Keywords: *vocational school, technical departments, mathematics curriculum*

Introduction

The uncontrollable new conditions coming in our life in everywhere of the world and in this new position everybody should integrated the new life environment, so our students need to have this information from their musters or teachers. Scientific programs at the vocational department help their members to prepare them to new life environment. This new criteria give to students a good advantage of mathematical study area. A good level of student coming with the new position by all scientific abilities performance reactions and moral energy to going on to stay learning according to his/her special interest. So, we believe that the new modulated curriculum give many students a standard of manage their life perfectly (Wenger, 1999).

By the connection of this way, educational activities and vocational school perspective has the good coherent. Our observation tell us that this new environment in vocational culture present a positive atmosphere for their teachers and students (dalby & noyes, 2015). Studies on the finding of vital context of the lecture in the all curricula program give necessity an important way that focusing original situations and teaching methods of organizing math lecture in every curriculum. It is clear that by developing new technologies and their adaptation to education environment modified the position of teacher and students also all methods used to teach and learn to lectures. Operation and basic algorithms has a powerful effect on the organizing and conducting math lectures. In new educational environment student has a good chance to make mathematics quickly and painlessly using technological material in their studies. We are observing in our lectures that they are operating many calculations and many operation not to spend much time. (Ernest at all, 2004).

According to this researcher team, in the effective teaching program, students adapted in to the context of technology. Technology should be modified to the mathematics content in all possible conditions. Such a curriculum takes necessity technology programs and module the learning and doing of mathematics, so students spends much time algebraic skills and conceptual understanding.

Mathematics lectures for vocational schools

Mathematical enviroment develops expressive, helpful and effective at the level they used in submission. In other words, program need to have the learning of mathematics in the answering of difficulties based on real-life applications. All departments in vocational schools in turkey are a complete basis of active backgrounds for the study of mathematics. For example, problem-solving application be done for many departments, as construction technology, computer programs, business, electrics and chemistry (Hyland, 1999).

The advance of math information has a hierarchic procedure. A well-organized and unremitting database has necessity to give the people understanding of the concept deeply. The basics of significant context, definitions, theorems and methods were modulated at the all level of grades. The links between secondary school and high school mathematics and the transition from high school mathematics to university mathematics are very important in the student's conceptual development of skills and abilities (Dalby & Noyes, 2015).

Student's and teacher's position in math lecture

Teacher and students position in the math lecture can be expressed as very responsible role. They have responsibilities to develop an efficient instruction programs and methods to provide their students to well understand the lectures for their lectures and also constructing efficient ways on determination their students understanding position. Also, they need to know their development level of all activities about school program as algorithmic abilities which are important to understand teacher and lecture book presentation. All educational person of vocational school needs to present the same pedagogical and educational perspectives to all students and in all classes for many students' position and also, they present different learning environments and positions for every learner (Ernest at all, 2004). Every teacher need be aware of a main reality that their students want to have a powerful mathematical background to accomplish the difficult concept of mathematics and modulate them into other area of mathematics effectively and painlessly. Another important role of the teacher to help the students to accomplish the understand math which essential and powerful item to applicate basic math concept to other scientific area in their school programs (Dalby and Noyes, 2015).

As mathematician we believe that if a school program modified to mathematics lecture very effectively, students take some responsible roles in their program with their teachers to reach the maximum level good results of the program and high-level accomplishment at mathematics lectures. Also, to reach to best result of well-organized program, the motivated students want to be active in the mathematic lectures which is necessary for the good results and sometimes they try to make some lecture activities themselves. At the end of the well-organized procedure students will be aware of the very important reality of their education life that a very closed relation is essential between showing active performance and to reach to very good position at school achievement. We need to add that some negative results or unexpected situations could be seen at the end of the program application, for example, a few students don't want to be take some responsibilities for the mathematic lectures and maybe they feel that it is difficult to take such responsibilities to accomplish their school program and this is not necessary to do (Dalby and Noyes, 2015). Usually there is a solution for these students that firs teachers need to be learn the reason of the motivation problems than they will give some phycological directions if necessary. So, it could be taken some good results for these students at the and of the education program. Many education systems apply such a solution to give them to reach best result in school life, social life or working life.

Mathematics lectures in the programs

A well-designed lecture program gives positive results for students' departments expectations and their possible working position according to their department. For the all department of the vocational school math curricula, math laboratory studies which students are active in the lectures as computer applications, math processes and/or methods that are modulated mentioned as above, math books or other lecture materials in which all concepts of the lecture are presented according to students' department level are accepted as essential to a balanced approach for the lectures in the vocational school program (Dalby and Noyes, 2015).

In the vocational schools, each of departments' mathematics courses contain a set of modules of the concept which determine, and effect student's department abilities and capacities modulated in these essential processes. It is clear the we need apply the math processes to student learning and our teaching in all areas of a math course and in all lectures of every vocational school departments. A balanced or well-organized math program at the vocational school level includes the development of algebraic skills and application dimensions. The designed curricula prepare students with the algebraic skills they need to understand other aspects of math that they are learning, to solve meaningful problems, to apply their program lectures and to continue to meet with success as they study math in the future (Dalby and Noyes, 2015)

Vital point: math processes

The math processes have straight consistent with each other. Problem solving and collaborating have the strongest value of many disciplines. Problem-solving method inspires students to analyses the focusing to a true way of concept analyses or be aware of the solving. When we make our students to well motivation in math thinking, we also to help them to make math analyzing, applying to formulas to new position, focusing on new different solution types and some approach evaluating with their friends, try to find new relation between the concept and problem situations. In this point to follow problem solving steps have vital important for the student's mental developments during the lecture. All difference approach coming from student need to be supported by the teacher to give them self-confidences. (Robert at all., 2005).

Problem solving

Problem solving is essential to learning math in the teaching and learning. It is considered an essential process through which students can accomplish the opportunities in math and is a main part of the math curricula. It is the main emphasis and area of math in the actual life and assistances students be self-possessed step by step. Also, problem solving tolerates students to practice the information in different areas and aids them link math with conditions related the math subjects (<http://www.edu.gov.on.ca/eng/curriculum>). It is one of the main processes need to learn all math students carefully because of its power to understand mathematics more effectively.

Reasoning

Reasoning in teaching and learning helps students do true connection with math. Laboratory teaching in math lecture can continuously assist serious thoughtful. Another words, it is, a prepared, logical and balanced style to learning math thoughts, theorems and procedures. Moreover, the other name of making mathematics or a necessary tool to operate mathematics concepts, to understand the relation between mathematic concepts and the application

Reflecting

The mean of reflecting math ideas or thinking's is a student frequently and intentionally reproduce his individual understood procedures. Also, we can explain this concept as one of main critical point for student to organize it correctly because of its nature Thus, he can identify at the time method he is consuming is not effective, and give correction to connect to another technique, reanalyzing the problematic situation, look connected information which could solution (<http://www.edu.gov.on.ca/eng/curriculum>). Their problem-solving abilities need to be reinforced at the time student replicate on other behaviors to achieve a problem that students not effectively finish the application. Focusing on the moderateness at a solution thinking the difficult and innovative problem has additional position that students could advance the skill to be aware of problems, also find solution for application studies about real life.

Computational tools

Students want to progress the math abilities at the choice suitable technological apparatuses, software applications, algorithmic approaches to accomplish specific math responsibilities. Another way of the meaning of this concept that doing mathematics with the all equipment, for example, all geometric materials or computer or some concrete box using the lecture Several kinds of tech materials are suitable at classroom and teaching. Students can practice computers and CPUs to large the volume and to check the dimensions studies to examine and analyse math concepts, to have different perspectives on concepts and to reduce the time on purely mechanical activities that is only repeating the same algorithms (<http://www.edu.gov.on.ca/eng/curriculum>).

Communication

This concept is the method of communicating math thoughts. As a social concept, it is important doing efficient mathematics between mathematicians or mathematic students or other students who are using mathematics concepts It is identifications verbally, concretely, choosing numbers, symbols, charts, symbols and all concept of math. Students connect with people from different culture for various purposes. communicating symbols figures is an important method in teaching and learning math. Over communicating, students could imitate and make clarify thoughts, thinking, relations, and math opinions for problems or concepts (Dalby and Noyes, 2015).

Connecting

Problem solving and applications which permit students to find correlations to understand in which way notions are connected to each other's. This support the notion to hold main math concept, definitions and theorems. connecting at the time students to type this type of contacts in their studies, students start to understand math is connect and use together all of the math concepts and ideas and notions and that students could practice their understanding and skills at mathematics from which one concept to another one. Understanding the relations between mathematical steps, definitions, theorems and ideas give students' math thoughtful more powerful.

Result

At the time learners give explanations for the details of being students to vocational school, the central explanations at which coming the the examination had always been *it was always* been very interesting to be classroom and it is very important for me to develop my information and social position. Motivation to lecture discussions providing extra indication which many learners are involved in the vocational courses and appreciated the chance to choose the way of the school or learning.

References

- Dalby, d., & noyes, a. (2015). Connecting mathematics teaching with vocational learning. Adults learning mathematics: an international journal, 10(1), 40-49.
- Ernest, p. (2004). Relevance versus utility. In b. Clarke, d. M. Clarke, g. Emanuaelson, b. Johansson, d. Lambin, f. Lester, a. Wallby & k. Wallby (eds.), international perspectives on learning and teaching mathematics (pp. 313-327). Goteborg: national center for mathematics education
- Hyland, t. (1999). Vocational studies, lifelong learning and social values: investigating education, training and nvqs under the new deal. Aldershot: ashgate.
- Roberts, c., gidley, n., eldred, j., brittan, j., grief, s., cooper, b., ... castillino, c. (2005). Embedded teaching and learning of adult literacy, numeracy and esol: seven case studies. Leicester: niace.
- Wenger, e. (1999). Communities of practice: learning, meaning and identity. Cambridge: cambridge university press
- Yüksel, s. (2002) örtük program. Eğilim ve bilim dergisi, cilt 27, sayı 126, sayfa: 31-37.
- <http://www.edu.gov.on.ca/eng/curriculum/secondary/math11curr.txt>. Ministry of education of canada. (2005). The ontario curriculum grades 9 and 10. Mathematics

Mathematics for Vocational School Students Business Department Sample

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Abstract

In this study, it remains meant that examining of exact ideas of vocational schools of student, the relation amid school attainment and student' choosing this schools with any program, the sense of mathematic and accounting in the school meaning for vocational school student. This search used an much used and well known study method with a deep analyse searching approach. The review remained lead by three circles of likert-type surveys aimed at the commercial section student after a vocational school in turkey. An entire 203 student remained the defendants of this education. Answers presented that there remained an essential aimed at a exact prospectus aimed at student concentrating happening rudimentary information and services and abridging the gratified of the mathematic custom-made to student. Glitches confronted through normal of the student when knowledge mathematic and accounting remain in retention mathematic gratified, reasons mathematic remains problematic, consuming trouble in sympathetic and smearing mathematic formulations.

Keywords: *vocational schools, mathematic and accounting, difficulty, school achievement*

Introduction

Vocational teaching and exercise production a dominant part in making new student aimed at effort, aimed at emerging passable services and replying toward the work marketplace wants of the cheap the development of the instructive procedure organization remains careful by way of one of the chief habits of well-organized usage of physical, methods and humanoid capitals (Kamariah, A.B., Rohani A.T., Sharifah M.N., Wan Zah Wan A., Ramlah H., Arshad A. And, Abdul Rashid, J., 2010). The greatest real remains the growth of new procedures of group and organization founded in the world. Mathematic and accounting and remain dangerous and energetic to the communal, cheap and, consequently development of contemporary lifetime a republic. The education of mathematic and accounting wants complete preparation to safeguard excellence teaching scheme for the persons (Battal At All., 2017; Bostan, And Durmuş, 2016; Bostan, And Durmuş, 2017; Durmuş, 2016). Though concentrated labors must remain occupied toward teach altogether persons, we must not misplace vision of the attention of the vocational student. Knowledge mathematic and accounting aimed at vocational student remains a marvel aimed at certain viewpoints and does not frequently happen by clearness and ease (Kamariah, A.B., Rohani A.T., Sharifah M.N., Wan Zah Wan A., Ramlah H., Arshad A. And, Abdul Rashid, J., 2010).

The change which beginners remain obligatory toward brand after school which remains theoretic stadium toward the office which remains request part remains a multifaceted and frequently difficult procedure for student. The important inform of the gratified of the vocational teaching, heading for the calibration of prospectuses and instructive packages. The outline of the scheme of instructive praise scheme consumes large compensations, if the school flexibility of the student (Kamariah, A.B., Rohani A.T., Sharifah M.N., Wan Zah Wan A., Ramlah H., Arshad A. And, Abdul Rashid, J., 2010; Zhamuldinow, 2013). Dissimilar issues might principal to knowledge glitches in mathematic for these students. Amongst the issues remain: the exact linguistic, ciphers, problems in dispensation mathematic, certain graphic misperceptions connected to mathematic and accounting knowledge, reminiscence and order problems, and remarkably high nervousness in knowledge mathematic and accounting (Of At All, 2017; Valencia And Black, 2002). Teaching mathematic and accounting aimed at educators and knowledge mathematic and accounting aimed at vocational student remain start toward obtain care and sure teachers must intended knowledge circumstances which remain additional inspiring albeit the procedure of identifying of the glitches remain motionless on an increasing phase. Though, there remain singular wants, and this must remain assumed singular care through mathematic investigators (Kamariah, A.B., Rohani A.T., Sharifah M.N., Wan Zah Wan A., Ramlah H., Arshad A. And, Abdul Rashid, J., 2010; Görentaş And Yıldız, 1999; Bilgin At All, 2010; Yıldız And Görentaş; Bilgin And Görentaş, 2008; Kamariah, A.B. At All, 2010). Investigation educations aimed at vocational school student demonstration a hole amid what remains erudite and what remains obligatory (Baartman And De Bruijn, 2011).

The alliance of student' knowledge involvements attach school and repetition locations remains now of substantial attention inside the instructive school. Educational research educations for vocational school teaching lessons show that certain problems in education plans for knowledge mathematic and accounting remain happening in the schoolrooms (Aydin At All, 2018; Wehlage & Rutter, 1989). The problems remain, for instance, inadequate pledge that student must pertinent previous rudimentary information for knowledge the example and fast degree for presenting numerous of the ideas. Also, absence of rational consistency in the performance of mathematic plans in the schoolroom and deprived message and a absence of collectivity in numerous instructional doings (Kamariah, A.B., Rohani A.T., Sharifah M.N., Wan Zah Wan A., Ramlah H.,

Arshad A. And, Abdul Rashid, J., 2010; Of At All, 2018; Kahraman At All, 2018). Furthermore, inadequate directed repetition of educators toward assistance the student change after the first education phase toward self-governing knowledge and inadequate appraisals toward safeguard that student recall what they must erudite on the talks (Seita, 2004). The goals of this investigation remain toward control and examine;

- *Problems connected to mathematic and accounting learning faced by student*
- *Problems connected to the teaching and learning of math and accounting*

Method

This study working a measurable, evocative review investigation project, connecting commercial section student in a vocational school in turkey. Vocational school student typically refers toward student by upcoming school preparation glitches and difficult school attainment. 203 students after commercial after 1st year and 2nd year class equal was used aimed at this study. The student replied two distinct 5-point likert gauge surveys representative their equal of contract toward stated substances in all survey aimed at knowledge mathematics and accounting (kamariah, a.b. At all., 2010). The statistics remained examined descriptively.

Findings

Founded happening the demographic statistics calm finished the survey, it remained originate that mainstream of the student remained male around 71% and the additional remained female 29%. The fraction of student who consumed approved mathematics and accounting examinations remained not abundant (18.52%). Moreover, albeit the amount of those who approved the examinations remained somewhat little, greatest student supposed that mathematics and accounting talks remained amusing and stimulating toward study. Answers presented that lone around 15.2% of scholar defendants unpopular mathematics (table 1) (Kamariah, A.B., Rohani A.T., Sharifah M.N., Wan Zah Wan A., Ramlah H., Arshad A. And, Abdul Rashid, J., 2010);

Table 1: student perception on mathematics and accounting

Perception	mathematics and accounting	
Category	frequency	percentage
Enjoy	132	65.0%
Moderate	40	19.7%
Dislike	31	15.2%
Total	203	100%

Scholar defendants' insights of their glitches when knowledge mathematics and accounting particularly that the topics remained existence trained theoretic somewhat than computational. For knowledge mathematics and accounting, two glitches remained tinted through mainstream of the defendants, viz., happening their 'difficulty toward recall formulae' erudite (70.0%) and 'trouble to recall mathematics content' (72.1%). As for the other problems related to the learning of mathematics and accounting by way of registered in table 2, albeit certain of the scholar defendants designated that they met the glitches, though lone a lesser amount consumed tinted that they remained consuming those glitches meanwhile mainstream of them did not highpoint the registered glitches by way of glitches they confronted when knowledge mathematics and accounting. The discovery happening stating the student' 'aversion aimed at mathematics and accounting', over lone a minor fraction designated that they aversion mathematics and accounting (16.4%) (Table 2) (Kamariah, A.B., Rohani A.T., Sharifah M.N., Wan Zah Wan A., Ramlah H., Arshad A. And, Abdul Rashid, J., 2010).

Table 2: form two student' perceptions on problems in learning mathematics and accounting

Types of problems	Mathematics and accounting	
	Yes	No
Do not remember the formulae	68.0%	32.0%
Difficult to remember the math content	74.6%	25.4%
Do not understand the formulas	68.3%	31.7%
The concepts are difficult	61.9%	38.1%
Do not know how to apply the formulae	53.5%	46.5%
Do not understand what teachers are teaching	40.4%	59.6%
Teachers change to new topics very fast	20.3%	79.7%
Dislike mathematics and accounting	16.8%	83.2%
Teachers did not give enough examples to answer the questions	11.2%	88.8%

Teachers did not repeat the subject	12.7%	87.3%
Teachers did not explain clearly	12.3%	7.7%
Teachers only asked to do the exercises on the white board	13.6%	86.4%
Teachers make us copy notes	16.3%	83.7%
We were given many problems as homework	12.5%	87.5%

Results

Well-organized application of the ideals of investigation too wants that the investigation public remains eager toward employment the knowledge possible of the limits in instructive schemes toward disapprovingly appraisal the modern investigation procedures and approaches. The consequences connected toward student' insight of their knowledge air demonstrations that usually student remains optimistic method to their knowledge air (Kamariah, A.B., Rohani A.T., Sharifah M.N., Wan Zah Wan A., Ramlah H., Arshad A. And, Abdul Rashid, J., 2010). Though, when only statistics connected toward those who decided toward the bad ideas remained examined it remained originate that meaningfully little aptitude student decided toward the bad ideas likened toward the high aptitude accounting section student.

References

- Aydin, S., Genel Y. And Mutlu, C. (2018). Attitudes Towards Online Web Assisted Learning: Business Management Student. The Online Learning Of Distance Education And E-Learning, 6(2), 34-40.
- Baartman, L.K.J., & De Bruijn, E. (2011). Integrating Knowledge, Skills And Attitudes: Conceptualizing Learning Processes Towards Vocational Competence. *Educational Research Review*, 6, 125-134.
- Battal, F. Durmuş, İ. Ve Çınar, İ. (2017). The Effects Organizational Citizenship Behaviours And Decision-Making Styles On Transformational Leadership Behavior. *International Periodical For The Languages, Literature And History Of Turkish Or Turkic*, 12 (31), Pp. 1-28.
- Biglin, T. And Görentaş, N. (2008). A Note On Characterization Of $N_u(D_n)$. *International Electronic Journal Of Algebra*, 3, 135-140.
- Biglin, T., Görentaş, N. And Kelebek, I.G. (2010). Characterization Of Torsion Units Of Z_{a_4} . *Journal Of Korean Mathematical Society*, 6, 1239-1252.
- Bostan, S. Ve Durmuş, İ. (2016). Yöneticilerin Karar Sürecinde Zamanı Kullanması Üzerine Bir Araştırma. *Journal Of Administrative Sciences*, 14 (27), Pp. 277-307.
- Bostan, S. Ve Durmuş, İ. (2017), "An Attempt To Develop A Scale On The Decision Process: The Manager Decision Time Scale", *Hacettepe Sağlık İdaresi Dergisi*, 20 (2), Pp. 125-141.
- Durmuş, İ. (2016). Tv Reklamlarının Tüketicilerin Tutum Ve Motivasyonları Üzerindeki Sosyo-Ekonomik Etkileri: Üniversite Öğrencileri Üzerine Bir Uygulama. *The Journal Of International Scientific Researches*, 1 (1), Pp. 28-40.
- Görentaş, N. And Yıldız, M. (1999). A Characterization Of Idempotents And Idempotent Generators Of Q_8 . *Bulletin Of Pure And Applied Sciences*, 18(2), 289-292.
- Kahraman, K., Of, M. And Tola, Y. (2018). Accounting And Task Application Student' Learning Styles In Distance Education. The Online Learning Of Distance Education And E-Learning, 6(2), 16-20.
- Kamariah, A.B., Rohani A.T., Sharifah M.N., Wan Zah Wan A., Ramlah H., Arshad A. And, Abdul Rashid, J., (2010). Teachers And Learners' Perspectives On Learning Mathematic For At-Risks Student. *Procedia Social And Behavioral Sciences*, 8(C), 393-402.
- Of M., Şeneldir O., Tola Y., Koparan B., Kahraman K. (2017). Scorm Nesneleri İle Etkileşimli Eğitim. *Turkish Online Journal Of Educational Technology*, Si, 64-72
- Of, M., Kahraman, K. And Kudu, M. (2018). Computer Programming Student' Attitudes In Distance Education. The Online Learning Of Distance Education And E-Learning, 6(2), 41-45.
- Seita, J. (2004), Strength-Based Approaches Expand Into Leadership, *Reclaiming Children And Youth*, Vol. 13 No.1, 22-5.
- Valencia, R., Black, M (2002). "Mexican Americans Don't Value Education! The Basis Of The Myth, Mythmaking, And Debunking", *Journal Of Latinos And Education*, Vol. 1 No.2, Pp.81-103.
- Wehlage, G.G & Rutter, R.A (1986). Dropping Out: How Much Do Schools Contribute To The Problem? *Teachers College Record*. 87(3), Available At [Http://www.tcrecord.org/Pdf/660.Pdf](http://www.tcrecord.org/Pdf/660.Pdf)
- Yıldız, M. And Görentaş, M. (1996). On Homogenous Maps. *Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 1(2), 14-149.
- Zhamuldinov V.N (2013). Some Words About The Correctional Education Problems Of Prisoners. *Middle-East Journal Of Scientific Research* 13: 616-620.

Maths And Programming Project: Developing Mathematical Knowledge With Programming In Middle School

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Abstract

In the curriculum of the Italian secondary school, in the last decade, there has been a renewed interest in the practice of programming, also due to the recent national reforms based on the recommendations of the European Parliament in 2006.

The Maths and Programming project was born with the intention of encouraging the exploration of concepts and properties typical of mathematics through the use of programming. Research literature in mathematics education has shown how the practice of programming helps students develop reasoning, intuition and problem-solving skills. In this perspective, this paper presents the general lines of the project and a didactic activity realized in a first-year Middle school class (age 11-12 years) through the practice of programming using Python programming language.

Introduction

Computer programming is perceived as an important competence for the development of problem-solving skills in addition to logical reasoning. Hence, its integration throughout all educational levels is considered valuable and research studies are carried out to explore the phenomenon in more detail.

High-level thinking and problem-solving skill are requirements of computer programming that most of the students experience problems with. Individual differences such as motivation, attitude towards programming, thinking style of the student, and complexity of the programming language have an influence on students' success at programming (Yağci, 2016). In Italian Middle school, for most students the formal methods of mathematics remain forever mysterious, artificial, poorly motivated, and very obscurely related to intuitive thinking. The teaching of programming languages as a regular part of curriculum study can contribute effectively to reduce formal barriers and to enable students to access an accurate understanding of some key mathematical concepts. In the field of heuristic knowledge for technical problem solving, experience of programming is no less valuable: it lends itself to promote a discussion of relations between formal procedures and the comprehension of intuitive problem-solving and provides examples for the development of heuristic precepts (formulating a plan, subdividing the complexities, etc.). The activity of programming thus fosters an experimental approach toward solving problems; the use of a programming language provides students with a natural framework, a standard vocabulary, and a set of personal experiences for discussing mathematics. This is a great educational benefit – the mathematical thinking of students at all levels is seriously impeded by their inability to verbalise their mathematical experiences (Feurzeig, et al., 2011). Programming is a creative act that does not stop at the intuition of an idea, but expresses a constructive process that is expressed in the algorithm.

The ability to develop algorithmic solutions and to express them in a rigorous manner so as to be able to entrust the execution to a machine - computational thinking - deserves greater attention in the training of future adults as it forms the basis for a conscious use of technology and for profoundly understanding the computational aspects of reality. For these reasons, in Italy, the CINI consortium (Consorzio Interuniversitario Nazionale per l'Informatica - National Inter-university Consortium for Computer Science) has developed a 'Proposal for National Guidelines for the teaching of Computer Science in the School' (<https://www.consorzio-cini.it/index.php/it/component/attachments/download/745>) on the basis of the National Guidelines, highlighting the need to introduce the IT approach to problem-solving from the first school moments.

At the same time, the MIUR (Ministero dell'Istruzione, dell'Università e della Ricerca - Ministry of Education, University and Research) is preparing a syllabus of Digital Civic Education (http://www.generazioniconnesse.it/site/_file/documenti/ECD/ECD-sillabo.pdf) also in light of the National Plan for Digital Education (PNSD - http://www.istruzione.it/scuola_digitale/index.shtml) which introduced computational thinking in schools in order to bring students closer to the basic principles of Computer Science in a playful context (Coding).

The practice of Coding allows for the achievement of two objectives: learning through programming and

developing the habit of solving more or less complex problems. In this perspective, Coding can be included in all the disciplinary teaching activities for each school moment. The policy conducted by the Italian Minister of Education is in line with that of the European Commission which drafted the Digital Education Action Plan (<https://ec.europa.eu/education/sites/education/files/digital-education-action-plan.pdf>), with the goal that by 2020 at least 50% of European schools would take part in Europe Code Week, the campaign for the diffusion of computational thinking (Klopfenstein et al., 2018). As a result, in the last three years the number of Italian teachers who use coding in the classroom has grown through appropriate programming environments.

This paper introduces the essential parts of the Maths and Programming project aimed at the construction of mathematical knowledge through the use of the Python programming language. The main objective is to develop in students the ability to model problems and design algorithms. Specifically, the authors present an educational activity, realised within the project, with students aged 11-12 years. The activity is focused on the construction process of the algorithm for the calculation of the quotient from natural numbers, starting from a real problem.

Theoretical Framework

Today's digital landscape includes a diverse set of software and applications capable of supporting all sorts of mathematical activity. Nonetheless, programming has remained a significant part of science, technology, engineering, and mathematics related disciplines, where professional work often involves not just the use of existing digital tools, but also the creation of new and/or more adequate computer programs. This is just one reason why programming has recently regained the attention of politicians, curriculum developers, and researchers worldwide, who envision it as having potential both within and beyond classrooms (Broley, Caron, & Saint-Aubin, 2018).

In the last thirty years, several studies have been directed to the investigation and analysis of the role and effects of the use of technology in teaching and learning of Mathematics at the cognitive level (Bishop-Clark, 1995; Costabile, & Serpe, 2012; Goos, et al., 2003; Lesmeister, 1996; Quesada, & Maxwell, 1994; Lye, & Koh, 2014; Weber, 1998). In particular, the value of the programming in educational and pedagogical terms has been recognised internationally (Aydin, 2005; Costabile, & Serpe, 2013; Dubinski, & Tall, 1991; Kuzler, 2000; Liao, & Bright, 1991; Oprea, 1988; Pea, & Kusland, 1984). Programming is more than just coding, for, it exposes students to computational thinking which involves problem-solving, as well as using computer science concepts like abstraction and decomposition.

Wiedenbeck & Ramalingam (1999) defined programming as a process which includes a variety of cognitive activities, and mental representations related to program design, program understanding, modifying and debugging. In addition, Bayman & Mayer (1988) specified that programming involves syntactic, conceptual and strategic knowledge. The syntactic knowledge includes the programming languages' specific facts and rules; conceptual knowledge concerns programming structures and principles; and strategic knowledge is related to applying general problem-solving skills (Çakiroğlu, 2013).

The importance of programming since the early years of schooling has also been stressed (Clements, & Gullo, 1984; Clements, 1990; Clements, & Meredith, 1993; Fessakim, et al., 2013). Furthermore, the curriculum of mathematics has given an increasing emphasis on problem solving processes, indicating didactic problems of an intentional and functional nature as the educational goals to be achieved, in terms of knowledge, skills and abilities (National Council of Teachers of Mathematics, 2000). However, in recent years, there has been renewed interest in introducing programming into teaching because it is a cognitive and constructive activity.

Hatfield (1984) had already highlighted the pedagogical value of programming by detecting the existence of strong links between the thought processes that are triggered in students when they design and/or write computer programs and aspects related to mathematical thinking. Even Papert (1980) emphasised the fact that the construction of a program is configured as the construction of knowledge and, above all, warned about the use of 'pre-packaged' programs that inhibit creativity and a sense of discovery in the learner. Similarly, Bork (1981) associates 'computer programming as a vehicle for ... training ... analytic thinking applicable to broad classes of problems' and Nickerson (1982) states that we can see 'computer programming as a vehicle for teaching thinking skills'. Students only learn when they get the chance to construct their own knowledge and re-elaborate previous knowledge. In Mathematics education, computer programming allows the learner to develop new ideas and become familiar with them, and handle mathematical objects in an informed way as a result. The use of a programming environment in the classroom promotes a shift from concrete to abstract learning, and from the iconic to the symbolic (Kelly, 1984) so strengthening rational thinking.

Computer programming has been described by Nickerson (1982) as a creative endeavour that requires planning, accuracy in language use, generation and testing of hypotheses, and ability to identify action sequences. It ought to represent a fundamental part of the literacy for twenty-first century citizens (Rushkoff, 2010) as it is now a skill required for most jobs and spare time activities. While this is certainly true, one should not forget the psychological perspectives of computing in Mathematics (Hatfield, 1984).

The basic principle underlying the practice of programming in the classroom is that students can use the computer as a Mathematics laboratory in which to experiment (Howe, et al., 1989). Devising a program creates the

opportunity for experimenting by operating a cognitive shift in focus from procedures to their effects.

This kind of learning experience develops problem-solving skills. Feurzeig, et al. (1969) - the first to propose the practice of programming in the teaching of Mathematics in the classroom - believed that a programming language would provide an excellent environment for students to explore Maths and provide an ideal context for the understanding of problem-solving steps.

Programming gives the opportunity to organize, produce, understand and establish processes and procedures in order to plan, design and build computer prototypes of objects; translated in terms of student skills this means the learners can acquire intellectual education in all its components (logical, intuitive, creative and imaginative) and capacity for abstraction and modelling to solve real-world problems. Problem-solving is one of the skills employed in the learning of a programming language (Gundarao, Manjunath, & Nachappa, 2010). One needs to develop good problem-solving skills in order to learn how to write a successful computer program (Gundarao, Manjunath, & Nachappa, 2010). Gomes and Mendes (2007) also state that it is necessary for learners to develop good problem-solving skills in order to learn to program.

Maths And Programming Project

The use of programming in school favours the development of high levels of mathematical thinking in relation to numerical aspects related to reasoning, abstraction and problem-solving skills (Clement, 2000). More recently, attention has been paid to defining computational thinking (Wing, 2008), which is seen as part of a family of different aspects of mathematics thinking (Wing, 2008).

Maths and Programming is a one-year research project involving a class of 29 students, aged between 11 and 12 from a secondary-middle school in Calabria (Italy). Divided over a time frame of 40 hours, the project was initially linked to computational thinking to then give ample space to some key concepts of Mathematics emphasised through the programming activity. Specifically, in the first part of the project the students acquired the basics of programming and the general syntax of the Python language; in the second part, on the other hand, they refined the conceptualisation of what had been learned through the structuring of specific algorithms for the resolution of real problems related to basic arithmetic.

The project aims to facilitate the understanding of the concrete-abstract relationship, in order to avoid the acquisition of purely theoretical mathematical concepts in arithmetic with the use of programming.

The procedures of the project were framed around four phases.

- Administration of a pre-test to the students, aimed at exploring the students' knowledge in relation to some arithmetic concepts and students' ability in problem solving. The learning activities are planned based on the results of the pre-test.
- Introduction to basis of programming languages Python.
- Creation of didactic activities, further divided into various dates, supported by the use of Python programming languages.
- Administration of the post-test to the students, which consisted of questions concerning the resolutions of some real arithmetic problems.

The didactic activities were designed for the project based on the learning model in Figure 1 (Frassia, 2018).

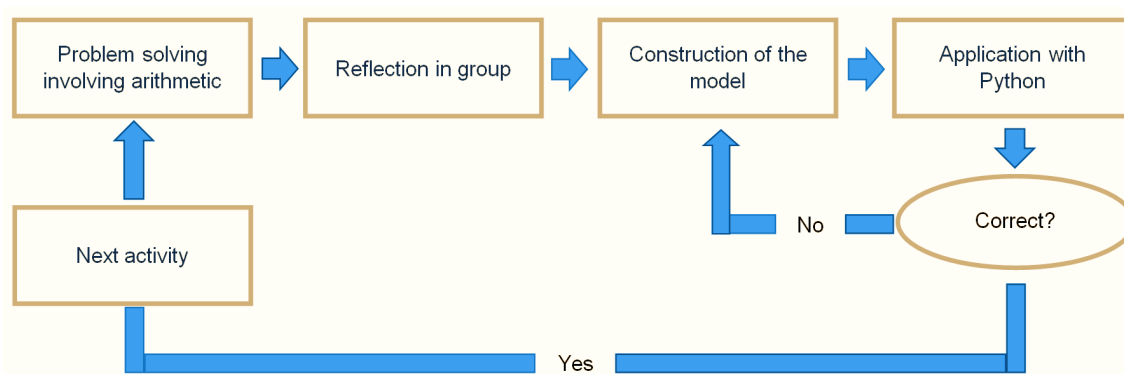


Figure 1: Learning model.

The phases of the teaching activity are explained below in more detail:

Problem-solving involving arithmetic: The learning activity starts by posing a problem in the context of daily life so as to make it meaningful to the students.

Reflection group: A careful reading of the text is followed by a discussion guided by the teacher on questions about the problem. A whole class discussion managed by the teacher includes interaction and communication with the students. As well as being an active, positive and collaborative exchange, this phase is essential for the continuation of the activity and allows all students to reflect on their own ideas.

Construction of the model: The construction of the model requires the students to reproduce some aspects of reality in order to analyse and study them. In this context, the algorithm represents the model. Moving from the experience to the construction of the meaning requires the construction of a simple algorithm to solve the situation proposed.

Application with Python programming language: The model is made explicit and reviewed in a logical sequence thanks to the algorithm; furthermore, the use of a programming environment, like Python, adds value because it helps the students to reinforce their skills in handling mathematical language. The construction of the algorithm is an important and delicate phase because the students have to design the 'finite sequence of steps' that allows the computer to get to the solution or to highlight the need for further study. Moreover, programming is a constructive and cognitive activity as it allows the student to acquire skills, strategies and techniques to solve problems using the concepts of variable, procedure, repetition and recursion, which are transversal concepts linked to other school subjects (Frassia, 2014; Serpe, & Frassia, 2017). The pedagogical-educational value of programming is internationally recognized (Pea, & Kurland, 1984); especially in the Informatics Education Report - ACM Europe (<http://europe.acm.org/iereport/>) the strategic role of this practice that today forms the basis of scientific progress is emphasized. Consequently, the programming cannot and must not be neglected in the teaching and learning of mathematics because it helps to form and enrich the technical, scientific and cultural development of young people. The practice of programming, then, becomes a useful mental training exercise, allowing at the same time the effective resolution of problems or simulation of reality. The teaching practice takes advantage of this game-like activity intended as a "space of knowledge" that allows students to formulate precise questions, record their thoughts, and, therefore, leads them to the formulation of a common synthesis (Frassia, 2015). Aspects of reality, then, are reconfigured to be analyzed and studied through the computer, as a program tool.

The results of pre-test highlight the following students' difficulties:

- in reading and understanding problem;
- they do not recognize data;
- they are not able to reorganizing strategy and solving problem;
- they are not able to confirm of the answer and process.

But, they don't have any difficulty in the operation's (addition, subtraction, multiplication and division) mechanism, that is, the students are able to correctly execute the algorithms of the four fundamental operations. Based on the results of the pre-test and following the learning model, five learning activities were designed (Table 1).

Didactic activity	Learning topics
One	Problem-solving involving addition.
Two	Problem-solving involving subtraction.
Three	Problem-solving involving multiplication.
Four	Problem-solving involving division.
Five	Problem-solving involving four basic operation.

Table 1: Learning topics.

This paper will now concentrate only on the fourth activity.

A Didactic Activity Of Maths And Programming Project

In this section, we report on the fourth learning activity about problem-solving involving division.

Initially, the teacher proposed to the students the following problem situation:

A group of three friends, always attentive to social issues, decided to collect the clothes they no longer wear and to give them to the voluntary associations in their city. None of them knows how many disused items of clothing he/she owns, but it is their intention to distribute them equally among the associations.

In relation to the clothes collected and the number of voluntary associations present in their city, how many items of clothing will each volunteer association receive?

In which case (s) will each voluntary association receive no garment?

In which case (s) will it not be possible for the three friends to realise their purpose?

The teacher engaged in a discussion on the data in the context of the introduced problem. This conversation triggered and guided by the teacher is very important because it avoids the construction of formal games, and educates to a reasoned exposition of conjectures and hypotheses, stimulating creativity, intuition and imagination. The students divided into 6 groups (5 groups of five and 1 group of four) by the teacher reflect about the text of the problem and begin to formulate some hypotheses. Some of the recorded comments between the teacher (T) and students (S1, S2, S3, S4, S5) in group 1 are reported below:

S1: We must divide the number of garments collected by the number of voluntary associations.

S2: But we do not know this.

- T: How can we continue without these data?
- S2: Do we invent them?
- S3: We must make hypotheses and then generalise.
- S2: For example, if the three friends collect 20 garments and there are 2 voluntary associations, they will be able to distribute 10 garments to each association.
- T: And if there were 16 items of clothing and 3 voluntary associations, how would the clothes be divided?
- S1: (With the calculator) 16 divided by 3 equals 5.33333
- T: Can we accept this solution?
- S3: We cannot accept it, because we cannot have a decimal number of garments.
- T: So what?
- S3: Each association will receive 5 garments and the three friends will have one left over.
- T: If the number of garments was 6 and that of associations 11?
- S1: It cannot be done because the first number (the dividend) is smaller than the second (the divisor).
- T: Do you all agree? Think about the case where 3 slices of cake are left and there are five of you, if you decide to eat them only if there is an equal number of slices per head, how many slices of cake will you eat and how many will remain?
- S5: We will not eat any and all 3 will be left over.
- S3: Then each association will have zero garments and 6 will remain.
- T: Let's consider another case: if the number of garments is 7 or any other positive natural number and the number of associations is zero, what happens?
- S2: That makes 7 or the number of garments.
- T: 7 is the result of which operation? Explain this better.
- S2: 7 divided by 0.
- T: If there are no voluntary associations, can the collected garments be divided?
- S4: No.
- T: So, what can we conclude about the division of a positive natural number by zero?
- S3: That division by zero is not possible.

At this point, the teacher proposes to schematise some of the predictable cases so as to give an answer to the initial problem and then put in a table. The following is an example (Table 2).

N. of garments	N. of associations	N. of garments per association
4	2	2
11	3	3
27	4	6
0	5	0
13	0	Not possible

Table 2: Scheme.

At the end of this point, the teacher asks each group of students to write the algorithm that allows them to answer the question when the values related to the number of garments and the number of voluntary associations changes. The ability to think in algorithms and procedures is promoted as an important learning goal in mathematics. Algorithmic thinking describes students' ability to work with algorithms understood as systematic descriptions of problem-solving and construction strategies, cause-effect relationships, and events (Misfeldt, & Ejasing-Duun, 2015).

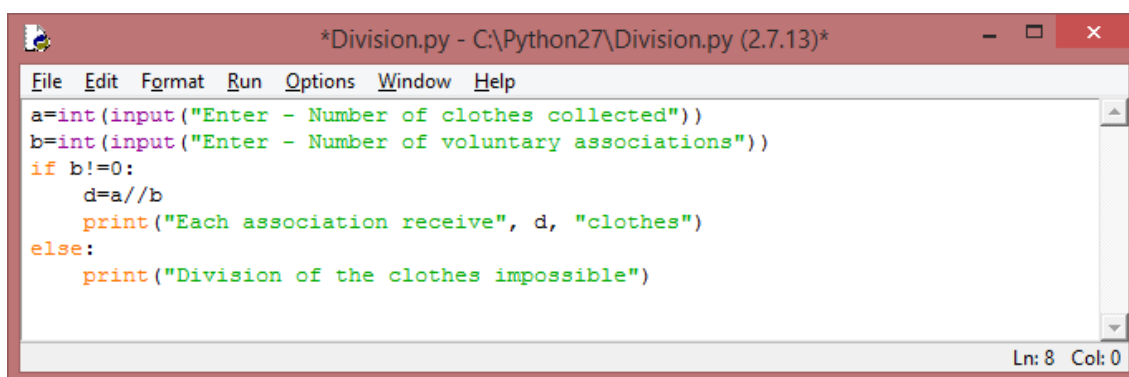
The steps of the algorithm related to the situation proposed are:

```

Input: a (Number of clothes collected)
      b (Number of voluntary associations)
Control:  if (b ≠ 0)
           Calculate:  $d = a/b$  (whole division)
           Print: Each association will receive  $d$  clothes.
        else:
           print: Division of the clothes impossible.

```

The implementation of the algorithm in Python programming language is as follows:



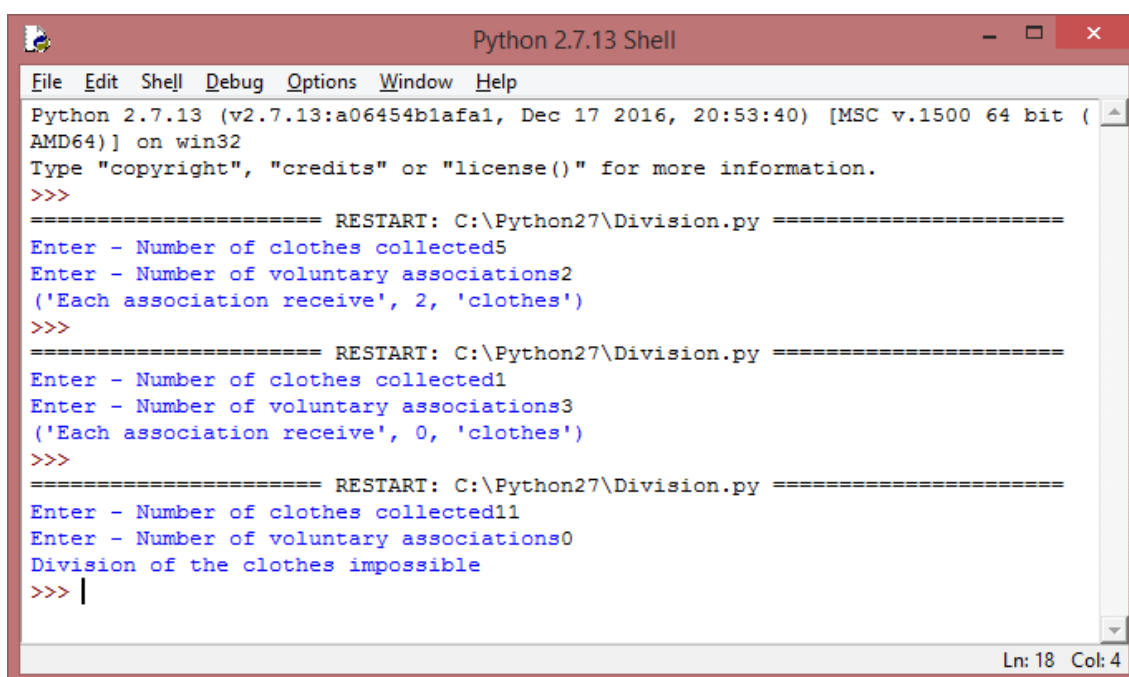
```

File Edit Format Run Options Window Help
a=int(input("Enter - Number of clothes collected"))
b=int(input("Enter - Number of voluntary associations"))
if b!=0:
    d=a//b
    print("Each association receive", d, "clothes")
else:
    print("Division of the clothes impossible")
Ln: 8 Col: 0

```

Figure 2: Code-Program to calculate the solution of the problem.

When the students run the program, they should see the following:



```

Python 2.7.13 Shell
File Edit Shell Debug Options Window Help
Python 2.7.13 (v2.7.13:a06454b1afa1, Dec 17 2016, 20:53:40) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Python27\Division.py =====
Enter - Number of clothes collected5
Enter - Number of voluntary associations2
('Each association receive', 2, 'clothes')
>>>
===== RESTART: C:\Python27\Division.py =====
Enter - Number of clothes collected1
Enter - Number of voluntary associations3
('Each association receive', 0, 'clothes')
>>>
===== RESTART: C:\Python27\Division.py =====
Enter - Number of clothes collected11
Enter - Number of voluntary associations0
Division of the clothes impossible
>>> |
Ln: 18 Col: 4

```

Figure 3: Output – Program to calculate the solution of the problem.

In the end, the students generalise the solutions to the problem:

- If $a < b$ each association received zero garments;
- If $b = 0$ it is not possible to divide the number of garments because there are no voluntary associations in the city;
- If $a > 0, b > 0, a > b$ each association will receive at least one item of clothing.

Conclusions

This study investigated qualitatively the effect of the process of learning to program on students' problem-solving skills.

The results of the study showed that in mathematics learning to program did have a significant effect on students' problem-solving skills.

After the didactic activities, the post-test was administrated. The result of the post-test are listed below:

- They are able to identification the data and the questions;
- They are able to make decision in the resolution of problem solving;
- They are able to make the operation (addition, subtraction, multiplication and division) between integer number in the correct context.

In Table 3, the authors report the initial and final observations made by the students:

Initial observation	Final observation
They believe that division between two natural numbers returns a single "number" - the quotient - and that this can be decimal.	They have become aware of the fact that division between natural numbers returns two integers: the quotient and the remainder.
They cannot contextualise the result of the division in a real situation.	They are able to contextualise the results obtained by the division in the real situation.
They believe that in the division the dividend must be greater than the divisor.	They have become aware that in the division the dividend may be smaller than the divisor.
They believe that a number (n) divided by zero (0) is equal to the number (n).	They have become aware of the fact that the division between a positive natural number and zero is not possible.
Few of them can identify the situation in which division can be applied.	Almost everyone can identify the situations in which the division is to be applied.

Table 3: Initial and final observation of fourth activity.

Ultimately, this type of activity provides students with additional conceptual tools to understand the logic and processes that underlie the resolution of real problems. The abstraction, organisation and precision efforts, characteristic of a mathematical activity assisted by programming, contribute to the development of critical thinking and allow students to create and acquire new skills, also ones that are transversal to other disciplines.

References

- Aydin, E. (2005). The use of computers in mathematics education: a paradigm shift from "computer assisted instruction" towards "student programming". *The Turkish Online Journal of Educational Technology*, 4(2), 27-34.
- Bayman, P. & Mayer, R.E. (1988). Using conceptual models to teach basic computer programming. *Journal of Educational Psychology*, 80, 291-298.
- Bishop-Clark, C. (1995). Cognitive style, personality, and computer programming. *Computers in Human Behavior*, 11(2), 241-260.
- Bork, A. (1981). *Learning with computers*. Digital Press, Bedford, Mass.
- Broley, L., Caron, F., & Saint-Aubin, Y. (2018). Levels of Programming in Mathematical Research and University Mathematics Education. *International Journal of Research in Undergraduate Mathematics Education*, 4(1), 38-55.
- Çakiroğlu, Ü. (2013). Using a hybrid approach to facilitate learning introductory programming. *TOJET: The Turkish Online Journal of Educational Technology*, 12(1).
- Clements, D. H. (1990). Metacomponential development in a Logo programming environment. *Journal of Educational Psychology*, 82(1), 141.
- Clements, D. H., & Gullo, D. F. (1984). Effects of computer programming on young children's cognition. *Journal of Educational Psychology*, 76(6), 1051.
- Clements, D. H., & Meredith, J. S. (1993). Research on Logo: Effects and efficacy. *Journal of Computing in Childhood Education*, 4(4), 263-290.
- Clements, D. H. (2000). From exercises and tasks to problems and projects: Unique contributions of computers to innovative mathematics education. *The Journal of Mathematical Behavior*, 19(1), 9-47.
- Costabile, F.A., Serpe, A. (2012). MatCos: A Programming Environment for Mathematics Education. In G. Lee (Eds.), *Proceedings of the International Conference on Computer and Advanced Technology in Education* (Vol. 859971, pp. 25-30). Beijing, China, ICCATE 2011. New York: ASME Press: New York.
- Costabile, F.A., Serpe, A. (2013). Computer-Based Mathematics Instructions with MATCOS: A Pedagogical Experiment. In P.M. Pumilia-Ggnarini, & E. Pacetti (Eds). *Didactic Strategies and Technologies for Education: Incorporating Advancements* (pp. 724-738). Handbook of Research Vol. II., Cap. 63, IGI Global, Hershey, PA.
- Dubinsky, E., & Tall, D. (2002). *Advanced mathematical thinking and the computer*. In Advanced mathematical thinking (pp. 231-248). Springer Netherlands.
- Feurzeig, W., Papert, S., Bloom, M., Grant, R., & Solomon, C. (1969). *Programming languages as a conceptual framework for teaching mathematics*. Report N. 1889. Bolt Beranek & Newman Inc., Cambridge, MA.
- Feurzeig, W., Papert, S. A., & Lawler, B. (2011). Programming-languages as a conceptual framework for teaching mathematics. *Interactive Learning Environments*, 19(5), 487-501.
- Fessakis, G., Gouli, E., & Mavroudi, E. (2013). Problem solving by 5–6 years old kindergarten children in a computer programming environment: A case study. *Computers & Education*, 63, 87-97.
- Frassia, M.G. (2014). Esperienze di programmazione al computer: 'punti di vista' sul calcolo della probabilità. *Mondo Digitale*, 13(51), 726-735.
- Frassia, M.G. (2015). Games design with the programming environment MatCos for enhanced learning of

- probability theory: a didactic example for high schools. In L. GomezChova, A. LopezMartinez, & I. CandelTorres (Eds.), *EDULEARN15 Proceedings. International Conference on Education and New Learning Technologies* (pp. 1165-1172). Barcelona, Spain: IATED.
- Frassia, M.G. (2018). Enhanced statistical thinking in secondary school with python programming language: a realistic mathematics education approach. In L. GomezChova, A. LopezMartinez, & I. CandelTorres (Eds.), *INTED18 Proceedings. 12th International Technology, Education and Development Conference*. (pp. 3462-3471) Valencia, Spain: IATED. doi: 10.21125/inted.2018.0666
- Gomes, A., & Mendes, A. J. (2007) Learning to program – difficulties and solutions. *Proceedings of the 2007 international convergence on Engineering education*, September 3-7, Coimbra, Portugal.
- Goos, M., Galbraith, P., Renshaw, P., & Geiger, V. (2003). Perspectives on technology mediated learning in secondary school mathematics classrooms. *The Journal of Mathematical Behavior*, 22(1), 73-89.
- Gundurao, H. K., Manjunath, N. S., & Nachappa, M. N. (2010). *Computer Technology and Computer Programming*. Mumbai, IND: Global Media.
- Hatfield, L. L. (1984). Toward comprehensive instructional computing in mathematics. *Computers in mathematics education*, 1-9.
- Howe, J. A. M., Ross, P. M., Johnson, K. R., Plane, F., & Inglis, R. (1982). Teaching mathematics through programming in the classroom. *Computers & Education*, 6(1), 85-91.
- Lesmeister, L. M. (1996). The effect of graphing calculators on secondary mathematics achievement. (Unpublished MS thesis, University of Houston). *Dissertation Abstracts International*, 35, 01.
- Liao, Y. K. C., & Bright, G. W. (1991). Effects of computer programming on cognitive outcomes: A meta-analysis. *Journal of Educational Computing Research*, 7(3), 251-268.
- Lye, S. Y., & Koh, J. H. L. (2014). Review on teaching and learning of computational thinking through programming: What is next for K-12?. *Computers in Human Behavior*, 41, 51-61.
- Misfeldt, M., & Ejsing-Duun, S. (2015). Learning mathematics through programming: An instrumental approach to potentials and pitfalls. In Konrad Krainer; Nad'a Vondrová (Eds.), *Proceedings of the Ninth Congress of the European Society for Research in Mathematics Education*. (pp.2524-2530). CERME 9 - Ninth Congress of the European Society for Research in Mathematics Education, Feb 2015, Prague, Czech Republic.
- Kelly, A.V. (1984). Microcomputers and the curriculum: Uses and Abuses. In A.V. Kelly. (Ed), *Microcomputers and the Curriculum*. (pp. 1-19). London: Harper and Row.
- Klopfenstein, C. U. N. O., Delpriori, S., Paolini, B. D., & Bogliolo, A. (2018). X Marks the Bot: Online coding-based treasure hunt games for code literacy. In L. GomezChova, A. LopezMartinez, & I. CandelTorres (Eds.), *INTED18 Proceedings*. (pp. 4867-4873) Valencia, Spain: IATED.
- Kuzler, B. (2000). The Algebraic Calculator as a Pedagogical Tool for Teaching Mathematics. *International Journal of Computer Algebra in Mathematics Education*, 7(1), 5-23.
- Nickerson, R. S. (1982). Computer programming as a vehicle for teaching of thinking skills. *Thinking*, 4, 42-48.
- Oprea, J. M. (1988). Computer programming and mathematical thinking. *Journal of Mathematical Behavior*, 7(2), 175-190.
- Papert, S. (1980). *Mindstorms: Computers and Powerful Ideas*. New York: Basic Books.
- Pea, R. D., & Kurland, D. M. (1984). On the cognitive effects of learning computer programming. *New ideas in psychology*, 2(2), 137-168.
- Quesada, A. R., & Maxwell, M. E. (1994). The effects of using graphing calculators to enhance college students' performance in precalculus. *Educational Studies in Mathematics*, 27(2), 205-215.
- Rushkoff, D. (2010). *Program or be programmed: Ten commands for a digital age*. Or Books.
- Serpe, A., & Frassia, M.G. (2017). Computer-based activity's development for probability education in high school. *TOJET - The Turkish Online Journal of Educational Technology, Special Issue for INTE 2017 - October 2017*, 613-621. http://www.tojet.net/special/2017_10_1.pdf
- Weber, T. E. (1998). Graphing technology and its effect on solving inequalities. (Unpublished doctoral dissertation, Wayne State University, Detroit, MI). *Dissertation Abstracts International*, 60(01A), 88.
- Wiedenbeck, S. & Ramalingam, V. (1999). Novice comprehension of small programs written in the procedural and object-oriented styles. *International Journal of Human-Computer Studies*, 51, 71-87.
- Wing, J. M. (2008). Computational thinking and thinking about computing. *Philosophical transactions of the royal society of London A: mathematical, physical and engineering sciences*, 366(1881), 3717-3725.
- Yağci, M. (2016). Blended learning experience in a programming language course and the effect of the thinking styles of the students on success and motivation. *TOJET: The Turkish Online Journal of Educational Technology*, 15(4), 32-45.

Maths In-Service Teacher Training In The Italian National Plan For Digital Education - An Example Of Practice For The 21st Century

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Abstract

The growing impact of globalisation and the development of a 'knowledge society' have led many to argue that 21st century skills are essential for life in twenty-first century society and that to utilise technology is central to the development of these skills. Teachers need to be aware of what implications this has for teaching and learning strategies, as well as for the construct of their lesson presentation. A new approach to teaching practice, calibrated for the 21st century, requires teachers to use digital artefacts as an integral part of their teaching.

This paper describes an example of practice in the in-service teacher training programme for maths teachers of secondary school, within the Plan for Digital Education (*Piano Nazionale Scuola Digitale* - PNSD).

The authors' aim is to make participating teachers reflect on their own teaching praxis when using digital technology as an integrated part of their pedagogical content and at the same time to develop their own programmes for digital technology literacy to meet the teaching demands of the 21st century.

Introduction

"The Digital Agenda for Europe is one of the seven flagship initiatives of the Europe 2020 Strategy, set out to define the key enabling role that the use of Information and Communication Technologies (ICT) will have to play if Europe wants to succeed in its ambitions for 2020" (Digital Agenda for Europe, <http://ec.europa.eu/digital-agenda/>). For this reason, the Italian Government has adopted a series of reforms - in the labour market, in the education and innovation systems - aligned with international documents such as the Recommendations of the European Parliament and Council of Europe (<http://ec.europa.eu/citizenship/>), Framework for 21st Century Skills (<http://www.oecd.org/education/ceri/>). The National Plan for Digital Education (*Piano Nazionale Scuola Digitale* - PNSD- <http://www.miur.gov.it/scuola-digitale>) is part of the broader programme initiated by the recent law reforming the education system, "La Buona Scuola" (Law 107/July 2015- <https://labuonascuola.gov.it/>), and is based on the following assumption: technologies should serve active learning for students and innovative practices for teachers, not vice versa.

The final goal is to give teachers and students a competitive advantage, such as classrooms and schools 'boosted' by the internet and technological devices. The plan is the steering document from the Ministry of Education, Universities and Research (Ministero dell'Istruzione, Università e Ricerca - MIUR) to launch a comprehensive strategy for promoting innovation in Italian schools; the purpose is to reposition the education system in the digital era. The plan consists of 35 actions which will be implemented up to 2020 and is in line with the Italian Digital Agenda strategy. Specifically, Action # 25 - In-service training for educational and organisational innovation - (http://www.istruzione.it/scuola_digitale/allegati/Applicativi/SmartGuide_PNSD_DM762_Docenti2016.pdf) is aimed at re-elaborating and adapting professional skills of teachers, not only on a purely instrumental level, but above all on a critical level in order that these teachers rethink their didactic activity in its entirety.

In this institutional framework, the Regional School Office (USR) of Calabria has launched the "PNSD on the Road" initiative dedicated to the promotion of training activities for all local schools, with particular attention to teachers who play the role of both digital animator and as 'part of a digital innovation team' (http://www.istruzione.calabria.it/wp-content/uploads/2016/03/PNSD-on-the-road_per-i-docent.pdf).

This required an open call - from the USR Calabria (regional MIUR) to experienced university researchers in order to follow up on targeted interventions aimed at designing good practices in the classroom with mathematical technologies, also with a view to enhance existing initiatives.

This paper describes an example of practice in the in-service teacher training programme for maths teachers of secondary schools in the province of Cosenza. The training action put in place by the authors, within the 'PNSD on the Road' was aimed at acquiring the knowledge of instructional strategies and representation to enhance the processes of mathematical modelling in the classroom with the use of technological tools intended as tools in service to teaching in a specific pedagogical framework. The paper is structured as follows: this introduction is followed by the theoretical framework and the design and development of one of the teaching practices developed within the training programme. The article finishes with some concluding remarks.

Theoretical Framework

In today's world it is important for students to develop lifelong learning skills, often referred to as a capacity of "learning to learn" (Anderson, 2008, p.19); many countries have implemented initiatives in education, in mathematics in particular, to respond to the challenges in acquiring these new skills - for the 21st century – which are creativity and innovation, communication and collaboration, research and information fluency, critical thinking, problem-solving and decision making, and digital citizenship and technology operations.

The skills cannot be taught in isolation, Voogt et al. (2013) argue that, "most frameworks recognise the complex and cross-disciplinary nature of 21st century competencies and thus recommend integrating them across the curriculum" (p. 407). In preparing for these skills, the appropriate use of technology by maths teachers in education is crucial. Roberts, Leung, and Lin (2013) comment on the complexity of the interplay between technology, mathematics, and education, noting that this complexity related to the use of tools in mathematics is not a phenomenon that is due to current technologies, but one that has been evident whenever people use tools in mathematics. The rapid development of digital technologies features new capabilities not even considered possible in the past. Today, different types of technology are available for teaching mathematics, and different technologies are appropriate for different purpose (Drijvers, et al., 2016). For example, technologies for communication, documentation, and presentation are essential in order to support the exchange of mathematical ideas. Mathematical technologies, such as spreadsheets, Computer Algebra Systems (CAS), Dynamic Geometry Software (DGS), and applet, enable teachers and students to investigate mathematical objects and connections using different mathematical representations, and to solve mathematical problems (Zbiek, et al., 2007).

In a balanced mathematics program, the strategic use of technology strengthens mathematics teaching and learning (Dick, & Hollebrands, 2011). Simply having access to technology is not sufficient. The teacher and the curriculum play critical roles in mediating the use of technological tools (Roschelle, et al., 2009); this implies a revision of pedagogical landscape in terms of the ways in which students engage in learning, and how understandings emerge. Programs in teacher education and professional development must continually update practitioners' knowledge of technology and its application to support learning. Waits and Demana (2000) argue that adoption of technology by teachers requires professional development that focuses on both conceptual and pedagogical issues, ongoing support in terms of "intensive start-up assistance and regular follow-up activities" and a desire to change from within the profession.

In Italia, the Ministry of Education, Universities and Research, for some time now, has adopted strategies to increase teachers' awareness in this direction by means of appropriate training courses that do not stop at the theoretical level, but are supported by tools to support practice and examples: there is nothing better than a good example to understand mechanisms and generate, by analogy, new ideas both in terms of teaching strategies and in relation to the effective use of teaching technologies.

Opening diverse ways for learners to construct and comprehend mathematical knowledge and to solve problems, calibrated for the 21st century, requires a new approach to teaching practice and calls for the reflections of the teachers on their own teaching praxis when using digital technology as an integrated part of their pedagogical content knowledge. Content-based activities using technology should address worthwhile mathematics concepts, procedures, and strategies, and should reflect the nature and spirit of mathematics. Activities should support sound mathematical curricular goals and should not be developed merely because technology makes them possible. Indeed, the use of technology in mathematics teaching should support and facilitate conceptual development, exploration, reasoning and problem-solving (Wilson, 2000). For example, the modelling activities do not compromise mathematical content and pedagogy because they help develop problem-solving skills and promote connections between the real world and the mathematical world (Stillman, et al., 2015).

Several research studies recognise that the development of technology creates more opportunities for practicing mathematical modelling in the classroom (Galbraith, et al., 2007); this has led to the promotion of modelling activities in schools (Lester, & Kehle, 2003; Stillman, et al., 2013).

In recent years, the practice of modelling with the use of technology has been fully included in the Mathematics school curricula (CAS, DGS, spreadsheets, programming environments, etc). Siller and Greefrath (2010) have implemented Blum and Leiss' (2007), modelling cycle introducing the world of technology (Figure 1).

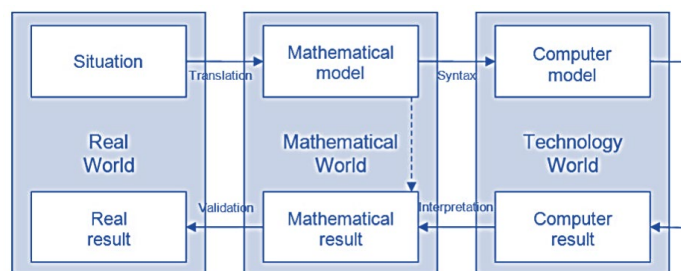


Figure 1: Extended modelling cycle – regarding technology when modelling.

The three worlds shown in Figure 1 are idealised and influence each other. For example, the development of a mathematical model depends on mathematical knowledge on the one hand, and on the other hand is influenced by the technology. The use of technology increases the chance to solve some mathematical models; in particular, the intelligent use of computers in teaching allows us to increase motivation on the one hand and to recognise the importance of mathematics in life on the other (Frassia, & Serpe, 2017). Unfortunately, many teachers prefer not to introduce modelling in classroom practice for different reasons, which include the lengthier learning process; at the same time, there are many reasons in favour of integration between modelling and technology (Siller, & Greefrath, 2010). In classroom teaching practice, the use of technology allows you to create new opportunities in the processes of teaching-learning and at the same time operate active links between the ideas and the mathematical content (Frassia, 2016). The use of technology can help to simplify the difficulties typical of some modelling procedures. Siller and Greenfrath (2010) identify some key elements when you engage in modelling activities with technology: computationally-intensive or deterministic activities; working or evaluating structuring of large data sets; visualising processes and results; experimental working.

Given this scenario, the authors illustrate an example of teaching practice for the 21st century relates to the content 'Elementary functions: basic tool for modelling'. The example emphasizes content and pedagogy, and not just software; in fact, the purpose of the authors is to prevent technology use from compromising mathematics and to encourage users to connect their experiential findings to more formal aspects of mathematics. In other words, technology should not influence students to take things at face value or to become what Schoenfeld (1985) referred to as "naïve empiricists."

An Example Of Teaching Practice

The math in-service teacher training, in the 'PNSD on the road', involved 50 secondary school teachers in a 12 hour course. According to Azione#25, the design of the teacher training programme has seen the development of mathematics teaching practices in such a way as to optimise the potential of technology to enhance students' understanding, stimulate their interest, and increase their proficiency in mathematics.

The choice of mathematical technology has fallen on the DGS GeoGebra because it is a software that teachers know very well from a technical point of view, but above all because it puts together the idea of a usability heuristic with a socio-constructivist learning perspective. The goal of the trainers is to point out that having a repertoire of heuristics does not automatically solve the central problem of "which" to use and "how", once you are faced with a specific problem. The teacher should not focus exclusively on the knowledge possessed (both in terms of basic mathematical knowledge and heuristic repertoire), but on "how" they must be used in order to provide the student with the opportunity to make meaningful and stimulating experiences and that are not limited to the execution of repetitive tasks. For example, the use in class of a DGS like GeoGebra widens the possibilities thanks to the following aspects of pedagogical usability:

- Encouraging student collaboration;
- Sequencing and sharing student work on mathematical task;
- Orchestrating mathematical discourse;
- Monitoring and assessing students' mathematical learning

should be considered along-side the technical aspects.

Based on these premises and in accordance with international research studies (Goos, et al., 2007, Doerr, & Pratt, 2008; Arzarello, et al., 2011), the maths in-service teacher has been oriented to the development of teaching practices related to elementary modelling in the classroom – with the use of GeoGebra – in such a way as to provide links from school-based learning to interdisciplinary themes that are essential to every student's ability to thrive as a global citizen. Students are able to discover ways to solve old problems and develop new ways of thinking about the world around them – a skill that is essential for the 21st century.

Mathematical modelling as an iterative problem-solving process that includes posing authentic, open-ended problems, making assumptions, identifying constraints and variables, building mathematical solutions and, finally, analysing and interpreting these solutions. It is iterative because once the initial solution is tested and translated back to the real world, revisions usually need to be made and the process continued until a satisfactory solution is reached and can be justified (Suh, et al., 2017).

In this perspective, the training action has privileged laboratory teaching in order to re-configure the knowledge to be taught in order to make it an object of investigation for the students and to favour the construction of mathematical ideas and meanings. In fact, the intention of the trainers is to bring the laboratory practice back to the centre as an essential meeting point between 'knowledge and know-how' also in the light of PNSD Action # 7, which designates the laboratory as a place of innovation and creativity where technology must combine tradition and the future, recovering practices and innovating them. Ultimately, a teacher training that sees the planning of laboratory activities, on the elementary mathematical modelling, as a means to improve the application of both the technical and pedagogical usability of the technology.

The teachers, provided with their own device (PNSD Action # 6 - Bring Your Own Device –BYOD), after having chosen the mathematical content must plan a real situation (Real-life problem) and develop it through the

modelling cycle (Fig.1) describing the different sub-processes of modelling with different levels of detail and emphasis. The implementation of this model encourages inductive reasoning while leaving plenty of opportunity for discovery. The simulation with GeoGebra software allows you to take stock of the situation and start again from what you know, to make appropriate considerations and understand why phenomena occur, and their implications. Specifically, the simulation represents a constructive and cognitive activity because it enables you to acquire skills, strategies and techniques for the solution of problems.

Now the authors describe an example of teacher practice on mathematical modelling of linear functions realised during in-service teacher training. In detail, the phases of the teacher training can be summarised as follows:

- 1) Theory-oriented competency (necessary knowledge about theoretical aspects of modelling such as knowledge about modelling cycles, goals and perspectives for modelling, types of modelling tasks).
- 2) Teaching competency (ability to formulate a real-life problem, micro- and macro-scaffolding abilities such as the ability to plan and perform modelling lessons and knowledge of appropriate adaptive interventions to enable students to work as independently as possible) and task-related competency (ability to solve a modelling problem, to analyse possible obstacles and necessary competencies, and to create modelling tasks on their own).
- 3) Diagnostic competency (the ability to identify phases in students' modelling processes and to diagnose students' difficulties during such processes in order to support students during their work and to select modelling problems).

In the first phase the teachers study, with the support of trainers, part of the existing literature on mathematical modelling also with the use of technology, focusing on the modelling cycle of Siller and Greefrath (Fig.1). Another fundamental theoretical pillar of analysis is the question concerning the formulation of a good real-life problem; in this sense, the principles proposed by Wedelin and Adawi (2015) for the design of problems related to real life have been a starting point, also providing ample space for discussion between teachers and trainers.

In the second phase the teachers are actively involved: divided into groups they must design problems related to real life, considering and hypothesising the sequence of actions to be recreated in the classroom and analysing the difficulties and skills required of the students. In this phase, the formulation of the text is fundamental as it must satisfy the principles of Wedelin and Adawi (2015). Below is the text of one of the problems created by a group of teachers, based on an experience in the classroom.

Problem of gym fees:

Anna and Maria received a scholarship of € 150.00 for their excellent academic performance. They decide, by mutual agreement, to allocate part of the amount for registration in the gym and the remaining part as a donation to a charity for the protection of the environment.

Anna and Maria do not live in the same neighbourhood, so they decide to enrol in two different gyms. Anna enrolls in a gym that requires the payment of a registration fee of € 30.00 and a weekly fee of € 10.00; instead the gym to which Maria enrolls requires a registration fee of € 20.00 and a weekly fee of € 12.00.

If Anna and Maria want to allocate the same amount to the charity, how many weeks can they attend the gym?

This example can be discussed under the aspect of different didactical principles:

- Graphical discussions (to draw a chart or diagram of the given situation, and/or modify a given chart with paper and pencil or DGS).
- Symbolic discussion (to describe the situation for both gym fees with the help of a function or functional dependency with paper and pencil or CAS).
- Numerical discussion (to compute data to solve problem with a scientific calculator or spreadsheet).

The various groups of teachers discussing the various methods and having at their disposal each their own device (BYOD) tend to favour the method that they usually use in the classroom also using the technology most familiar to them. Trainers point out to teachers that it is not important which method is chosen because in the classroom, when students are faced with a problem they tend to work on the basis of their experience and use methods familiar to them so that they can fulfil the task. Instead, it is important for student to see the different approaches for this problem.

This problem can be solved in completely different ways. It helps to uses the DGS because this provides the double possibility of translating the problem into the two registers (algebraic and geometric); in addition, by assigning variables - using sliders - the generalisation of the problem and its solution is obtained.

Looking to the modelling cycle by Siller and Greefrath (Figure 1), teachers must try to translate the steps which are necessary for solving the problem.

The hypotheses of the extended modelling cycle for the "Problem of gym fees" problem elaborated by the teachers are presented in Figure 2.

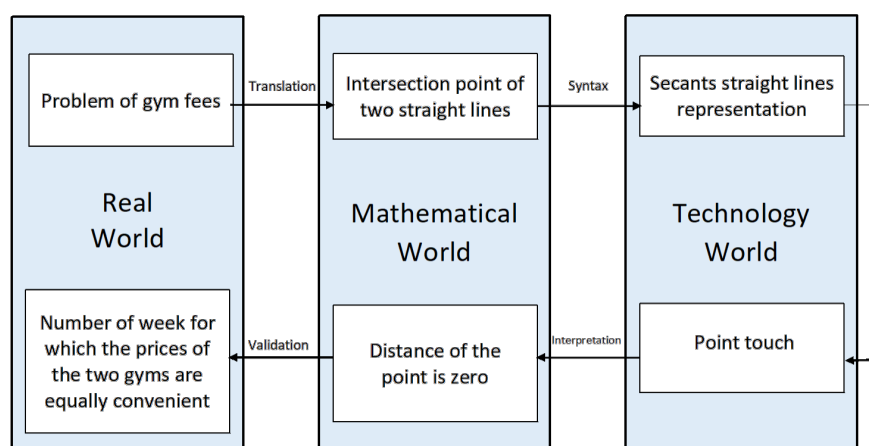


Figure 2: Extended modelling cycle for the “problem of gym fees”.

At this point the teachers retrace the model in Figure 2 step-by-step:

- Reading of the text and discussion aimed at identifying the data of the problem.
- Translation of the "Problem of gym fees" into mathematical language (determine the intersection point between two straight lines). This step requires the modelling process that determines the two payment fees (linear functions), offered by the two gyms:

$$y = 30 + 10x$$

$$y = 20 + 12x$$
- The syntax process allows a geometric representation in the Cartesian plane through modelling with the GeoGebra software (Figure 3).
- Solution of the problem in the world of technology (identification of the intersection point between the two straight lines represented in the previous step).
- Mathematical interpretation of the result obtained with GeoGebra (distance between two points belonging to the two straight lines).
- Validation of the mathematical solution in the real world.

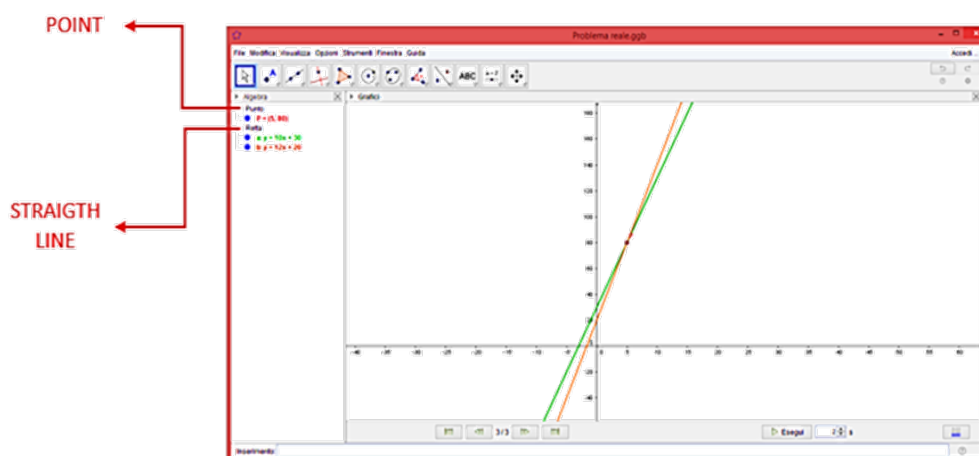


Figure 3. Output of the resolution of the “Problem of gym fees”.

In the third and final phase, teachers discuss the skills that students can develop in a process of mathematical modelling with the use of technology.

Specifically, with reference to Figure 4, the following skills are found:

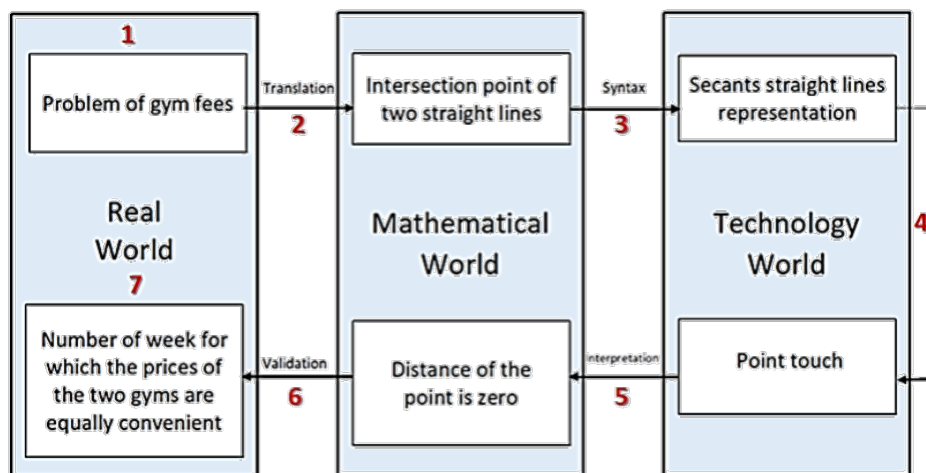


Figure 4: The extended modelling cycle for the “problem of gym fees”.

1. in understanding, analysing and structuring the real problem;
2. in the creation of a mathematical model through the language of the real world and in the use of mathematical content for the resolution of problems;
3. in the manipulation of variables of the mathematical model;
4. in the use of the IT tool;
5. in the interpretation of the results in the mathematical model;
6. on the reflection and validation of the model and in the interpretation of the mathematical results of the real situation;
7. in the communication of the model and its results.

Concluding Remarks

One of the fundamental points of this training activity was to insist on enlarging the methodological horizon, within which to frame the technological one. The task of the trainers was to make teachers reflect on the opportunities offered by mathematical technologies in order to select those that are useful for achieving the objectives set in the design of the various learning environments. Starting from the methodological choices, the teachers were able to grasp the importance of the transformation into the usual didactic practices, thus widening the options and the choice of the most effective strategies for the cognitive and motivational needs of the students. Within this framework the mathematical technologies should be included as "reagents".

Essential heuristic strategies for problem solving were used and encouraged in the work on modelling problems. In addition, modelling problems particularly encourage communicating and arguing. In teaching of mathematics, the use of applications and modelling is important because they promote different goals at various levels.

Due to the link between mathematics and reality, mathematical modelling offers the unique opportunity to get interesting impressions in the subject of mathematics as well as in real life. In this in-service teacher training, content-related, process-oriented, and general goals of modelling have been distinguished in order to underline the importance of mathematical modelling at different levels (Greefrath 2010; Niss et al. 2007).

The example of the practice presented shows how strategic intervention can be created, based on heuristic strategies and the role played by use of mathematical technologies in problem-solving activities.

In the in-service teacher training, the heuristic strategies can act as a conceptual toolkit to analyse the complexity of a modelling problem, identify the important steps in the modelling process, and pre-formulate possible strategic support.

In this scenario, the role of mathematical technology is many-fold because it can be generated and incorporate representations which can assist in transforming an indeterminate situation into a determinate one.

Mathematical technology also plays a central role in coordinating the inquiry, reasoning, and systematising that lead to a determinate situation.

The in-service teacher training that took place within the framework of the “PSND on the Road” has partially changed teachers’ attitudes towards the modelling problems. Indeed, the teachers they have overcome that initial reluctance and have worked with great enthusiasm thus widening their cultural horizons on the integration of meaningful and realistic contexts with the use of technology into mathematics.

In conclusion, the training action has increased teachers' awareness of the fact that technologies must be considered as tools available to teaching and as such they must be used within specific pedagogical models. This is in the belief that methodological and didactic innovation in digital learning environments (as foreseen by the European Framework for the Digital Competence for Educators - DigCompEdu <https://ec.europa.eu/jrc/en/printpdf/137812>) may have place in the school only through a re-elaboration and adaptation of the professional skills of the teachers, not only on a merely instrumental level, but above all on the critical level, so that they reach the ability to rethink their didactic activity in its entirety.

References

- Anderson, R. (2008). Implications of the information and knowledge society for education. In J. Voogt & G. Knezek (Eds.), *International handbook of information technology in primary and secondary education* (pp. 5–22). New York, NY: Springer.
- Arzarello, F., Ferrara, F., & Robutti, O. (2011). Mathematical modelling with technology: the role of dynamic representations. *Teaching Mathematics and its Applications*, 31(1), 20-30.
- Action #6 of PNSD - Linee guida per politiche attive di BYOD (Bring Your Own Device) <https://www.scuole-digitali.it/2016/07/29/le-35-azioni-del-pnsd-piano-nazionale-scuola-digitale/>
- Action #7 of PNSD - Piano per l'apprendimento pratico - <https://www.scuolaetecnologia.it/piano-nazionale-scuola-digitale/azione-7-atelier-creativi-piano-lapprendimento-pratico/>
- Action #25 of PNSD - Formazione in servizio per l'innovazione didattica e organizzativa - http://www.istruzione.it/scuola_digitale/allegati/Applicativi/SmartGuide_PNSD_DM762_Docenti2016.pdf
- Blum, W., & Leiss, D. (2007). How do students and teachers deal with mathematical modelling problems? The example "Filling up". In Haines et al. (Eds.), *Mathematical Modelling: Education, Engineering and Economics* (pp. 222-231). Chichester: Horwood, Publishing.
- Dick, T.P., & Hollebrands, K.F. (2011). *Focus in high school mathematics: Technology to support reasoning and sense making*. Reston, VA: NCTM.
- Digital Agenda for Europe. <http://ec.europa.eu/digital-agenda/>
- Doerr, H.M., & Pratt, D. (2008). The learning of mathematics and mathematical modeling. In M.K. Heid and G.W. Blume, (Eds.) *Research on technology and the teaching and learning of mathematics: Research syntheses*, (pp. 259-285). Information Age Publishing.
- Drijvers, P., Ball, L., Barzel, B., Heid, M.K., Cao, Y., & Maschietto, M. (2016). Uses of Technology in Lower Secondary Mathematics Education. In *Uses of Technology in Lower Secondary Mathematics Education* (pp. 1-34). Springer International Publishing.
- European Commission (EC). (2013). Survey of schools: ICT in education. <http://ec.europa.eu/digital-agenda/sites/digital-agenda/files/KK-31-13-401EN-N.pdf>
- European Framework for the Digital Competence for Educators - DigCompEdu <https://ec.europa.eu/jrc/en/printpdf/137812>
- Frassia, M.G., & Serpe, A. (2017). Learning geometry through mathematical modelling: an example with GeoGebra. *TOJET - The Turkish Online Journal of Educational Technology*, Special Issue for INTE 2017 - November 2017, 411-419.
- Framework 21st Century Skills. <http://www.oecd.org/education/ceri/>
- Galbraith, P.L., Stillman, G., Brown, P., & Edward, I. (2007). Facilitating middle school modelling competencies. In C. Haines, P. Galbraith, W. Blum, & S. Khan (Eds.), *Mathematical modelling (ICTMA 12): Education, engineering and economics* (pp.130-140). Chichester: Horwood.
- Goos, M., Stillman, G., & Vale, C. (2007). *Teaching secondary school mathematics: research and practice for the 21st century*. Crows Nest, NSW : Allen & Unwin.
- Greefrath, G. (2011). Using technologies: New possibilities of teaching and learning modelling-Overview. In G. Kaiser, W. Blum, R. Borromeo Ferri, G. Stillman (Eds.), *Trends in teaching and learning of mathematical modelling*, ICTMA 14 (pp. 301–304). Dordrecht: Springer.
- La Buona Scuola (Law 107/July 2015) <https://labuonascuola.gov.it/>
- Lester, F., & Kehle, P. (2003). From problem solving to modelling: The evolution of thinking about research on complex mathematical activity. In R. Lesh, & H.M. Doerr (Eds.), *Beyond constructivism: Model and modeling perspectives on mathematics problem solving, learning and teaching* (pp.501-518). Mahwah, NJ: Erlbaum.
- Niss, M., Blum, W., & Galbraith, P. (2007). Introduction. In W. Blum, P.L. Galbraith, H.W. Henn & M. Niss (Eds.), *Modelling and applications in mathematics education*. The 14th ICMI Study (pp. 3–32). New York: Springer.
- Piano Nazionale Scuola Digitale (PNSD). <http://www.miur.gov.it/scuola-digitale>
- PNSD on the Road. http://www.istruzione.calabria.it/wp-content/uploads/2016/03/PNSD-on-the-road_per-i-docent.pdf
- Recommendations of the European Parliament and Council of Europe. <http://ec.europa.eu/citizenship/>
- Roberts, D., Leung, A., & Lin, B. (2013). From the slate to the web: Technology in the mathematics curriculum. In A. Bishop, M.A. Clements, C. Keitel, J. Kilpatrick, & F. Leung (Eds.), *Third international handbook of*

- mathematics education* (pp. 525–547). Berlin: Springer.
- Roschelle, J., Rafanan, K., Bhanot, R., Estrella, G., Penuel, W.R., Nussbaum, & M., Claro, S. (2009). Scaffolding group explanation and feedback with handheld technology: Impact on students' mathematics learning. *Educational Technology Research and Development*, 58, 399–419.
- Schoenfeld, A. (1985). *Mathematical problem solving*. New York: Academic Press.
- Siller, H.S., & Greefrath, G. (2010). Mathematical modelling in class regarding to technology. In V. Durand-Guerrier, S. Soury-Lavergne, & F. Arzarello (Eds.), *Proceeding of the Sixty European Conference on Research on Mathematics Education* (pp. 1150-1160). INRP. <http://www.inrp.fr/editions/cerme6>
- Stillman, G.A., Kaiser, G., Blum, W., & Brow, J.P. (Eds.) (2013). *Teaching Mathematical Modelling: Connecting to Research and Practice, International Perspectives on the Teaching and Learning of Mathematical Modelling*. Springer Science + Business Media Dordrecht.
- Stillman, G.A., Blum, W., & Salett Biembengut, M. (Eds.) (2015). *Mathematical Modelling in Education Research and Practice Cultural, Social and Cognitive Influences, International Perspectives on the Teaching and Learning of Mathematical Modelling*. Springer International Publishing Switzerland.
- Suh, J.M., Matson, K., & Seshaiyer, P. (2017). Engaging Elementary Students in the Creative Process of Mathematizing their World through Mathematical Modeling. *Educational Sciences*, 7(62), 1-21.
- Voogt, J., Erstad, O., Dede, C., & Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of the 21st century. *Journal of Computer Assisted Learning*, 29, 403–413.
- Waits, B.K., & Demana, F. (2000). Calculators in mathematics teaching and learning: Past, present, and future. In M.J. Burke, & F.R. Curcio (Eds.), *Learning mathematics for a new century* (pp. 51-66). Reston, VA: National Council of Teachers of Mathematics.
- Wedelin, D., & Adawi, T. (2015). Applied Mathematical Problem Solving: Principles for Designing Small Realistic Problems. In *Mathematical Modelling in Education Research and Practice* (pp. 417-427). Springer International Publishing.
- Wilson, J. (2000). *Technologies in Secondary Schools*. <http://jwilson.coe.uga.edu/TiMER/TiMER.S.html>
- Zbiek, R.M., Heid, M.K., Blume, G.W., & Dick, T. (2007). Research on technology in mathematics education: A perspective of constructs. In F. Lester (Ed.), *Second handbook of research on mathematics teaching and learning* (pp. 1169–1207). Charlotte, NC: Information Age.

Mediator Role Of Motivational Self Talk In The Relation Of Life Satisfaction And Mental Toughness

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Abstract

The objective of this study is to examine the mediator role of motivational self-talk in the relation of life satisfaction and mental toughness. In line with the objective of the study, 199 athletes ($Age_{mean} = 20,30 \pm 2,526$), 110 of whom were females ($Age_{mean} = 20,09 \pm 0,277$) and 89 of whom were males ($Age_{mean} = 20,55 \pm 0,206$), volunteered to participate in the research, who were doing active sports in 2017-2018 season. Sport experience of the participants was calculated as $Year_{mean} = 6.07 \pm 3.70$. In order to reach the objective of the study, Life Satisfaction Scale, Self Talk Scale, and Mental Resilience Scale were used. In line with the objective of the study, in order to determine the relations among the variables, firstly correlation analysis was conducted. Pearson correlation coefficient necessitates both of the variables to be constant and to demonstrate a normal distribution together (dually). The interpretation of the r values, which are Pearson coefficients, were conducted as such; r values in between .00-.29 indicate low relation, while in between .30 and .69 they indicate mid-level relation, and in between .70 and 1.00 high-level relation (Büyüköztürk, 2008). Statistical significance level was accepted as .05. Moreover, the PROCESS macro regression analysis was used in order for the mediator role of the motivational self talk in between the life satisfaction and mental toughness. The analyses were conducted in 95 % confidence interval, and in order to test whether the mediator role was significant, Sobel z test was used. For the analyses of the research, SPSS 22.00 package program was used. When the findings of the research are examined, it can be stated that motivational self-talk has a positive mediator role in the predictor effect of life satisfaction on mental toughness. According to these results, it can be stated that one of the factors affecting mental toughness of the athletes is life satisfaction, moreover, with the mediator role of the motivational self-talk, the effect of life satisfaction increases on the mental toughness. Considering the positive effects, it is evaluated that life-satisfaction-increasing ones should be included in the mental-toughness-increasing activities, and that steps taken to increase motivational self-talk of the athletes might be effective in increasing their mental toughness.

Keywords: *Life Satisfaction, Motivational Self Talk, Mental Toughness.*

Introduction

Neugarten had first proposed the life satisfaction concept in 1961. Fundamentally, it is the condition, or the result, obtained by comparing the individuals' expectations (what one wants) and what they have at hand (what one has) (Özer and Karabulut, 2003). Subjective well-being and life satisfaction are described by many as the primary goals of life. Subjective well-being is closely related to how the individual assesses his or her life. It is suggested that the individual's life goals, the thoughts and the emotions of fulfilling these goals play a predictive role in achieving happiness and pleasure (Rask et al., 2002).

Life satisfaction is a subject in positive psychology issues that have been on the agenda in the sports and exercise environment for many years (Gaudreau & Antl, 2008; Ardahan, 2012; Toros et al., 2010; Özkara, Kalkavan & Çavdar, 2015; Şahin, Bayköse & Civar Yavuz, 2017; Kiliç, Bayköse & Kaplan, 2018; Guhn et al., 2018; Yıldız, Gülşen & Yılmaz, 2015; Yıldız et al, 2017).

The concept of mental toughness has recently become a topic that is on the agenda of researchers who are both in Turkey (Bayköse et al., 2017; Altıntaş & Koruç, 2017; Yarayan, Yıldız & Gülşen, 2018) and in other countries (Weinberg, Freysinger & Mellano, 2018; Thelwell et al., 2005; Jones et al, 2002; Bull et al., 2005; Clough et al., 2002). Although the concept of mental toughness, which is based on theoretical foundations by researchers many years ago (Kelly, 1955; Loehr, 1982), has been associated with positive and desired psychological features related to success (Jones et al., 2002), it is stated that specific themes are repeated in the current literature (Crust, 2007). Researchers and theorist defined mental toughness as coping with pressure and negativities in a way that performance will be least affected (Clough et al., 2002; Jones et al., 2002; Loehr, 1995; Middleton et al., 2004a; Williams, 1988), overcoming difficulties and failures with increasing determination to success (Clough et al.,

2002; Goldberg, 1998; Jones et al., 2002), refusing to give up and persevering (Goldberg, 1998; Gould et al., 1987; Middleton et al., 2004a), competing with oneself and others (Bull, Shambrook, James & Brooks, 2005; Clough et al., 2002), being stable and resistant (Bull et al., 2005; Clough et al., 2002; Goldberg, 1998; Gould et al., 2002), having a steadfast belief for self-determination (Clough et al., 2002; Jones et al., 2002; Middleton et al., 2004a), development through pressure (Bull et al., 2005; Jones et al., 2002; Thelwell et al., 2005), and having superior mental skills (Bull, Albinson, & Shambrook, 1996; Golby, Sheard, & Lavallee, 2003; Loehr, 1995).

One of the most common cognitive strategies used by athletes is self-talk. Self-talk is central to cognitive and cognitive-behavioral interventions and has recently become an important research topic in the field of applied sports psychology (Conroy & Metzler, 2004). Self-talk refers to the internal or external explanations that individuals make themselves and is defined as an internal dialogue in which individuals interpret perceptions and emotions, organize and change evaluations and cognitions, and instruct themselves (Hackfort & Schwenkmezger, 1993).

Initially, researchers have distinguished between two main dimensions of self-talk including positive and negative self-talk. Positive self-talk is defined as expressions requiring praise and courage, and negative self-talk is defined as criticism and self-concern (Moran, 1996). More contemporary approaches guide self-talk according to its purposes. Zinsser, Bunker, and Williams (2001) expressed self-talk as an instructional or motivational phenomenon. While instructional self-talk is related to the statements associated with focus, technical knowledge, and tactical options, motivational self-talk indicates the statements related to creating self-confidence, effort, and positive moods. Following the researches, Hardy and his colleagues (Hardy, 2006; Hardy, Hall & Hardy 2005) made a more comprehensive definition of self-talk. They have defined self-talk as a multidimensional dynamic phenomenon related to the words that come out of the athletes' mouth. In this study, Considering the theoretical approach put forward by Zinsser, Bunker and Williams (2001), the motivational dimension of self-talk will be examined. In line with this information, the following H1 hypothesis will be tested within the scope of the research. H₁= There is a mediation role of motivational self-talk in the influence of life satisfaction on mental endurance.

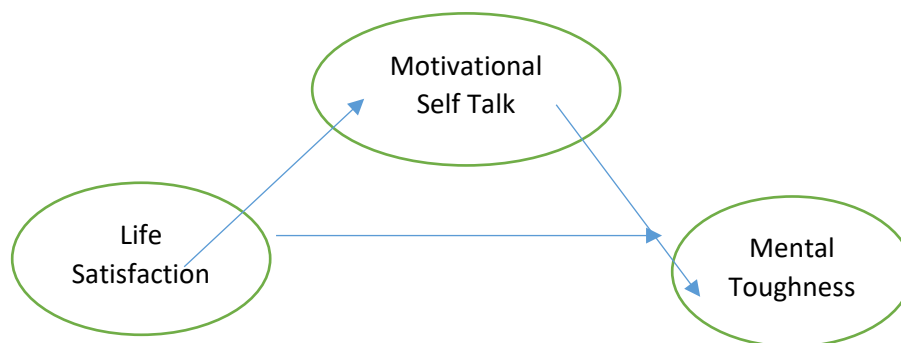
Method

Research Model

This study was a relational screening model designed to examine the mediation role of self-talk levels in the relationship between life satisfaction and mental toughness. Karasar (2009) defined the relational screening models as the research models aiming at finding out the existence and degree of covariances between two or more variables. In the scope of this model, the mediation role of self-talk levels in the relationship between life satisfaction and mental toughness was examined.

The hypothesized model was shown below;

Figure 1: Research Model



Research Group

110 females (Age_{mean}: 20,09 ± 0,277) and 89 males (Age_{mean}: 20,55 ± 0,206), totally 199 athletes (Age_{mean}: 20,30 ± 2,526), voluntarily participated in the study. The sports experience mean score of the athletes was Year_{mean}: 6.07 ± 3.70.

Data Collection Tools

To reach the research purpose, Life Satisfaction Scale, Self-Talk Questionnaire and Sport Mental Toughness Scale were used. The detailed information on the scales used in the research is given below.

The Satisfaction With Life Scale-SWLS

The Satisfaction with Life Scale, developed by Pavot and Diener (1993), was used. The Satisfaction with Life Scale was a scale developed to evaluate the respondent life in the aggregate. This scale is not for assessing the living area such as health or income but allows them to be integrated. The Satisfaction with Life Scale is a 7-Likert type scale.

It is a scale including 5 items rated as 7. Absolutely agree, 6. agree, 5. agree very little, 4. Undecided, 3. Disagree a little 2. Disagree 1. Absolutely Disagree (my life in many directions is close to ideal, my living conditions are

excellent, my life satisfies me, up to now, I have achieved the important things I want in life, If I had the chance to live my life again, I would hardly change anything). The highest score one can get from the scale is 35; the lowest one is 5; the higher the score in the scale, the higher the level of life satisfaction (Pavot and Diener, 1993). The scale was used in various fields (Yetim, 1991). Pavor and Diener found the reliability of the scale as $\alpha = 0.89$. In this study, the reliability of the scale was found to be $\alpha = 0.695$.

Self-Talk Questionnaire

The Self Talk Questionnaire was developed by Zervas, Stavrou & Psychountaki (2007) for use in sports and sports environments. Turkish adaptation was conducted by Engür (2011) in a sample of 422 college athletes (157 females and 265 males). Latent variables measured by item groups related to a theoretical model created by KKA hypothesizing that there were 11 items and 2 factors by Zervas et al. (2007) were tested by using CFA in LISREL 8.51. The model fit of χ^2 / df calculated as 165.74/38=4.36. The other fit indices were calculated as RMSEA = 0.089, SRMR = 0.037, GFI = 0.93, AGFI = 0.88, NFI = 0.96; NNFI = 0.96, CFI = 0.97[3]. For the reliability of self-talk scale, reliability coefficient for motivational function subdimension was 0.94 while the value for cognitive function subdimension was 0.87 (Engür, 2011; Zervas, Stavrou & Psychountaki, 2007)

Sport Mental Toughness Scale

In the study, the Sport Mental Toughness Questionnaire (SMTQ-14) developed by Sheard et al., (2009) was applied to determine the mental toughness level of athletes. 14-item sport mental toughness scale measure three different subdimensions (Confidence, Continuity, and Control) as well as general mental toughness. The scale is the 4-point Likert type (1=completely wrong, 4=Completely right). The Cronbach's alpha values of Sport Mental Toughness Questionnaire was found to be 0.81 for Confidence; 0.74 for Continuity; 0.71 for control (Sheard et al., 2009). The fit indices of the inventory that tested with the participation of 509 athletes having age mean of 20 years were found to be GFI=0.95, AGFI=0.93, RMSEA=0.05, RMR=0.05, CFI=0.92, IFI=0.93 (Sheard et al., 2009). The Cronbach Alpha values of the Sport Mental Toughness Questionnaire adapted to Turkish culture by Altıntaş & Koruç (2017), were 0.84 for the Confidence; 0.51 for Continuity; 0.79 for Control (Altıntaş & Koruç, 2017). The fit indices for the inventory was GFI=0.90, AGFI=0.89, RMSEA=0.07, RMR=0.04, CFI=0.91, IFI=0.91 (Altıntaş & Koruç, 2017).

Analysis

Within the scope of the research purpose, correlation analysis was first performed to determine the relationships between variables. The Pearson correlation coefficient requires that both variables are continuous and that the variables have a normal distribution (in pairs). The value r , which represents the correlation coefficient, has been interpreted as follows: the relationship is low between .00-.29, moderate between .30-.69, and high between .70 and 1.00 (Büyüköztürk, 2008). The significance level was accepted .05 statistically. PROCESS macro regression analysis was used for analysis, and analysis was performed at 95% confidence interval, the Sobel z test was used to test whether the mediation was significant. SPSS 22.00 program was used for the analysis.

Results

Correlations between variables

Table 1: The relationship between life satisfaction, motivational self-talk, and mental toughness

		Life Satisfaction	Motivational Self Talk	Mental Toughness
Life Satisfaction	r	1		
	p			
	n	199		
Motivational Self Talk	r	.175*	1	
	p	.013		
	n	199	199	
Mental Toughness	r	.198**	.452**	1
	p	.005	.000	
	n	199	199	199

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

When table 1 is examined, significant differences were found between life satisfaction and motivational self-talk ($r: .175, p<0.05$); life satisfaction and mental toughness ($r: .198, p<0.05$), and mental toughness and motivational self-talk ($r: .452, p<0.05$)

Research Model

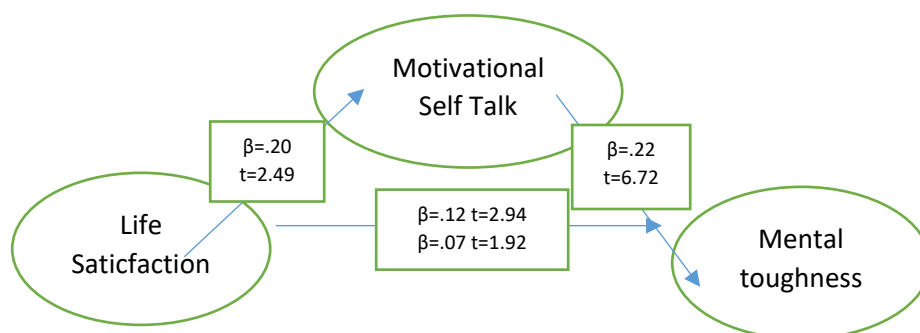


Figure 2: The mediation role of motivational self-talk of the athletes in the relationship between life satisfaction and mental toughness

The determination that there is a positive and significant correlation between life satisfaction and mental toughness allows testing the hypothesized mediation. PROCESS macro regression analysis was used to test whether motivational self-talk played a role in the relationship between life satisfaction and mental toughness. The predictive effect life satisfaction on motivational self-talk was examined in the first step of PROCESS macro regression analysis, and it was found that life satisfaction predicted motivational self-talk ($\beta=.20$, $t=2.49$, $p<.05$) at the level of 3% ($R=.17$, $R^2=.03$, $F=6.23$, $p<.05$).

In the second step of PROCESS macro regression analysis to determine whether motivational self-talk played a role in the relationship between life satisfaction and mental toughness, the predictive effect of life satisfaction on mental toughness was examined. When the results were examined, it was seen that life satisfaction ($\beta=.12$, $t=2.94$, $p<.05$) predicted mental toughness at the level of 4% ($R=.19$, $R^2=.04$, $F=8.06$, $p<.05$).

In the third step of PROCESS macro regression analysis to determine whether motivational self-talk played a role in the relationship between life satisfaction and mental toughness, motivational self-talk was included in the PROCESS macro regression analysis and found that it was seen that motivational self-talk contributed to the prediction of mental toughness at the level of 5%. Accordingly, it was found 22% of the total variances was explained via motivational self-talk in the prediction of mental toughness by life satisfaction ($R=.47$, $R^2=.22$, $F=27.54$, $p<.05$). In the third step of the analysis, it was observed that the effect of life satisfaction on mental toughness decreased ($\beta=.07$, $t=1.92$, $p>.05$). Thus, it can be said that motivational self-talk has a full mediation role in this relationship ($\beta=.22$, $t=6.73$, $p<.05$). Sobel z test, used to determine whether the mediation role was significant, showed that the mediation relation was statistically significant ($Z=2.32$, $p<.05$).

Table 3: The direct and indirect effects of life satisfaction on mental toughness

Direct Effect			Effect	S.E	LLCI	ULCI	t	p
Life Satisfaction	Mental Toughness		.074	.0383	-.0023	.1494	1.92	.050
Indirect Effect			Effect	S.E	LLCI	ULCI	t	p
Life Satisfaction	Motivational Self talk	Mental Toughness	.045	.0249	.0025	.1022	2.84	.000
Total Effect			.118	.0416	.0363	.2009		
Normal Theory Test for indirect effect								
Effect: .0487		s.e: .0195		z: 2.3181		p: .0204		

In table 3, it was found that total effect (direct + indirect) of life satisfaction on mental toughness was positive ($\beta: 0,074+0,045=0,118$) and statistically significant ($p=0,000$). Because the Z score (2,3181) of this model was higher than 1,96 and significant, the existence of a mediator effect can be said. According to this finding, H_1 (There is a mediation role of motivational self-talk in the influence of life satisfaction on mental endurance) was accepted.

Discussion And Conclusion

The direct and the indirect relationship between life satisfaction and mental toughness levels of the athletes were examined in this study. In line with the purpose of this study, 110 females ($Age_{mean}: 20,09 \pm 0,277$) and 89 males ($Age_{mean}: 20,55 \pm 0,206$), totally 199 athletes ($Age_{mean}: 20,30 \pm 2,526$), voluntarily participated in the study. The sports experience mean score of the athletes was $Year_{mean}: 6.07 \pm 3.70$.

When the results were examined, it was observed that the relationship between life satisfaction and motivational self-talk and the that between life satisfaction and mental toughness were significant. Furthermore, it was found that the relationship between mental toughness and motivational self-talk was significant.

The determination that there is a positive and significant correlation between life satisfaction and mental toughness allows testing the hypothesized mediation. PROCESS macro regression analysis was used to test whether motivational self-talk played a role in the relationship between life satisfaction and mental toughness. The predictive effect life satisfaction on motivational self-talk was examined in the first step of PROCESS macro regression analysis, and it was found that life satisfaction explained 3% of the total variances related to motivational self-talk. In this context, it can be said that increasing life satisfaction enhances motivational self-talk tendency. When the literature is examined, it is suggested that positive self-talk has a positive impact on performance and (Vab Raalte et al., 1995) and interrelated and correlated with many positive psychology dynamics (Neck & Manz, 1992).

In the second step of PROCESS macro regression analysis to determine whether motivational self-talk played a role in the relationship between life satisfaction and mental toughness, the predictive effect of life satisfaction on mental toughness was examined. When the results were examined, it was seen that life satisfaction explained 4% of the total variance related to mental toughness. In line with this information, it can be said that increasing life satisfaction contributes to mental toughness. As it is stated in the introduction, mental toughness concept can contribute to many positive components such as having a steadfast belief for self-determination (Clough et al., 2002; Jones et al., 2002; Middleton et al., 2004a), development through pressure (Bull et al., 2005; Jones et al., 2002; Thelwell et al., 2005), and having superior mental skills (Bull, Albinson, & Shambrook, 1996; Golby, Sheard, & Lavalley, 2003; Loehr, 1995), according to our results, it can be said that having a certain level of life satisfaction will provide support for mental toughness.

In the third step of PROCESS macro regression analysis to determine whether motivational self-talk played a role in the relationship between life satisfaction and mental toughness, motivational self-talk was included in the PROCESS macro regression analysis and found that it was seen that motivational self-talk contributed to the prediction of mental toughness at the level of 5%. Accordingly, it was found 22% of the total variances was explained via motivational self-talk in the prediction of mental toughness by life satisfaction. In the third step of the analysis, it was observed that the effect of life satisfaction on mental toughness decreased. Thus, it can be said that motivational self-talk has a full mediation role in this relationship. Sobel z test, used to determine whether the mediation role was significant, showed that the mediation relation was statistically significant. In line with these obtained results, it can be said that motivational self-talk mediates the relationship between life satisfaction and mental toughness. Based on the results, motivational self-talk can play a critical role in creating or increasing mental toughness studies.

Consequently, it is thought that individuals who want to contribute to the mental toughness of the athletes can benefit from motivational self-talk intervention programs as an intervention to increase their life satisfaction. Moreover, an intervention program for motivational self-talk can be developed and tested for efficiency by the researchers based on the views in literature in future studies.

Author Note

This study is an improved version of the oral presentation presented in the International Conference on New Horizons in Education held between 18-20 July.

References

- Büyüköztürk, Ş. (2008). Sosyal Bilimler İçin Veri Analizi El Kitabı. Ankara: Pegem Akademi Yayınları.
- Karasar, N. (2009). Bilimsel araştırma yöntemi (19. bs). Ankara: Nobel yayın dağıtım.
- Pavot, W. ve Diener, E (1993), "Review of the Satisfaction With Life Scale", Psychological Assessment, 5, 164-172.
- Yetim, Ü., (1991), Kişisel Projelerin Organizasyonu Açısından Yaşam Doyumu, Yayınlanmamış Doktora Tezi, İzmir: Ege Üniversitesi. Sosyal Bilimler Enstitüsü.
- Conroy, D., & Metzler, D. E. (2004). Patterns of self-talk associated with different forms of competitive anxiety. Journal of Sport and Exercise Psychology, 26, 69–89.
- Hackfort, D., & Schwenkmezger, P. (1993). Anxiety. In R. N. Singer, M. Murphy, & L. K. Tennant (Eds.), Handbook of research on sport psychology (pp. 328–364). New York: Macmillan.
- Moran, A. P. (1996). The psychology of concentration in sport performers. East Sussex, UK: Psychology Press.
- Zinsser, N., Bunker, L., & Williams, J. M. (2001). Cognitive techniques for building confidence and enhancing performance. In J. M. Williams, (Ed.), Applied sport psychology: Personal growth to peak performance (4th ed.; pp. 284–311). Mountain View, CA: Mayfield.
- Hardy, J., Hall, C. R., & Hardy, L. (2005). Quantifying self-talk. Journal of Sports Sciences, 23, 905–917
- Hardy, J. (2006). Speaking clearly: A critical review of the self-talk literature. Psychology of Sport & Exercise, 7, 81–97.
- Rask K, Astedt-Kurki P, Laippala P (2002) Adolescent subjective well-being and realized values. J Adv Nurs, 38: 254-263.
- Özer M, Karabulut ÖÖ (2003) Yaşlılarda yaşam doyumu. Geriatri, 6(2):72-74.

- Ardahan, F. (2012). Duygusal zekâ ve yaşam doyumu arasındaki ilişkinin doğa sporu yapanlar örneğinde incelenmesi. *Pamukkale Journal of Sport Sciences*, 3(3), 20-33.
- Toros, T., Akyüz, U., Bayansaldüz, M., & Soyer, F. (2010). Görev ve ego yönelimli hedeflerin yaşam doyumu ile ilişkisinin incelenmesi (Dağcılık sporu yapanlarla ilgili bir çalışma). *Uluslararası İnsan Bilimleri Dergisi*, 7(2), 1039-1050.
- Özkara, A., Kalkavan, A., & Çavdar, S. (2015). Spor bilimleri alanında eğitim alan üniversite öğrencilerinin yaşam doyum düzeylerinin araştırılması. *International Journal of Science Culture and Sport*, 3(Special Issue 3), 336-346.
- Şahin, A., Bayköse, N., & Civar Yavuz, S. (2017). The role of motivational self-talk and life satisfaction on determining the flow experience of undergraduate athletes. *Turkish Online Journal of Educational Technology*, (December Special Issue), 867-871.
- Kiliç, T., Bayköse, N., & Kaplan, K. (2018). Comparing the Life Quality of the Students in the Faculty of Sports Sciences and the Faculty of Education. *Journal of Education and Training Studies*, 6(8), 116-122.
- Yıldız, A. B., Gülşen, D. B. A., & Yılmaz, B. (2015). Sporcuların Optimal Performans Duygu Durumunun Yaşam Tatminleri Üzerindeki Etkisi. *Niğde University Journal of Physical Education And Sport Sciences* (Special Issue) Vol 9, 58-64.
- Guhn, M., Ark, T. K., Emerson, S. D., Schonert-Reichl, K. A., & Gadermann, A. M. (2018). The Satisfaction with Life Scale adapted for Children: Measurement invariance across gender and over time. *Psychological assessment*.
- Gaudreau, P., & Antl, S. (2008). Athletes' broad dimensions of dispositional perfectionism: Examining changes in life satisfaction and the mediating role of sport-related motivation and coping. *Journal of Sport and Exercise Psychology*, 30(3), 356-382.
- Yıldız, M., Bingöl, E., Şahan, H., Bayköse, N., & Senel, E. (2017). A Cross-Cultural Approach to Sport Psychology: Is Exercise Addiction A Determinant of Life Quality?. *Sport Journal*. 1-10.
- Bayköse N., Civar Yavuz, S., Özer, Ö., & Şahin, A. (2017). The role of self-talk and self-efficacy levels of athletes studying at faculties of sport sciences on predicting mental toughness. *Turkish Online Journal of Educational Technology*, (December Special Issue), 591-595.
- Altıntaş, A., & Koruç, B. K. (2017). Sporda zihinsel dayanıklılık envanteri'nin psikometrik özelliklerinin incelenmesi. *Spor Bilimleri Dergisi Hacettepe Journal of Sport Sciences*, 27(4), 162-171.
- Yarayan, Y. E., Yıldız, A. B., & Gülşen, D. B. A. (2018). Examination of Mental Toughness Levels of Individual and Team Sports Players at Elite Level According to Various Variables. *The Journal of International Social Research*. 11 (57), 992-999.
- Weinberg, R., Freysinger, V., & Mellano, K. (2018). How can coaches build mental toughness? Views from sport psychologists. *Journal of Sport Psychology in Action*, 9(1), 1-10.
- Crust, L. (2007). Mental toughness in sport: A review. *International Journal of Sport and Exercise Psychology*, 5(3), 270-290.
- Loehr, J. (1982). *Mental toughness training for sports*. New York: The Stephen Greene Press.
- Jones, G., Hanton, S., & Connaughton, D. (2002). What is this thing called mental toughness? An investigation of elite sport performers. *Journal of Applied Sport Psychology*, 14, 205-218.
- Clough, P. J., Earle, K., & Sewell, D. (2002). Mental toughness: the concept and its measurement. In I. Cockerill (Ed.), *Solutions in sport psychology* (pp. 32-43). London: Thomson Publishing.
- Loehr, J. E. (1995). *The new mental toughness training for sports*. New York: Plume.
- Middleton, S.C., Marsh, H.W., Martin, A.J., Richards, G.E., & Perry, C. (2004a). Discovering mental toughness: A qualitative study of mental toughness in elite athletes. Self Research Centre Biannual Conference, Berlin. Available from http://self.uws.edu.au/Conferences/2004_Middleton_Marsh_Martin_Richards_Perryb.pdf
- Middleton, S.C., Marsh, H.W., Martin, A.J., Richards, G.E., & Perry, C. (2004b). Developing the mental toughness inventory (MTI). Self Research Centre Biannual Conference, Berlin. Available from http://self.uws.edu.au/Conferences/2004_Middleton_Marsh_Martin_Richards_Perrya.pdf
- Williams, R.M. (1988). The U.S. Open character test: Good strokes help. But the most individualistic of sports is ultimately a mental game. *Psychology Today*, 22, 60-62.
- Goldberg, A.S. (1998). *Sports slump busting: 10 steps to mental toughness and peak performance*. Champaign, IL: Human Kinetics.
- Gould, D., Hodge, K., Peterson, K., & Petlichkoff, L. (1987). Psychological foundations of coaching: Similarities and differences among intercollegiate wrestling coaches. *The Sport Psychologist*, 1, 293-308.
- Bull, S.J., Shambrook, C.J., James, W., & Brooks, J.E. (2005). Towards an understanding of mental toughness in elite English cricketers. *Journal of Applied Sport Psychology*, 17, 209-227.
- Clough, P.J., Earle, K., & Sewell, D. (2002). Mental toughness: The concept and its measurement. In I. Cockerill (Ed.), *Solutions in sport psychology* (pp. 32-43). London: Thomson Publishing

- Gould, D., Dieffenbach, K., & Moffett, A.(2002).Psychological talent and its development in Olympic champions.Journal of Applied Sport Psychology, 14, 177-210
- Thelwell, R., Weston, N., & Greenlees, I.(2005).Defining and understanding mental toughness within soccer.Journal of Applied Sport Psychology, 17, 326-332
- Bull, S.J., Albinson, J.G., & Shambrook, C.J.(1996).The mental game plan: Getting psyched for sport. Eastbourne: Sports Dynamics
- Golby, J., Sheard, M., & Lavallee, D. (2003). A cognitive-behavioural analysis of mental toughness in national rugby league football teams. *Perceptual and Motor skills*, 96, 455-462.
- Engür, M. (2011). Performans Başarısızlığı Değerlendirme Envanteri ve Kendinle Konuşma Anketinin Türk Sporcu Popülasyonu'na Uyarlanması ve Uygulanması. Yayımlanmamış Doktora Tezi, Ege Üniversitesi, İzmir
- Zervas, Y., Stavrou N. & Psychountaki M. (2007). Development and Validation of The Self-Talk Questionnaire (S-Tq) For Sports. Journal Of Applied Sport Psychology, 19, 142-159.
- Van Raalte, J. L., Brewer, B. W., Lewis, B. P., & Linder, D. E. (1995). Cork! The effects of positive and negative self-talk on dart throwing performance. *Journal of Sport Behavior*, 18(1), 50.
- Neck, C. P., & Manz, C. C. (1992). Thought self-leadership: The influence of self-talk and mental imagery on performance. *Journal of Organizational Behavior*, 13(7), 681-699.

Mediator Role Of Self-Esteem In The Effect Of Harmony And Obsessive Passion On Psychological Resilience

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Abstract

The objective of this study is to examine the mediator role of the self-esteem levels of the athletes in the relation between harmony-obsessive passion and psychological resilience. In line with the objective of the study, 215 athletes (106 females, 109 males) volunteered to participate in research, who were doing active sports in the 2017-2018 season. The age average of the athletes participating in the research was determined as 20.39 ± 2.49 . Sports experience of the participants was calculated as $\text{Year}_{\text{mean}} = 8.09 \pm 3.93$. In order to reach the objective of the study, Rosenberg Self Esteem Scale, Passion in Sports Scale, and Psychological Resilience Scale (Short Version) were used. In line with the objective of the study, in order to determine the relations among the variables, firstly correlation analysis was conducted. Pearson correlation coefficient necessitates both of the variables to be constant and to demonstrate a normal distribution together (dually). The interpretation of the r values, which are Pearson coefficients, were conducted as such; r values in between .00-.29 indicate a low relation, while in between .30 and .69 they indicate a mid-level relation, and in between .70 and 1.00 high level relation (Büyüköztürk, 2008). The statistical significance level was accepted as .05. Moreover, the PROCESS macro regression analysis was used in order for the mediator role of the social support perceived from the friend and the teacher in between the social support perceived from the family and tendency to cyber bullying. The analyses were conducted in 95 % confidence interval, and in order to test whether the mediator role was significant, Sobel z test was used. For the analyses of the research, SPSS 22.00 package program was used. When the findings of the research are examined, it can be stated that self esteem has a positive mediator role in the predictor effect of harmony and obsessive passion for psychological resilience. According to these results, it is obvious that the sports psychologists, trainers, or relevant managers, who want to create a resource of psychologically enduring athletes, need to support the athletes in a way to increase their self-esteem, and need to take steps in a manner to support their harmony or obsessive passion levels. Considering the psychological factors and performance relations, it is evaluated that harmony or obsessive passion, self esteem, and empowered psychological resilience might play an important role concerning the sportive performance.

Keywords: *Harmony passion, Obsessive Passion, Resilience, Self esteem*

Introduction

Self-esteem focuses on the individuals' need for self-appraisal. Self-esteem is not related to the feeling perfect, but self-awareness, self-acceptance, identity formation, and the acceptance from others (Adams and Gullotta, 1989). The individual's features and environmental conditions influence his/her perspective on life and life position. The processes such as individual's perception of being in a stressful environment, inability to develop healthy self-esteem stemming from weak and unhealthy family bonds, failure to fulfill the taken decisions or the perception of decisions being damaging for individuality have negative impacts on one's world. High self-esteem implies we found ourselves and inner world valuable (Kaya and Saçkes, 2005). In this context, having high-level self-esteem is a positive psychological feature for an individual.

Passion, in which we included in this study, is another positive psychological feature for an individual. Passion can be defined as the love that the individual possesses for the activity he or she is doing. According to the dualistic model approach by Vallerand et al. (2003), passion fundamentally has two dimensions. While the first dimension of passions is "harmony passions" including individual's passion complying with the life, the second dimension is "obsessive passion" that can be a deterrent for daily living activities.

In recent years, the research into psychology and performances of the athletes has become increasingly widespread. Both the theoretical examination of psychological skills (Bayköse et al. 2017; Bayköse et al., 2016; Thompson et al., 2011) and the experimental studies into the understanding of the relationship between psychology and performance (Moore, 2009; Raalte et al, 1995; Dagrou et al., 1992; Williams, 1993) have provided an insight for the sport sciences.

The psychological resilience concept, included in this study, is defined as a personality trait referring to the individual staying physically, mentally, psychologically and healthily positive under intense and stressful conditions (Masten, 1994; Fonagy et al., 1994; Hunter, 2001; Tusaie and Dyer, 2004). In another word, psychological resilience can be expressed as the individual's ability to recover, cope with, and succeed against the events perceived negative and stressful (Luthans et al., 2006). It is seen that psychological resilience correlated with the concepts such as passion (Bayköse et al., 2017) and self-esteem (Fergusson and Lynskey, 1996; Crocker and Park, 2004) in literature.

Starting from the finding that positive psychological factors prevented athletes from stressors (Fletcher & Sarkar, 2012), the aim of this study, which was related to the effects of passion and self-esteem on supporting psychological resilience, was to examine the mediator role of the self-esteem levels of the athletes in the relationship between harmony-obsessive passion and psychological resilience.

METHOD

Research Model

This study is a relational screening model designed to examine the mediator role of the self-esteem levels of the athletes in the relationship between harmony-obsessive passion and psychological resilience. Karasar (2009) defined the relational screening models as the research models aiming at finding out the existence and degree of covariances between two or more variables. In line with this model, the role of self-esteem in the relationship between passion and psychological resilience levels of athletes. Two different models were hypothesized in line with the research purpose. The hypothesized models are displayed as follows.

Figure 1: The first study model

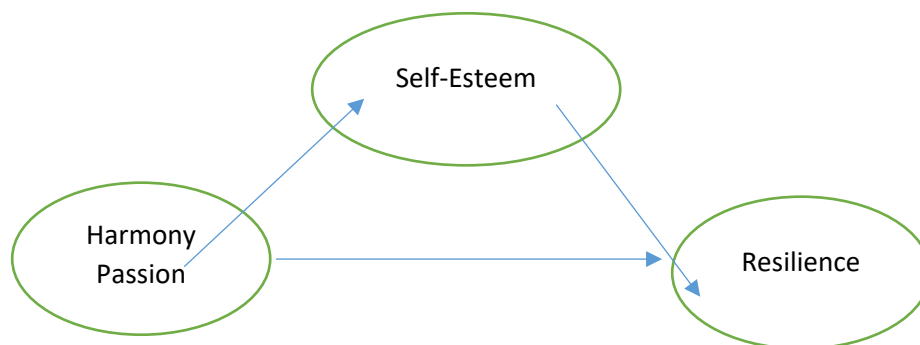
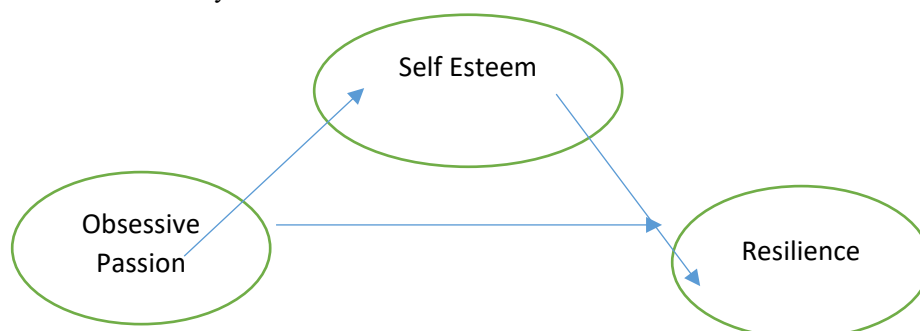


Figure 2: The second study model



Research Group

106 females and 109 males, totally 215 athletes, competing actively during the 2017-2018 season, voluntarily participated in this study. The age mean score of the athletes was 20.39 ± 2.49 . The sports experience mean score of athletes was $\text{age}_{\text{mean}} = 8.09 \pm 3.93$.

Data Collection

To reach the research purpose, the Rosenberg Self-Esteem Scale, Passion Scale in Sport, and Psychological Resilience Scale (Short Form) were used. The detailed information about the data collection tools was provided below.

Rosenberg Self-Esteem Scale

Self-esteem scale was developed by Rosenberg and adapted to Turkish culture by Çuhadaroglu (1986). The scale is a self-report scale including 63 multiple choice items and has twelve sub-dimensions. In line with the research purpose, the first "ten" items of the scale were used. According to the evaluation system of the scale, participants

score between 0 and 6. The higher the score get on the scale, the lower the self-esteem level. Confirmatory factor analysis was applied to test the validity of the scale for our study. The fit indices provided enough evidence for the scale validity ($\chi^2/sd=2,28$, RMSEA=0,037, TLI=0,95, CFI=0,96).

Passion Scale for Sport

Passion Scale in Sport, adapted to Turkish culture by Keleccek and Aşçı (2013), was developed by Vallerand et al. (2003) to determine two type of passion (harmony passion and obsessive passion) to participated and interested activity. The scale was developed to evaluate passion for different activities in the different field and used in this scope today. Passion scale consists of 16 items including 6 items to assess harmony passion, 4 items to assess obsessive passion and 4 items to assess passion to activities in which individuals participate, and it is a 7-point Likert type. While the internal consistency coefficient for Obsessive Passion dimension of Passion Scale in Sport was 0,78, the one for Passion dimension was 0,83. Confirmatory factor analysis was applied to test the validity of the scale for our study. The fit indices provided enough evidence for the scale validity ($\chi^2/sd=2,83$, RMSEA=0,046, TLI=0,94, CFI=0,93).

Psychological Resilience Scale (Short version)

The scale developed by Smith, Dalen, Wiggins, Tooley, Cristopher and Jennifer Bernard (2008) to assess the individuals' psychological resilience. The scale, adapted to Turkish culture by Doğan (2015), is a self-report and 5-point Likert type scale including 6 items. After recoding the related items, the higher score on the scale, the higher psychological resilience and the lower scores, the lower psychological resilience. After the analysis done by Doğan (2015), the scale was found to be a unidimensional scale, and the factor loadings ranged between 0,63 and 0,79. Confirmatory factor analysis was applied to test the validity of the scale for our study. The fit indices provided enough evidence for the scale validity ($\chi^2/sd=2,12$, RMSEA=0,033, TLI=0,97, CFI=0,98).

Analysis

In line with the research purpose, the correlation test was applied to find out the relationship between variables. The Pearson correlation coefficient requires that the two variables are continuous and that the variables have a normal distribution together (dyadically). The value r , which represents the correlation coefficient, has been interpreted as follows: the relationship is low between .00-.29, moderate between .30-.69, and high between .70 and 1.00 (Büyüköztürk, 2008). The significance level was accepted .05 statistically. Moreover, PROCESS macro regression analysis was used. The analysis was done at 95% confidence interval; Sobel z test was used to test if mediation was significant. SPSS 22.00 program was used for the analysis.

Results

Table 1: The Relationship Harmony Passion, Psychological Resilience, and Self-Esteem

	Harmony Passion	Resilience	Self Esteem	
	r	1		
Harmony Passion	p			
	n	215		
	r	,390**	1	
Resilience	p	,000		
	n	215	215	
	r	,206**	,582**	1
Self Esteem	p	,002	,000	
	n	215	215	215

** . Correlation is significant at the 0.01 level (2-tailed).

When table 1 is examined, it is seen that a positive and linear relationship is found between psychological resilience and self-esteem. Besides, positive and linear correlation is seen between self-esteem and harmony passion.

Table 2: The relationship between Obsessive Passion, Psychological resilience, and self-esteem

		Obsessive Passion	Resilience	Self Esteem
Obsessive Passion	r	1	,452**	,385**
	p		,000	,000
	n	215	215	215
Resilience	r	,452**	1	,582**
	p	,000		,000
	n	215	215	215
Self Esteem	r	,385**	,582**	1
	p	,000	,000	
	n	215	215	215

** . Correlation is significant at the 0.01 level (2-tailed).

When table 2 is examined, a positive and linear correlation is seen between obsessive passion, psychological resilience, and self-esteem.

Research Model 1

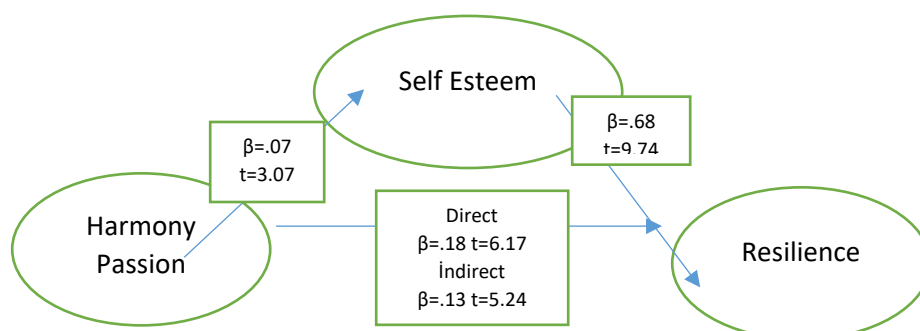


Figure 2: The mediator role of self-esteem level of athletes in the relationship between harmony passion and psychological resilience

The determination that there is a positive and significant correlation between harmony passion and psychological resilience allows testing the hypothesized mediation. PROCESS macro regression analysis was used to test whether self-esteem played a role in the relationship between harmony passion and psychological resilience. The predictive effect harmony passion on self-esteem was examined in the first step of PROCESS macro regression analysis, and it was found that harmony passion predicted self-esteem ($\beta=.07$, $t=3.07$, $p<.05$) at the level of 4% ($R=.21$, $R^2=.04$, $F=9.47$, $p<.05$).

In the second step of PROCESS macro regression analysis to determine whether self-esteem played a role in the relationship between harmony passion and psychological resilience, the predictive effect of harmony passion on psychological resilience were examined. When the results were examined, it was seen that harmony passion ($\beta=.18$, $t=6.17$, $p<.05$) predicted psychological resilience at the level of 15% ($R=.39$, $R^2=.15$, $F=38.14$, $p<.05$). In the third step of PROCESS macro regression analysis to determine whether self-esteem played a role in the relationship between harmony passion and psychological resilience, self-esteem was included in the PROCESS macro regression analysis and found that it was seen that self-esteem contributed to the prediction of psychological resilience at the level of 5%. Accordingly, it was found 41% of the total variances was explained via self-esteem in the prediction of psychological resilience by harmony passion to ($R=.64$, $R^2=.41$, $F=74.87$, $p<.05$). In the third step of the analysis, it was observed that the effect of harmony passion on psychological resilience decreased ($\beta=.13$, $t=5.24$, $p<.05$). Thus, it can be said that self-esteem has a full mediation role in this relationship ($\beta=.68$, $t=9.74$, $p<.05$). Sobel z test, used to determine whether the mediation role was significant, showed that the mediation relation was statistically significant ($Z=2.92$, $p<.05$).

Table 3: The results related to the direct and indirect effect of harmony passion on psychological resilience

Direct Effect		Effect	S.E	LLCI	ULCI	t	p
Harmony Passion	Resilience	.127	.0242	.0793	.1749	5.24	.000
Indirect Effect		Effect	S.E	LLCI	ULCI	t	p

Harmony Passion	Self Esteem	Resilience	.049	.0279	-.0003	.1108	6.175	.000
Total Effect			.176	.0285	.1197	.2319		
Normal Theory Test for indirect effect								
Effect: .0487		s.e: .0167	z: 2.9207		p: .003			

In table 3, it was found that total effect (direct + indirect) of harmony passion on resilience was positive (β : 0,127+0,049=0,176) and statistically significant ($p=0,000$). Because the Z score (2,9207) of this model was higher than 1,96 and significant, the existence of a mediator effect can be said. According to this finding, H_1 (There is a mediation role of self esteem in the influence of harmony passion on resilience) was accepted.

Research Model 2

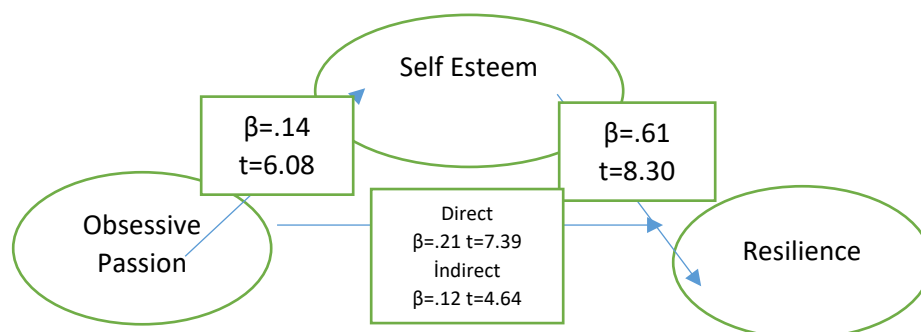


Figure 3: The mediator role of self-esteem level of athletes in the relationship between obsessive passion and psychological resilience

The determination that there is a positive and significant correlation between obsessive passion and psychological resilience allows testing the hypothesized mediation. PROCESS macro regression analysis was used to test whether self-esteem played a role in the relationship between obsessive passion and psychological resilience. The predictive effect obsessive passion on self-esteem was examined in the first step of PROCESS macro regression analysis, and it was found that obsessive passion predicted self-esteem ($\beta=.15$, $t=3.07$, $p<.05$) at the level of 15% ($R=.38$, $R^2=.15$, $F=37,017$, $p<.05$).

In the second step of PROCESS macro regression analysis to determine whether self-esteem played a role in the relationship between obsessive passion and psychological resilience, the predictive effect of obsessive passion on psychological resilience was examined. When the results were examined, it was seen that obsessive ($\beta=.21$, $t=7.39$, $p<.05$) predicted psychological resilience at the level of 20% ($R=.45$, $R^2=.20$, $F=54,69$, $p<.05$).

In the third step of PROCESS macro regression analysis to determine whether self-esteem played a role in the relationship between obsessive passion and psychological resilience, self-esteem was included in the PROCESS macro regression analysis and found that it was seen that self-esteem contributed to the prediction of psychological resilience at the level of 5%. Accordingly, it was found 40% of the total variances was explained via self-esteem in the prediction of psychological resilience by the obsessive passion for ($R=.63$, $R^2=.399$, $F=70.53$, $p<.05$). In the third step of the analysis, it was observed that the effect of obsessive passion on psychological resilience decreased ($\beta=.12$, $t=4.64$, $p>.05$). Thus, it can be said that self-esteem has a full mediation role in this relationship ($\beta=.61$, $t=8.30$, $p<.05$). Sobel z test, used to determine whether the mediation role was significant, showed that the mediation relation was statistically significant ($Z=4.88$, $p<.05$).

Table 4: The results related to the direct and indirect effect of obsessive passion on psychological resilience

Direct Effect			Effect	S.E	LLCI	ULCI	t	p
Obsessive Passion	Resilience		.129	.0278	.0744	.1740	4.64	.000
Indirect Effect			Effect	S.E	LLCI	ULCI	t	p
Obsessive Passion	Self Esteem	Resilience	.088	.0271	.0422	.1458	7.39	.000
Total Effect			.218	.0295	.1599	.2762		
Normal Theory Test for indirect effect								
Effect: .0889		s.e: .0182		z: 4.8844		p: .000		

In table 4, it was found that total effect (direct + indirect) of obsessive passion on resilience was positive (β : 0,129+0,088=0,218) and statistically significant ($p=0,000$). Because the Z score (4,8844) of this model was higher than 1,96 and significant, the existence of a mediator effect can be said. According to this finding, H_1 (There is a mediation role of self esteem in the influence of obsessive passion on resilience) was accepted.

Discussion And Conclusion

106 females and 109 males, totally 215 athletes, competing actively during the 2017-2018 season, voluntarily participated in this study. The age mean score of the athletes was 20.39 ± 2.49 . The sports experience mean score of athletes was $\text{age}_{\text{mean}} = 8.09 \pm 3.93$.

To reach the research purpose, the Rosenberg Self-Esteem Scale, Passion Scale in Sport, and Psychological Resilience Scale (Short Form) were used. The detailed information about the data collection tools was provided below. In line with the research purpose, the correlation test was applied to find out the relationship between variables. The Pearson correlation coefficient requires that the two variables are continuous and that the variables have a normal distribution together (dyadically). The value r , which represents the correlation coefficient, has been interpreted as follows: the relationship is low between .00-.29, moderate between .30-.69, and high between .70 and 1.00 (Büyüköztürk, 2008).

The direct and indirect relationship between passion and psychological resilience levels of athletes was examined in this study. It was found that the psychological resilience of athletes could be increased if their harmony and obsessive passion levels were supported to increase self-esteem. It can be said that the results of this study were supported by some study findings in the literature.

When the results of the structural equation modeling study conducted by Bayköse et al. (2017) to examine the predictive role of self-esteem and passion on psychological resilience were examined, it was suggested that psychological resilience had positive relationships with both self-esteem and harmony passion. The results of Bayköse et al. (2017) supported our findings. In another part of the study by Bayköse et al. (2017), a negative correlation was found between psychological resilience and obsessive passion. In this context, this part of the study by Bayköse et al. (2017) was contradictory with our results. The sample difference can be the reason for this contradiction.

Many researchers suggested that self-esteem positively correlated with psychological resilience. These studies contributed to our findings in various ways (Crocker and Park, 2004; Fergusson and Lynskey, 1996; Vallerand et al. 2003). Furthermore, the results of this study supported the view that psychological resilience was supported by positive psychological factors (Fletcher & Sarkar, 2012).

According to these results, it is evident that sports psychologist, coaches, and managers, who wish the athletes being psychologically resilient, should attempt to support them to increase their self-esteem, harmony and obsessive passion levels. Considered psychological factors and performance relations, it is thought that harmony and obsessive passion, self-esteem and strengthen psychological resilience can play a key role in sports performance.

References

- Bayköse, N., Civar, Yavuz, S., Çoban, M., Şahan, H. & Certel, Z. (2016). "Role of self talk in prediction of passion level in physical education class environment", *Turkish Online Journal Of Educational Technology*, vol.2016, pp.445-452.
- Büyüköztürk, Ş. (2008). *Sosyal Bilimler İçin Veri Analizi El Kitabı*. Ankara: Pegem Akademi Yayınları.
- Crocker, J. ve Park, L. E. (2004). The costly pursuit of selfesteem. *Psychological Bulletin*, 130, 392-414.
- Çuhadaroglu, F. (1986), "Adolesanlarda Benlik Saygısı", Yayınlanmamış Uzmanlık Tezi, Hacettepe Üniversitesi, Tıp Fakültesi, Psikiyatri Bölümü, Ankara
- Dagrou, E., Gauvin, L., & Halliwell, W. (1992). Effets de langage positif, negatif et neutre sur la performance motrice [Effects of positive, negative and neutral self-talk on motor performance]. *Canadian Journal of Sport Science*, 17, 145-147.
- Doğan, T. (2015). Kısa psikolojik sağlık ölçeği'nin Türkçe uyarlaması: Geçerlik ve güvenirlik çalışması. *The Journal of Happiness & Well-Being*, 3(1), 93-102.
- Fergusson, D. M. ve Lynskey, M. T. (1996). Adolescent resiliency to family adversity. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 37, 281-292.
- Fletcher, D., & Sarkar, M. (2012). A grounded theory of psychological resilience in Olympic champions. *Psychology of sport and exercise*, 13(5), 669-678.
- Fletcher, D., & Sarkar, M. (2012). A grounded theory of psychological resilience in Olympic champions. *Psychology of sport and exercise*, 13(5), 669-678.
- Fonagy, P., Steele, M., Steele, H., Higgitt, A., ve Target, M. (1994). The Emmanuel Miller memorial lecture 1992: The theory and practice of resilience. *Journal of Child Psychology and Psychiatry*, 35, 231- 257.
- Hunter A. J. (2001) A Cross-cultural Comparison of Resilience in Adolescents. *J Pediatr Nurs*, 16:172-179.
- Karasar, N. (2009). Bilimsel araştırma yöntemi (19. bs). *Ankara: Nobel yayın dağıtım*.
- Keleş, S., & Aşçı, F. H. (2013). "Tutkunluk Ölçeği" nin Üniversite Sporcuları İçin Geçerlilik ve Güvenilirlik Çalışması. *Türkiye Klinikleri Spor Bilimleri*, 5(2).
- Masten, A. (1994). Resilience in individual development: Successful adaptation despite risk and adversity. In M. C. Wang ve E. W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (3-25). Hillsdale, NJ: Lawrence Erlbaum.

- Moore, Z. E. (2009). Theoretical and empirical developments of the Mindfulness-Acceptance-Commitment (MAC) approach to performance enhancement. *Journal of Clinical Sport Psychology*, 3(4), 291-302.
- Raalte, J. L. V., Brewer, B. W., Lewis, B. P., Linder, D. E., Wildman, G., & Kozimor, J. (1995). Cork! The effects of positive and negative self-talk on dart throwing performance. *Journal of Sport Behavior*, 18(1), 50.
- Rosenberg, M. (1965). *Society and Adolescent Self-image*. Princeton University Press, New Jersey.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International journal of behavioral medicine*, 15(3), 194-200.
- Thompson, R. W., Kaufman, K. A., De Petrillo, L. A., Glass, C. R., & Arnkoff, D. B. (2011). One year follow-up of mindful sport performance enhancement (MSPE) with archers, golfers, and runners. *Journal of Clinical Sport Psychology*, 5(2), 99-116.
- Tusaie K. & Dyer J. (2004) Resilience: A Historical Review of the Construct. *Holist Nurs Pract*, 18:3-8.
- Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., ... & Marsolais, J. (2003). Les passions de l'ame: on obsessive and harmonious passion. *Journal of personality and social psychology*, 85(4), 756.
- Williams, J. M. E. (1993). *Applied sport psychology: Personal growth to peak performance*. Mayfield Publishing Co.

Medical Animation In Educational Virtual Environments And Its Effect On Medical Reality Perception

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Abstract

Medical animation as a visual simulation is a very effective tool in communicating medical information with more emotional impact, and more compelling, memorable, objective and succinct at a faster rate more dramatically than traditional dry oral or written formats. Medical animation plays multiple roles in shaping the notion of medical reality. It is an integral aspect in teaching, learning, and communication. Animation modules provide patients, medical educators, healthcare professionals with visual support, increasing understanding and retention of important issues, so they can develop mental models to understand the behavior of a complex physical system in the real world. This graphical representative medium doesn't only reflect and report reality, but also filters and shapes understandings of the mechanism of action of a biological system, bio-medical technology, pharmaceutical drug or an anatomical process. This paper demonstrates medical illustrative styles and the use of animation characteristics as an instructional communicative tool for medical educators and patients to experience situations through edugraphic games in a virtual environment that may be difficult to experience in reality. This paper aims to highlight an important question: does medical animation represent reality in a fully accurate or proportional way or it has sometimes false appearance due to the user's perception, or mainly due to subjective impression as well as illustrative manipulations of artists and designers as being creators of visual simulations? So getting misrepresentations and misinterpretations question the credibility of documentation and prediction of medical subjects. Finally, ended to several results the most important are: the variations in illustrative styles in medical animation depicting the movements, process of the inner workings of biomedical issues depend on spatial and temporal design considerations, perspectives, angles of views of the illustrated elements and techniques used to create proportionally accurate motion visualization in a virtual environment. Continuous co-operation between scientists and creators as media artists, designers and animators has to take place in order to achieve scientific validation of the illustrated reconstructed models and to maintain accuracy, consequently affecting the communication and perception process.

Introduction

Visualizing complex and dynamic medical scenarios is the key in the analysis and understanding of these scenarios. Medical animation as a reality depicting visual medium plays a fundamental role in the notion of medical information and health care culture. (Patrick 2018; Hajar 2011; Stephen et al 2005; Oai & Ning 2013) For patients and low health literacy people animated videos have been found to be effective, eye-catching in providing information, as it is perceived as familiar and accessible across age groups, cultures and literacy levels, it may hold the attention of viewers and improve patient recall. For medical educators animation has shown to be more effective for conveying symbolic theories and demonstrating key concepts of devices, procedures, and technology advances by delivering clear visuals in a simple format, with sufficient fidelity to cope competently with real-life critical situations. It is also a key strategy to teach crisis resource management skills. (Sheba et al 2013; Matt 2016; Datta et al 2012) For medical experts and healthcare professionals as scientists taking management decisions, depicting their own understanding about the scientific data, animation helps to gain insight into the information they are studying engaging the imagination besides revealing all the details of the subject converting complex scientific information into a compelling visual which tickle their imagination as thinkers and thought provokers (medical-animation 2018) to expand their ideas, facilitate sharing of information with other scientists and researchers.

Delivering medical reality as animated visualization is particularly significant because it involves human life, especially in a virtual environment as virtual reality, where users are fully immersed removing their reality, or augmented reality where virtual presences is allowed to be blended into their reality with minimal interference. (Herron 2016). Medical animation can be combined within virtual environments which offer skills in contexts that users could never participate in naturally, to see features that are invisible in real environments as cellular and molecular structures and provides a training environment that is rich and responsive as surgical or clinical training to control variables that are not possible to control in the real world, and to see these in action. (Oai. & Ning 2013) Medical animation may be viewed as a standalone visualization, such simulations may be viewed as an animated scene or time line or a process as mechanism of action animations or as emergency care instruction animations. (Choa et al 2008; Choa et al 2009) with the possibility of using interactive controls in different levels. The simulation of hand-eye skills using haptics is another possible use of medical animation technology, as the one that stems from the replacement of cadavers in surgical classrooms with task trainers and mannequins. (Kathleen 2008) . A very important question arises : does medical animation represent reality in a

fully accurate or proportional way or it has sometimes false appearance. There are many options for how the artists, as image creators, might depict medical issues with greater control over presentation, characterization, staging and timing.(Sheba et al 2013)They usually create or re-create illustrated structures depending on references as photographs, drawings, a live recording, developing videos, medical imaging¹, movies, or links to either as a medical experts' idea or an assumption. References are the basic and the most important beginning point of creation or depiction, though must be verified to provide accurate information for animators to show preference for coloration, style, movement, complexity, realism in design. That can help accurately to communicate the importance and meaning of what is being seen in a planned and prescribed manner without compromising ethical and legal rights.(Datta et al 2012)(Biomedical, Biotech, Cellular & Molecular 3d Animation Visualization 2018)

The virtual models created on a computer passes by sequenced stages controlled by artists, designers and animators from simple to highly detailed storyboards in the concept phase till constructed models and final presentation format. The designer develops the beginnings of a script of the medical scenario. He sets up what should happen and in what order, how long the medical animation should play and how should it appear. The artists control subtle properties and aesthetic choices to achieve the clear vision of the processes as the appropriate illustrative style, color, lighting scheme and motion techniques that are suitable for clarity. Identifying the target audience and their cognitive and perceptual aspects is critical to proper animation design. (biomedical-3d-animations2018)(Medical animation 2018) Animation programs offer increasingly adaptable and realistic tools, which give wide free space to the artists to construct, change and correct already rendered animations to users specifications. So this paper pegs two main questions: does the artistic intervention in creating medical animation in educational environment shape the notion of medical reality ? does the constructed medical illustrations, degree of manipulation and credibility of motion construction, editing techniques consequently affect the user perception and experience.?

Effectiveness Of Educational Virtual Environments On Medical Reality Perception

The mechanisms underlying the educational benefits of animation in serious²/edu-graphic³ games in virtual environments as an instructional tool lie in their capacity to improve the enjoyment, engagement, and motivation of users. Educational games teach complex cognitive skills, provide meaningful and challenging tasks, with flexibility in use and scalability where users can directly experience the consequences of their decisions in an extraordinary new way, from unique points of view and motivate them to go deeper where they are immersed in complex, feedback rich problem spaces. They can practice specific scenarios which help them effectively transfer the acquired skills to the real world. The effect of educational games on medical users satisfaction, knowledge, skills, attitude, and behavior are still in debate, depending on the validation and reliability of information, mode and the delivery format of medical content and other aspects. (Dankbaar et al 2017;S. De Ribaupierre, et al 2014 ; IV. Alexandrova et al 2011;Christopoulos 2013)

The game scenario designer often has his own personal view on how to arrange the scenario. The designer can control different presentations of animation in educational games as:

- one scenario which usually do not confer actual practical skills because it prevents the user from being fully immersed in the situation such simulations may be viewed passively (Figure 1)⁴but sometimes interactive controls are added from low to higher levels.(Figure 2)⁵(Kathleen2008) The scenario usually designed to explain surgical procedures or pharmaceutical mechanisms of action in terms simple enough for a layperson to understand, also may be used in order to get fully informed consent from patients facing surgery or medical treatment.(Lai-Chu et al 2011) or learning mechanism of action of certain subject.(Figure 3)⁶
- multiple scenarios :where the level of interactive training and immersion can be increased by creating a realistic working environment as virtual reality based training exercises to teach procedural skills in

¹Computer imaging in medicine :using medical scans, such as computed tomography (CT)using thin pencils x-rays beams or magnetic resonance imaging (MRI)using large magnetic fields with pulsed radio waves. Ackerman, MJ. (2011)

²A serious game is a game designed for a primary purpose other than pure entertainment. serious games are a subgenre of serious storytelling, where storytelling is applied outside the context of entertainment, where the narration progresses as a sequence of patterns impressive in quality.(lugmayr, artur et al 2016)(djaouti, damien;et al 2015)

³educational graphics, or edugraphics, are graphic visual representations of educational information intended to simplify social culture content, the term "edugraphic" is born from a related term :infographic the first international conference on graphics education, was held in alvor, algarve, portugal 1993 with the name edugraphics. santo, harold p. (1993).

⁴Figure 1: watch video on <https://www.hybridmedicalanimation.com/work/virtualreality/tradeshaw-vr-intracellular-experience/>(accessed February2018)

⁵ Figure 2: watch video on <https://3d4medical.com/support/complete-anatomy/multiselect> and for more information watch also the cystic fibrosis-crispr hololens experience trailer <https://www.youtube.com/watch?v=XWCd5k2ygrI>(accessed February2018)

⁶Figure 3:watch video on <https://www.hybridmedicalanimation.com/work/animation/vr-real-time-capabilities/>(accessed February2018)

situations of varying complexities as surgical simulation, a simulated intensive care unit coupled with feedback from observers(Figure 4)⁷or High fidelity Software Simulation which is designed to allow the mimicking of human physiological conditions for a variety of clinical scenarios,in addition to high fidelity manikin where realistic, programmable manikins behave like real patients that are capable of simulating a wide range of clinical scenarios; including simulating cardiac arrest, seizure, etc. Finally,Virtual Patient Game where interactive clinical scenarios take place in an entirely virtual world designed to practice team training in high risk situations like avatars within a virtual health facility. (Kononowicz et al 2015). Role-playing with someone taking on the role of a patient, interacting with the trainee, was one of the first types of serious games introduced in nursing education(Minhuaet al 2014)

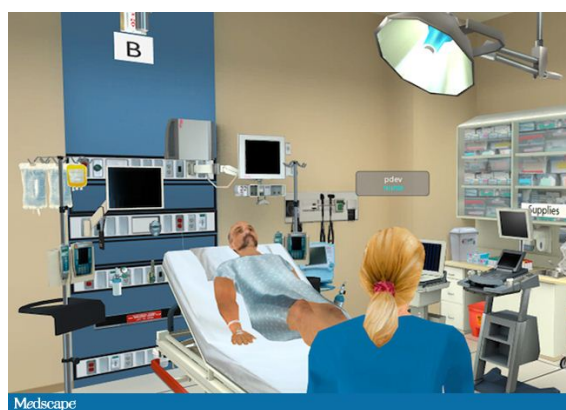


Figure 5 : A Digital Revolution: Games, Simulations, and Virtual Worlds in Nursing Education
(Stokowski2013) https://www.medscape.com/viewarticle/780819_4
(accessed February2018)

More accurate structure in the design process must be taken in consideration, thereby creating more effective scenarios, guiding design principles are needed to help game scenario designers where the focus lies on one scenario or on the progression of multiple scenarios.(Hartog 2009)

Coming to the concept of ‘unconstrained play’ rises risk-free training , and brings into sharp focus the necessity of a clearly articulated well-designed accurate instructional content for medical educational games. Selecting the games, the sequence order for the user, the interaction mode are main considerations, the games are adapted to the current level of the user to ensure the optimal degree of challenge without cognitive overload. The majority of users prefer to explore with a human guide, because it allows direct interpersonal interaction with which the educator can immediately adapt to the users and solve doubts or provide more information. The role of the medical expert as a teacher and a guide should ensure that the user does not over-learn one small fragment of a necessarily broad skillset. (S.DeRibaupierre et al2014;Hargreaves2018;Hartog2009; Christopoulos 2013)

The plausibility illusion which is the illusion that what is apparently happening in the virtual environment is really happening and defines that the key component for its realization is the existence of events in the virtual world over which the user has no direct control . So a bidirectional flow of information and action, by handing at certain moments control over to the game, so that not all information and actions would come from the educator. Through the usage of in-game characters at the various interest points in the virtual environment and mainly during the completion of a task, medical information is provided and events initiated which advance the storyline. Both the educator and user are forced to cooperate in order to advance the story. The reception of information and tasks both from the educator and the animation allows not only the direct participation in an interactive experience but also the passive observation placing the user in the middle of the action. (Christopoulos 2013). If the game is so engaging, the context and conditions in a scenario have to be designed taking into consideration: task (subject)arrangement, complexity progression and the balance between short and long cyclic scenarios.

Designing a game scenario mainly consists of the translation of learning goals into specific elements in a scenario to create the right elements associated with each competency or learning goal by confronting the users with various elements of the scenario - in clinical or emergency situation -they are required to assess the situation(situational assessment), make a decision and task selection and sequencing, followed by the task activities, thereby acquiring

⁷Figure 4:watch video on <https://www.hybridmedicalanimation.com/work/virtualreality/medical-device-virtual-reality/>(accessed February2018)

the necessary competencies (Hartog2009) in such a way that the learning goals are reached, and the user as a learner has experienced all aspects of his real job and has built the necessary practical experience. Experts as well as educators will have to work in collaboration with the artists, designers, animators, computer software or game developers. Ideas can be tested very early in the concept process or in the design stage, or through creating a clickable or coded prototype. It also means that a scenario should give proper feedback on the performance of users. The elements in the final scenario should consequently be 1) of educational value, 2) technically feasible and 3) realistic, in which a conceptual design is continuously refined into an implemented final version. Objective measures based on speed and accuracy at all levels not only provide an evaluation of the learning process, but serve as the scores for these gaming activities in virtual environment for healthcare education. (S.DeRibaupierre et al2014;Hargreaves2018;Hartog2009)

When evaluating medical animation in an educational game a fundamental question arises: How well does the final visualization represent the underlying medical information to achieve the user's goal? This question involves two aspects:

First: the evaluation of the technical efficacy, intrinsic quality, or technical image quality of the representation. How well does the visualization approximate the medical information to be understood? Is the visualization realized through graphic illustrative styles and motion editing that will produce the final animated images? Though analyzing the characteristics of the model, as timings, rendering, processing, framerates within its hypothetical/original context, as well as matching any hypotheses alternative to the shaping of some of its parts are basic considerations of design. In addition to checking if the visualization: 1) successfully highlights the target medical information, does it distort this information, if it transforms it in some way, while providing context for that information. 2) transforms nominal interval, and quantitative information properly. 3) reveals trends, patterns, gaps, or outliers. 4) provides insight to some situation or answer a specific question. (Aragon 2017 ; Hartog2009 ; Beatriz & Dillenseger2005 ; Beatriz 2008).

Second the evaluation of the semantic efficacy: the performance of the user at interpretation tasks when using the visualization, which implies the understanding of the underlying medical information, considering the purpose of the medical visualization and who is the intended audience, the user's motivation or goal: how well does the construction of a specific model from the data help the users to understand the underlying subject and perform their task? examining readability of the visualization whether it is immediately understandable after a short period or does it require excessive cognitive effort? How does this make users feel? Is the process clear? Are designers thinking of the user's wants and needs, or their own vision only? What do the designer want users to do?

Strategy is then translated into design through illustrative and technical styles determining the emotional reaction to the visualization, whether it is generally positive or negative, with examining in detail which helps to better understand not only what works and what doesn't, and also by how much, to gain insight into why. (Interrante 2005; Aragon 2017; S. de Ribaupierre, et al; Katharine 2018; Beatriz & Dillenseger2005; Farouk 2017)

Medical Illustration Credibility And Degree Of Manipulation: Balancing Creativity, Clarity And Reality

Artists have been visualizing medical world bringing a reinterpretation of medical issues throughout centuries in various forms of artistic expression. Artistic intervention of medical illustrators and animators as image creators presents a potential tool for facilitating and deepening communication that redress the balance of power in interaction between health professionals, medical experts, medical educators and students or patients. The artist goal often concerns the provision of emotional insight, rather than purely medical education knowledge. The artist doesn't act as a conduit for science, but account for a medical aesthetic beyond didactic when interpreting and visualizing medical data. (Tsafrir & Ohry 2001; Hajar2011).

An artist can articulate an alternative aesthetic illustrated image to that of reductive plain medical information. He has the ability to tell stories through medical animation and potentially widen accessibility to medical imagery. This does raise several questions about the integrity of the illustrated and animated images: How far does the artist interpret the medical data? Does the artist reflect or construct reality? exactly or distortedly? Does the artist imitate and project or embody and build up medical reality? A major issue is the aesthetic choice of where to strike the balance between realism and clarity in medical animation. (Weber2002; John2010; medical-animation-2018)

Illustrating a medical concept is difficult and can be tricky. (Hajar2011) Artistic manipulation is regarded as involving material changes in the processing of an image construction through the addition or subtraction or modulation of content. (Boering 2015) Medical images' manipulation has been used legitimately, to allow superposition or clarity enhancement, for medical educational or experimental and scientific purposes without physical intervention, to avoid misrepresentations and though misinterpretations. (Tsafrir & Ohry 2001) But artists as visual communicators adapt certain techniques, not with an intent to change the truth of what they were attempting to articulate, but to make images featured and characterized (McNally2015) to attract the attention of the recipient and keep him on the path of the image not through the process of revoking the reality but may sometimes beyond the limits. (Mike M.1993) Such manipulation questions the credibility of documentation in

medical animation.(Tsafrir& Ohry2001) Some artists think any degree of manipulation is possible so they may filter and manipulate for the sake of aesthetics striving for an impossible level of perfection and idealism in their work. (Lyttle2015)

Artists aim to highlight medical world and tell stories in their own artistic vision depending upon their own experiences plus the credit medical reference which determine the motivation behind each stage of the animation from the concept creation to the final representation.(McNally2015)for example medical illustrators draw the steps taken during procedures and create illustrations of both healthy and diseased body parts to explain the effects of medical conditions. (Hajar 2011) demonstrating how healthy tissue functions or how various ailments impair that function. Claiming that neither illustration, nor animation certainly isn't all the truth, an artist can formulate or stylize the same animated elements in different ways, with different interpretation of the real world.(McNally2015)Manipulation is not equivalent to processing or editing through an illustrative style. All images are processed or edited, and levels of processing are aesthetic judgments and do not by themselves violate real medical reality information. The only point at which processing becomes manipulation is when transforming significant parts of an image(Campbell 2015) as addition or subtraction to the medical content or moving around information blatantly.(McNally2015)The medical artist should draw or animate the medical issue with scientific precision and at the same time brings artistic creativity to his work. (Hajar2011)

Creating medical animation requires a significant amount of technical experimentation prior to any creative intervention. Visualizing real reality may require the highest degree of mechanical artificiality. Articulating, stylizing, processing, editing and even manipulation has penetrated so deeply into the reality construction in order to appear real. 'The clearer real reality is suggested the more constructively there is behind it'. The appropriateness of a more abstracted visual narrative need images that describe medical scenarios in a more accessible and holistic way, as rendering on a higher level of abstraction, semantics and user interaction have to be taken into account.(John,M2010 ; J. Diepstraten et al 2003 ; Weber2002)

There is a potential for artistic intervention at almost every stage in medical animation practice, from the concept (creative) development including; Storyboarding, (Figure 6) animatics or pre-visualization (Figure 7)⁸, concept art (character and environment)passing by the production phase as character creation, the environments that run the story of the animation, modeling, texturing, rigging, animating, lighting, rendering and animation tests,(Figure 8) ending to post production phase including editing compositing, adding visual and sound effects,titles and credits andfinal rendering and presentation. (Boering2015 ; Getting start with a 3D animated movie 2015)

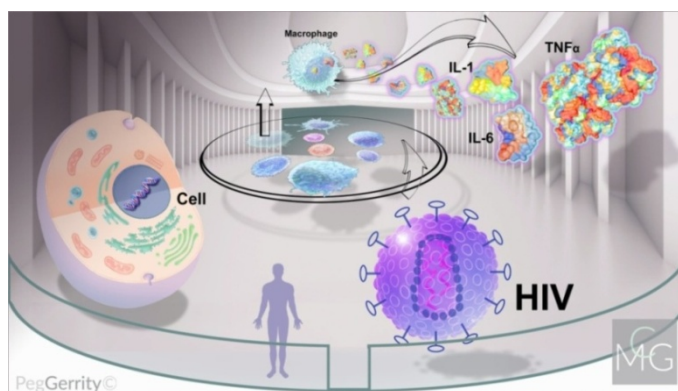


Figure 6 : biomedical virtual reality Storyboard
(artistic intervention in the concept development phase)
<http://www.chicagomedicalgraphics.com/animation>
Chicago Medical Graphics 2017/accessed February 201

⁸ Figure 7 : watch animatics on <http://www.chicagomedicalgraphics.com/animation/>

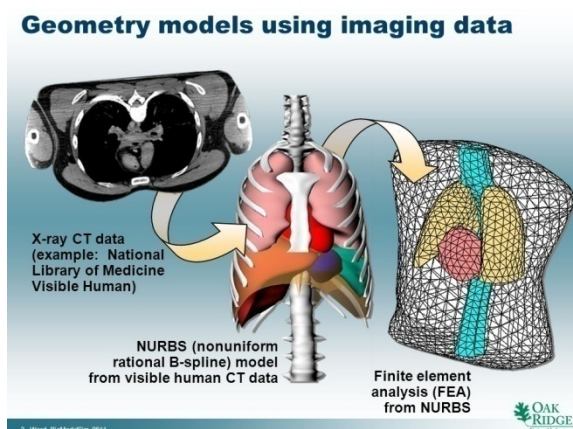


Figure 8: (artistic intervention in the production phase
(from medical imaging to artistic editing)
Presentation on theme: "Biomedical Modeling and Simulation
Richard C. Ward 2007<http://slideplayer.com/slide/4806689/>(accessed February 2018)

There is and always will be much debate about the degree of modifying of medical illustration. (Campbell2015)The mere fact of replacing or changing places to produce an image involves a choice that might represent reality in a partial manner.(Boering2015). This doesn't mean to emphasize and suggest a culturally critical pessimism in the sense of a loss of the reality or a distancing from one reality and proposing a reality of distorted media constructions.(Weber2002) and also doesn't mean to direct the composite images to falsify awareness and hide the truth, and perhaps to raise the value of surface issues, temporary and transient things over the real, because the images are no longer based on similar , but on the basis of composition and hybridization, which gave a way for the potential of counterfeiting and forgery.(Mike 1993)So minor changes may be accepted while excessive changes are prohibited, but what counts as minor versus excessive changes are necessarily interpretive with artists and judged by medical experts who value those images on a case-by-case basis. There should be a clear line demarcating these concepts, the ways used to explain the rules on artistic manipulation should be cleared improved for example setting up a series of video tutorials that show artists what kinds of manipulations are not allowed, regardless of the technical process through which that addition or removal is achieved.(Boering2015)An artist and scientist interaction is extremely useful in advancing art and medical issues.(Hajar 2011)

Form Structure Of Illustrative Styles In Medical Animation

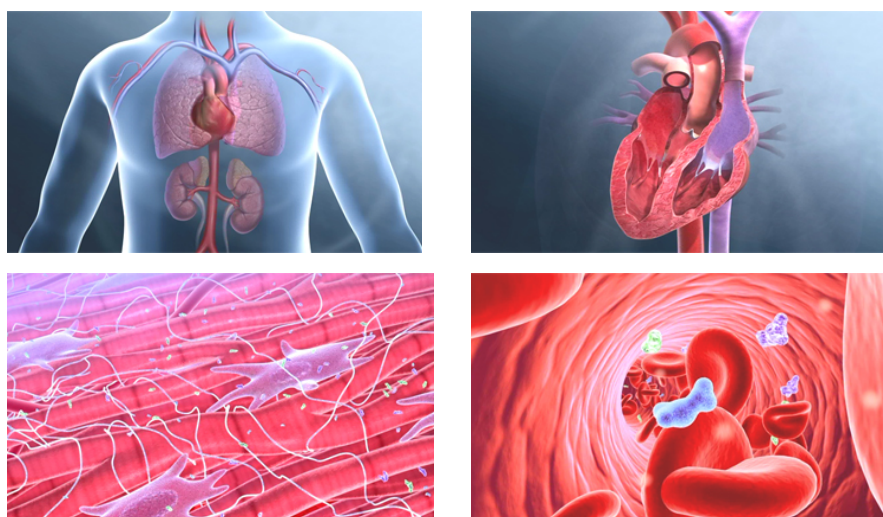
Constructed images in medical animation has a high ability to attract attention, as it guides the user as students patients or medical educators to meanings that help his mind to recognize and translate its content and relate it to familiar reality. The constructed illustrative styles may raise mystery and surprising in the image especially when finding a difference or unpredictable when linking between the real world view and the user physiological and social needs. The artist is able to influence the recipient using unusual forms, and combination of existing and non-existing visible. A huge potential ways and methods of various images' manipulations depict, reflect, produce a new or unusual represented vision as 1) modification of familiar forms 2)changing or modifying known laws of nature 3)interactions or blending between different forms (metaphor) 4)giving unreal features or characteristics to certain characters 5)Combining things that are impossible to meet in real world. Those techniques consequently affect the recipient mental and visual perception and shape the notion of medical issues. When he sees such strange and different forms from what he has accustomed to and stored in his mind, he attempt to find a relation between these forms and others, the mind begins the process of building a new database of these forms, which may require a relatively long time to realize the differences with new characteristics, then he tries to link between them finding convincing reasons for these changes, until they are well understood and interpreted. The process of cognition is equipped and prepared to recognize each element on its original real form, as well as to recognize its properties and characteristics that are familiar to the mind and have acquired knowledge during experience and perception.(Mikkel & Rudolph 1992 ; Mike 1993 ; Giemsa 2007;Wettlaufer 2003). so adding any new modulated information is at stake, especially that medical information is almost new for the user.

Creating medical animation depend mainly on identifying the appropriate kind of illustrative style which represent the medical issue and affects its validity and reliability. Those styles are specified to encode particular information about important features of the subject within the graphical representation. Concentration on certain issues and

subjects with certain representative styles leads the users to perceive those issues as more important than others (John 2010 ; J. Diepstraten et al 2003 ; Weber2002).

Concerning the degree of visual realism whether it is actual/apparent realism or iconicity/ symbolic, there are different illustrative styles how the medical subject can be represented graphically: If the purpose of the medical issue is to depict a specific location of an organ for example and the users are supposed to recognize elements in that issue, then the degree of realism should be high, and it will be necessary to use the most detailed information which is easy to interpret with extraction of the relevant features, as accuracy addresses the issue of the truthfulness or fidelity of the visualization imagery to the actual or expected appearance of the medical subject. Medical illustrations can be created as perspective representations, the more natural the perspective the more complex it will be. Using vanishing point perspective depict bodies as realistically as possible, while parallel perspective may be used to improve the recognition of the shape and structure of objects, their orientation, or spatial relationships in non photo realistic styles.

Realistic representations depict the medical subject and its physical characteristics in the simulated environment depending on creating and composing alternative world to reflect facts as close to reality as possible and suit the medical subject documentation. The task is to record imagery in all its details and simulate the desired effect for convincing using computer graphics imagery as pictorial elements to create the illusion of reality which in fact might either does not exist or cannot be seen by the human eye. (Figure 9)⁹Highly stylized realistic illustrations with most details available in the medical information requires a great deal of knowledge about both the 3D modeling and the rendering of a specific type of virtual environment, as hyper real visualization incorporates and often capitalizes upon photographic limitations such as depth of field, perspective and range of focus to create a tangible solidity and physical presence through subtle lighting and shading effects so the users can recognize the features' identities in the virtual environment which affect spatial cognition.(Figure 10)



Figure

10:Realistic representation with various point of views depict the medical subject and its physical characteristics in the simulated environment

still scenes:Diastolic cardiac insufficiency

watch video on <http://kostudios.com/diastolic-cardiac-insufficiency>

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Non realistic representations as stylized and abstract imagery can reduce visual complexity of images, and the level of detail which guide the user's eye towards important features in an animation. Non realistic representations may take several forms as iconic, symbolic, and others to visualize abstract information, communicate spatial complex and thematic information for medical issues. (Figure 11) These representations facilitate guidance of a user's gaze to prioritized information and predicted steps which may exist only in the scientist's imagination. When it comes to concentrate on essential features and reveal concepts, low visual realism is applied which requires interpretation of the abstract symbolism in the animation. It may possible to reuse existing objects or drawn elements but adapt the size and orientation of each element as it will change wherever it appears in the new issue. (J. Diepstraten et al 2003; Giemsa, 2007; Dykes et al 2005; Bishop & Ecrat 2005; Kettunen et al 2012; Farouk 2016)

⁹ Figure 9: watch video on <http://www.peggerrity.com/animation/>

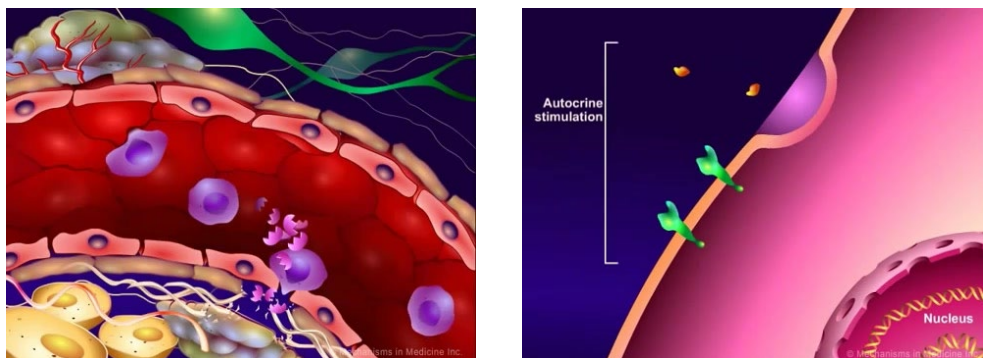


Figure 11: non realistic representations of stylized imagery
 reduce visual complexity of images, and the level of detail
 still scenes: mechanism of action- intro to cancer biology
 watch video on <https://www.pinterest.com.au/pin/843439836434445151>

medical scenarios may vary between realistic and nonrealistic or a combination of both styles based on the relation between the representation and its referent and the complexity of the information represented. The illustrator has artistic freedom to use various stylistic devices to support the purpose of the animation. The use of perspectives, graphic devices and simplifications are valuable tools for emphasising key details in an animation. Illustrations reveal the shape and appearance of important parts, plus the position and orientation of these parts in the context of the surrounding structures. However, creating illustrations that clearly depict the spatial relationships between parts is not an easy task. The primary problem is matching and managing. Most complex 3D objects contain many tightly connected and intertwined parts that occlude one another.

Illustrators carefully choose viewpoints that help the users to see the spatial relationships between the internal target parts they are interested in. Typically, the viewpoint not only centers the target parts in the animation, but also minimizes the number of occluding structures. This strategy makes it possible to expose the parts of interest with relatively few cuts, leaving more of the surrounding structures intact for context. For example, when depicting the inner workings of biologic systems as the events that take place inside of cells which are nearly invisible to all forms of visual analysis. If interior parts are to be shown, the occluding parts can be shown as transparent, or completely cut away, or removed in sequence as during a surgical technique where inner structures gradually come into view as the surgery progresses. (medical-animation2018) There are variety expressive visualized representation methods that artists can create with several illustrative styles, the purpose of the animation distinguish the choice of that representation method, the most important of these representations are: 1) Cut-away/cross section views where a section or part section which allows to see through the surface and perceive other surfaces or structures behind. (Figure 12). (J. diepstraten et al 2003; Giemsa 2007; Ivan & Gröller 2005; Farouk 2011)

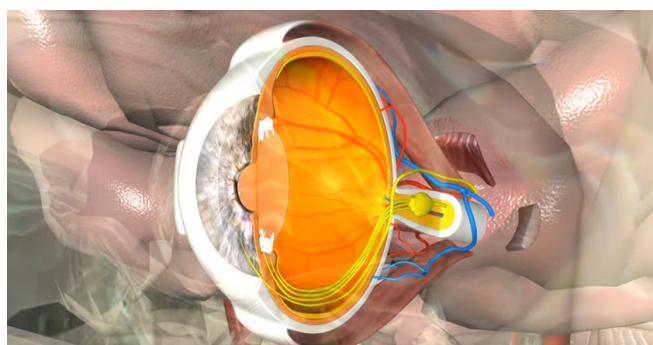


Figure 12: Eye Anatomy Cross Section
 still scene : 3D Medical Animation watch video on <https://medical3danimationcompany.com/project-attributes/medical-illustration/page/2/> (accessed February 2018)

2) Ghosting views in which transparency is used as the dominant method. so elements or objects are semi-transparent illustrative views. The inner parts of an object can be seen by displaying the outer case as if it is transparent. (Figure 13) (Giemsa, 2007; Ivan & Gröller 2005; Farouk 2011)

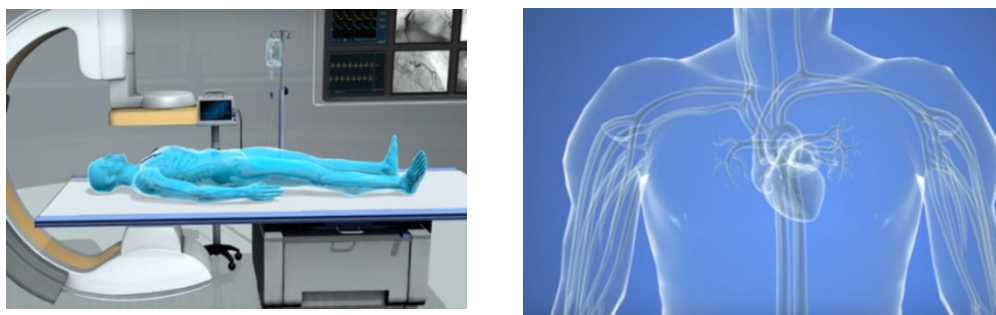


Figure 13: ghost view Cardiac catheterization - 3D Animation 1080p
still scenes watch video on <https://www.youtube.com/watch?v=Y2fmJgt3cms/>
(accessed February 2018)

3) Exploded Views in which the spatial arrangement of features are modified to uncover the most prominent ones. It is also a very effective way to present assembly instructions.(Figure 14)

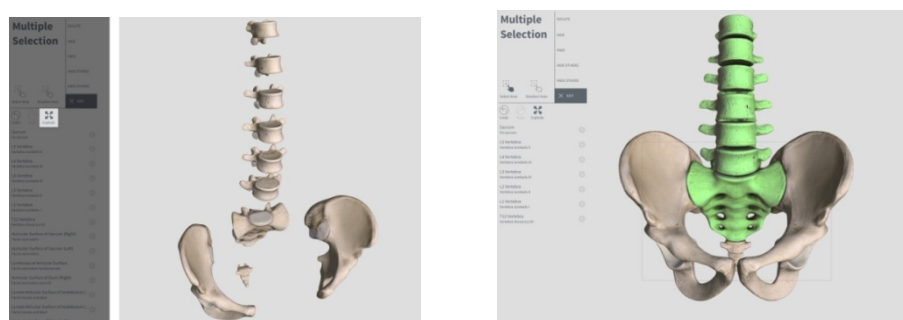


Figure 14 : exploded views .Control Multi-select with Surface Dial*still scenes*
watch video on <https://3d4medical.com/support/complete-anatomy/multiselect>
(accessed February 2018)

The artist controls constructing stylistic devices to shape the user notion of medical reality are varied which enables him to percept the meaning of the illustration more easily such as line weights, line types which may form patterns to convey regular and irregular textures through choosing appropriate weighs and spacing for those lines. Illustrative rendering techniques include the use of non-physical or exaggerated lighting and shading models that emphasize the shape, texture and reflection properties of the depicted elements. The artist should think about what to depict and how to arrange the parts so that the structure is clear and avoid making the visualization too ornate as too much detail will distract the viewer and obscure the meaning. In this context the effects and strengths of various stylistic devices become apparent as it enables the user to see the meaning of the illustration more easily.(Mitra et al2010;Giemsa 2007;Ivan& E.Gröller 2005;Farouk 2011)

Motion Construction And Motion Editing In Medical Animation:

The main goal of medical animation is to synthesize the desired motion effect precisely which is a mixing of natural phenomena, perception and imagination. The animator designs and specifies the dynamic behavior of the elements in medical scenarios not only with his mental representation of causality and academic backgrounds but with a help of a medical expert to produce an accurate dynamic visualization in a fraction of the time. He tries to transform the vision of the elements' behaviors into a realistic and conceived animation depending on the required result and how the user is going to interact with.(Thalmann2001;Steven et al 2003; medical-animation 2018)

The motion in medical animation can be created or derived from a reconstruction of the subject with motion control methods as keyframe (computer animation), simulations and motion capture to translate the desired motion according to the context subject. Amotion control method specifies how the mechanism of action of elements in a biological system, bio-medical technology, pharmaceutical drug or an anatomical is animated. A combination of blending of methods can be used and provide good results. There are two aspects of a motion representation: the representation of the medical element character at any given instant in time and how these specific instants are varied across time.(M. Jung et al 2000;Thalmann,2001;Patrick 2018)

The user as a recipient is not assigned to analyze the motion techniques used in medical edugraphics, whatever the method is, his relationship to those techniques is a relationship of vulnerability, not analysis, and the process of understanding and perceiving the contents of the medical subject comes in the first place. If the user begins to analyze the construction of used motion technology, it will get on the content or the meaning presented, which

separates the user from that meaning in favor of technological use . Using motion techniques within the context has a direct emotional impact on the user so technology must remain within the context of the receiving sense and not perception . Diversity and differences in techniques, just are creative agents that the creator seeks for high communicative level, to achieve more interaction with the user. This means to send signals and semantics which help to build the imagined image in his mind . responsiveness with intents and desires arises as a result of mental and emotional connection between the user and the animation in the virtual environment . All this leads to the creation of a specific communication, whatever the motion technique used, it is employed to serve the aim of the animation and correspond to the nature of the users.

Key framing motion(key frame animation)

Creating realistic motions with accurately mimic subtle characteristics requires a great deal of skills to build objects and scenes to achieve medical reality. An animator creates a simplified representation of an object anatomy which is called skeletal animation. The position of each segment pose of the skeletal model is defined by animation variables (avars). Animators specify a series of many individual poses to create properties of the motion using key frames to define the position and orientation of objects at specific points in time so changing the values of avars over time and the computer provides the motion in between to achieve the smooth motion of the objects. Realism in computer animation can mean making each frame look photorealistic, in the sense that the scene is rendered to resemble reality and make the animation believable and lifelike. Diagrammatic or schematic illustrative styles can represent physiological processes and the mechanisms of dysfunction that cause disease as an abstract concept. The animator has his own space to think and create real or false appearance of the medical elements in certain time with certain movement; what motion is going to be added or emitted depending on his accurate interpretation and understandings of the represented medical subject. (Gleicher 1999; Patrick 2018; Steven et al 2003; Masson 1999; Parent 2012; medical-animation 2018)

Computer simulation (simulated motion):

Simulation generates motion of objects using numerical simulation (algorithmic) methods depending on computer programs, which rely on the laws of physics and engineering to analyze the event and produce the motion. (Figure 15a-b) Simulation is the artificial representation of a complex real-world process to simulate physical processes and phenomena with sufficient fidelity and relies on the input data to be consistent with the elements in portrayed medical scenarios with the aim to facilitate learning through immersion, reflection, feedback, and practice minus the risks inherent in a similar real-life experience of which can be complicated, hazardous, expensive, and time consuming in many situations. (Figure 16)¹⁰ Medical simulation offers numerous potential strategies for comprehensive and practical training, and safer patient, the output data from simulation are fed directly into animation as if both steps take place simultaneously. One key problem facing algorithmic methods is how to describe a complicated motion or a subtle nuance. So the animator credibility creation depends upon his skills and equivalent of the constructed motion to reality. Simulation Perceptual accuracy requires stability, ease of use, speed, robustness to transform science into a technically-accurate, visually-dramatic experience. (Datta et al 2012; Oai & Ning 2013; Patrick M. 2018; Gleicher 1999; hybrid medical animation 2018)



Figure 15 a: Virtual Medical Simulation Laboratory
<https://contest.techbriefs.com/2016/entries/medical/6915> (accessed February 2018)

¹⁰ Figure 16 : watch video on invivo Surgical Simulation Trailer <https://vimeo.com/193605703> (accessed on February 2018)



Figure 15 b: Virtual Medical Simulation

<https://techli.com/2012/04/government-unreal-engine/> (accessed February 2018)

Motion capture animation:

Capturing the motion is an aspect of creating medical animation from observations of real motion. An artist create animation from observation through several steps :1) Planning the motion capture shoot and subsequent production.2)Capturing the motion.3)Cleaning the data.4)Editing the motions.5)Mapping the motions to the animated elements.When computer animation is driven by motion capture, a real motion is recorded to a computer using video cameras and markers,or a real performer acts out the scene as if he is the character to be animated and that motion is then applied to the animated subjects or character especially in clinical or surgical animation virtual cases.Motion capture is appropriate in situations where believable, realistic behavior and action is required, as it provides a large collection of realistic motion data.(Masson1999) (Figure 17a-b) (Figure 18) ¹¹ (Figure 19)¹²

Changing and editing motions seems to be a big part of the use of motion capture where reality is reconstructed. There is a need to create the observations that are then interpreted, motion capture creates a representation that distills the motion from the appearance; that it encodes the motion in a suitable form for the kinds of processing or analysis needed to be performed depending on the final result. Motion capture for animation implies that the animator will somehow be changing something about what have been recorded.in other words to what extend and how farmotion database reusability and flexibilityis going to take place.The limitations of editing come from the library of motions available to adapt, and the quality of the tools available for adapting motions to new needs.(Gleicher 1999)

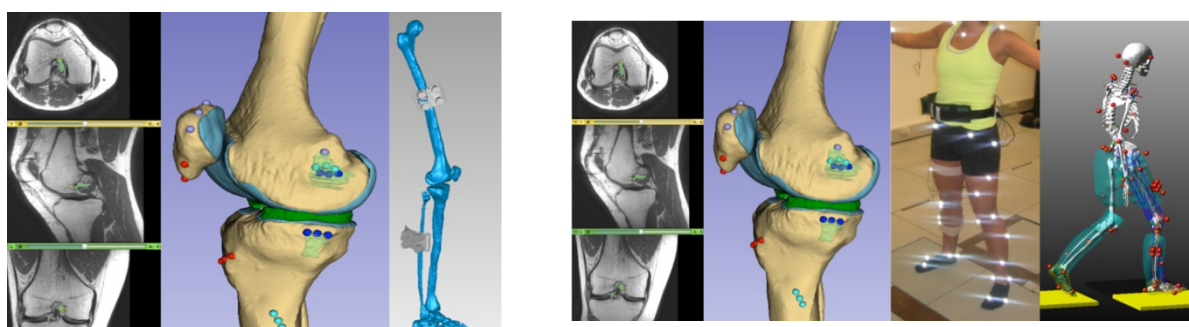


Figure 17 a-b: motion capture

subject specific con current simulation of movement and natural knee contacts mechanics

evaluation of knee ligament mechanics

still scences watch video on <http://faculty.missouri.edu/guesstr/Knee%20KEM%20Video.html>

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¹¹Figure18: watch video on ArthroPlannerSurgical planning solutions 2014:2016

https://www.medscape.com/viewarticle/780819_4 (accessed February 2018)

¹² Figure19: watch video on MyHipDynamic planning for THA 2014:2016

<http://www.artanim.ch/en/projects-detail.php?id=1> (accessed February 2018)

Motion Editing

The need to control the motions of objects is an essential part of any animation. The animator as a creator control over the motion to better convey- not to manipulate - clear biomedical content which accordingly affect the user perception. Motion editing can be applied to motion created with key-framing and simulation, as well motion capture. Animators edit created, recorded or real observed motions of medical data, they often make alterations to the motion, for reasons including:

1) reflecting an accurate reconstruction through the clean-up process which is a specific type of edit to motion capture. 2) re-using the medical data for something slightly different as a different action from the exactly recorded data. 3) creating infeasible motions and impossible actions or experimenting some speculations or predicting alternatives. 4) adjusting imperfections of reality. 5) addition of secondary motion. (Gleicher 1999; Komura 2006; Rick 2006; M. Jung et al 2000)

Adaptation, retargeting, editing and reusing motion is challenging, because the motion was acquired for a specific character within a specific environment in a specific style and mood. so constraint-based approaches specify features to be retained, new features to be accomplished with a new motion to satisfy given constraints, while preserving the characteristics of the original motion as much as possible. Relation with environments, dynamic constraints, subtle details accomplish new features for the target motion and new characters/environment, new style/mood are defined. Animators select motion segments from the database that will be modified, blended, and stitched using variety of motion editing tools. (hybrid medical animation 2018)

Creating a believable realistic performance and designing effective real motion through motion editing, shouldn't depend mainly on the artist imagination and technical skills but presenting the medical elements or objects' behaviors is the main goal, not how good the animator is at making something move. The animator should understand exactly the mechanics of the action of the animated elements, study how the character whether a human or an object moves: timings, arcs, speed changes, overlapping actions compression and extension, balance, weight, motivation, the medical issue or objective behind the action, to determine the past and the following steps. Discussing the action with the medical expert or the specialist involved with the issue is very significant to determine the accurate location of the action need to happen, in a certain distance and exact timing interacting with other objects to make the action feel more responsive. Adjusting a good motion can lose something of the depicted reality, the motion may no longer be physically correct, or may lose some nuance given by the animator. Good transformations preserve important aspects of the motion by altering less important ones. The animator must look at motion editing as a creative process where decisions are made as to how best to keep the originality of the motion while meeting new needs. Over all, medical animation should have no limits on creativity, and overtly constructed imagery has much to say about medical world. But for educational, documents and evidence images clear standards are necessary to underwrite their credibility. (Campbell 2015) and shouldn't depend mainly on pure artistic imagination but should also rely on scientific facts and hypothesis of a team of researchers and experts.

Conclusion

Medical reality could be recorded, reconstructed or processed in as an animation in a virtual environment depending on the accuracy of the artist's references as a visual creator, and his perception, interpretation of scientific information, imagery, in addition to his constructed illustrative styles, his motion controls of medical elements in the final visualization.

Balancing realism, aesthetic and clarity in medical animation depend on spatial and temporal design considerations depicting the movements, process of the inner workings of biomedical issues perspectives, angles of views of the illustrated elements and techniques used to create proportionally accurate motion visualization.

Medical simulations in virtual environments mannequin based, screen based and virtual reality simulator provides multiple benefits to different users as medical educators and patients to understand the known and explore the unknown, practice rare and critical situations. But educational serious games for medical and health care learning is not effective and do outcome negative learning, change awareness and twist the notion of medical reality without a good evaluation of the visual content, objectives, in addition to studying the user behavior during the development of the game scenario design to create safe and controlled virtual environments which eliminate risk to patients, enhance visualization, and contexts for learning and assessment.

Credibility of medical animation has to undergo several verifications to ensure the accuracy of the delivered information though bridging the gap between scientific instrumentation and the artist's experimentation. Finally, continuous co-operation between scientists and artists has to take place in order to achieve scientific validation of the illustrated reconstructed models and to maintain accuracy, consequently affecting perception of medical reality.

References

- Ackerman, M.J. (2011). "Visible Human Project: Getting the Data." U.S. National Library of Medicine. July 27, 2011. https://en.wikipedia.org/wiki/Medical_animation(accessed January 2018)
- Aragon, C. (2016). "Evaluating Visualizations" the course by University of Washington "Communicating Data Science Results" <https://www.coursera.org/learn/data-results/lecture/IBuU3/14-evaluating-visualizations> (accessed February 2017)
- Beatriz S. & Dillenseger, J. (2005). Visualization, Image-Guided Procedures, and Display Medical Imaging Proceedings" Volume 5744, San Diego, California, United States. doi: 10.1117/12.594549
- Beatriz S. (2008). "Evaluating Visualization techniques and tools: what are the main issues?" Portugal :DETI/IEETA- Universidade de Aveiro 3810-193.
- Biomedical, Biotech, Cellular & Molecular 3d Animation Visualization Services (2018) <https://medical3danimationcompany.com/biomedical-3d-animations/> © 2018 Medical 3D Animation Company Dallas Scientific & Device 3D Animation for Healthcare Marketing. - All Rights Reserved
- Bishop, D.&Eckart, Lange.(2005)."Visualization in Landscape and Environmental Planning: Technology and Applications". London . England. Taylor and Francis.
- Boering, L.(2015)."Debating the Rules and Ethics of Digital Photojournalism"The New York Times Feb. 17, 2015. <https://lens.blogs.nytimes.com/2015/02/17/world-press-photo-manipulation-ethics-of-digital-photojournalism/> (accessed 14 January 2018).
- Campbell, D. (2015)."Debating the Rules and Ethics of Digital Photojournalism" The New York Times Feb.17,2015. <https://lens.blogs.nytimes.com/2015/02/17/world-press-photo-manipulation-ethics-of-digital-photojournalism/> (accessed 14 January 2018).
- Choa, M. et al. (2008). "The effectiveness of cardiopulmonary resuscitation instruction: Animation versus dispatcher through a cellular phone". Resuscitation. 77 (1): 87–94. doi:10.1016/j.resuscitation.2007.10.023. PMID 18164119.
- Choa, M. et al. (2009). "Animation-assisted CPR II program as a reminder tool in achieving effective one-person-CPR performance". Resuscitation. 80 (6): 6804. doi:10.1016/j.resuscitation.2009.03.019. PMID 19410356.
- Christopoulos D. et al (2013) Digital Storytelling within Virtual Environments: "The Battle of Thermopylae". In: Pan Z., Cheok A.D., Müller W., Liarokapis F. (eds) Transactions on Edutainment IX. Lecture Notes in Computer Science, vol 7544. Springer, Berlin, Heidelberg https://doi.org/10.1007/978-3-642-37042-7_2
- Dankbaar, M. et al. (2017). "Comparative effectiveness of a serious game and an e-module to support patient safety" knowledge and awareness biomedical central the open access BMC Med Educ. 2017; 17: 30. Published online 2017 Feb 2. doi: 10.1186/s12909-016-08365-PMCID: PMC5289006 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5289006/>
- Datta. R. et al (2012). "Simulation and its role in medical education". Medical Journal Armed Forces India (MJAIFI) Copyright © 2018 Elsevier Inc. All rights reserved. April 2012. Volume 68, Issue 2, Pages 167–172 DOI: [https://doi.org/10.1016/S0377-1237\(12\)60040-9](https://doi.org/10.1016/S0377-1237(12)60040-9).
- Djaouti, D. et al. (2015). "Classifying Serious Games: the G/P/S model" (PDF). Retrieved 26 June 2015. https://en.wikipedia.org/wiki/Serious_game (accessed in 20/2/2018)
- Dykes, J. et al. (2005). "Exploring Geovisualization, Pergamon, Modelling Virtual Environments for Geovisualization: A Focus on Representation" 732pp. 0-08-044531-4 Pergamon, Elsevier Ltd. All rights reserved.
- Farouk, A. (2011). "Mental Processes of Reading Instructional Illustrations In Non-Linear Interactive Sequential Art". 11th International Educational Technology Conference 2011-Istanbul University-Turkey.
- Farouk, A. (2017). "Visualizing Archaeological Illustrations between Aesthetic and Scientific Vision in Conserving Cultural Heritage." 3rd International Conference on Plastic Arts and Community Service (Art and Identity between Heritage and Contemporaneity) Faculty of Fine Arts in Luxor- South Valley University.
- Fulcher, K.L. (1996). "The Jury as Witness: Forensic Computer Animation Transports Jurors to the Scene of a Crime or Automobile Accident". University of Dayton Law Review. 55: 56–76.
- Gauthier, J. & Nachbar, M. (2005). "The Virtual Patient Project" www.tinkering.net/vp Funding for this research is provided in part by NYU's CDCF 2004-2005 grant.
- Getting start with a 3D animated movie (2015). "Typical stages in 3D production pipeline(first part)" - Oct 14, 2015 <https://sepxhan.wordpress.com/mud/get-start-with-a-3d-animated-movie/> (accessed January 2018)
- Giemsa, B. (2007). "Technical illustrations in 21st century , a primer for today's professionals", parametric technology co-operation (PTC) all rights reserved. <https://mafiadoc.com>
- Gleicher, M. (1997). "Motion Editing with Spacetime Constraints. the Proceedings of the 1997 Symposium on Interactive 3D Graphics.
- Gleicher, M. (1999). "Animation From Observation: Motion Capture and Motion Editing Computer Graphics" 33(4), p51-54. Special Issue on Applications of Computer Vision to Computer Graphics.

- Hajar,R. (2011)."Medical Illustration: Art in Medical Education". Heart Views Apr-Jun; 12(2): 83–91
doi: 10.4103/1995-705X.86023
- Hargreaves,K. (2018)."A Beginner's Guide to User Experience (UX) Fundamentals
<https://generalassemb.ly/design/visual-design/user-experience-fundamentals> (accessed 9 February 2018).
- Hartog, Casper (2009)."Scenario design for serious gaming Guiding principles for the design of scenarios and curricula in military Job Oriented Training". delft university of technologtno Faculty of Technology, Policy & Management .
- Herron, Jennifer (2016) Augmented Reality in Medical Education and Training, Journal of Electronic Resources in Medical Libraries, 2016 - Taylor & Francis<https://scholarworks.iupui.edu>
- Hybrid medical animation.(2018). "Transforming your science into a technically-accurate, visually-dramatic experience".
<http://www.hybridmedicalanimation.com/work/illustration/>© 2018 Hybrid Medical Animation.
(accessed 9 February 2018).
- Interrante, V. (2005), "Art and science in visualization". In Visualization HandbookElsevier Inc.. DOI: 10.1016/B978-012387582-2/50042-3 (2005). pp. 781-805.
- Ivan. Viola & E.Gröller (2005) : "Smart Visibility in Visualization , Computational Aesthetics in Graphics, Visualization and Imaging" , L. Neumann, M. Sbert, B. Gooch, W. Purgathofer
- IV. Alexandrova et al (2011)."Animations of Medical Training Scenarios in Immersive VirtualEnvironments"Digital Media and Digital Content Management (DMDCM) 12123929.DOI: 10.1109/DMDCM.2011.64. IEEE Hangzhou, China.http://www.kyb.tuebingen.mpg.de/fileadmin/user_upload/files/publications/2011/CASA-2011-Alexandrova.pdf
- J. Diepstraten et al.(2003)."Interactive Cutaway Illustrations". Computer graphics forumVolume 22, Issue 3September 2003 Pages 523–532© The Eurographics Association and John Wiley & Sons Ltd.First. published: September 2003.DOI: 10.1111/1467-8659.t01-3-00700.
- John, M.(2010)."3-D visualization and animation technologies in anatomical imaging".Journal of anatomy.v.216(2); 2010 FebPMC2815947Published online 2009 Nov 25. doi: 10.1111/j.1469-7580.2009.01165.x
- Kathleen R.(2008). "The history of medical simulation". Journal of Critical Care. 23 (2): 157–66. doi:10.1016/j.jcrc.2007.12.004. PMID 18538206
- Komura,T.(2006)."Computer Animation" Lecture 6. "Motion Editing"
<http://homepages.inf.ed.ac.uk/tkomura/cav/presentation6.pdf>.(acesessed 14 January 2018)
- Kononowicz, A.et al. (2015)."Virtual patients - what are we talking about? A framework to classify the meanings of the term in healthcare education". BMC Medical Education. 15:11. doi:10.1186/s12909-015-0296-3. ISSN 14726920. PMC 4318546 PMID 25638167 https://en.wikipedia.org/wiki/Virtual_patient accessed 20 february 2018
- Lai-Chu, et al (2011). "Animation program used to encourage patients or family members to take an active role for eliminating wrong-site, wrong-person, wrong-procedure surgeries: Preliminary evaluation". International Journal of Surgery. 9 (3): 241–7. doi:10.1016/j.ijsu.2010.11.018. PMID 21167326.
- Lugmayr, A.et al. (2016). "Serious storytelling - a first definition and review". Multimedia Tools and Applications. doi:10.1007/s11042-016-3865-5.
https://en.wikipedia.org/wiki/Serious_game(accessed in 20/2/2018).
- Lyttle ,M. (2015)."Debating the Rules and Ethics of Digital Photojournalism"The New York Times Feb. 17, 2015 <https://lens.blogs.nytimes.com/2015/02/17/world-press-photo-manipulation-ethics-of-digital-photojournalism/> (accessed 14 January 2018).
- M. Jung et al. (2000). "Motion Capture and Editing: Bridging Principles and Practices", A K Peters, Ltd.
- Masson, T. (1999). "CG 101: A Computer Graphics Industry Reference". Digital Fauxtography Inc. ISBN 0-7357-0046-X.
- Matt, (2016)."why is medical3d-animationbetter?" 3D Animation for Healthcare Marketing. - All Rights Reserved© 2018 Medical 3D Animation Company Dallas | Scientific & Device
<https://medical3danimationcompany.com> (accessed February 2018)
- McNally, M. (2015)."Debating the Rules and Ethics of Digital Photojournalism".The New York Times Feb. 17, 2015 <https://lens.blogs.nytimes.com/2015/02/17/world-press-photo-manipulation-ethics-of-digital-photojournalism/> (accessed 14 January 2018)
- Medical animation.(2018).<http://trinityanimation.com/medical-animation>(accessed February 2018).
- Mike, M.(1993). "The Magic of Image Processing". Sams Publishing , USA.
- Mikkel, A. & Rudolph, B.(1992). "Digital Photography" . Random House, New York.
- Minhua M. et al. (2014)."Virtual, Augmented Reality and Serious Games for Healthcare"Springer Science & Business library of congress , newyork1 April 25, 2014.

- Mitra, N. J. et al. (2010): "Illustrating How Mechanical Assemblies Work", ACM Transactions on Graphics (TOG) - Proceedings of ACM SIGGRAPH 2010 Volume 29 Issue 4, July 2010.
- Mocappy(2018)."4 step motion editing workflow: how to edit motion and create characters"by mocappy<http://mocappys.com/4-step-motion-editing-workflow-how-to-edit-motion-and-create-characters/#.w1tp2k6wbiu> (accessed January 2018)
- Oai A. H. & Ning F. (2013)."Computer Simulation and Animation in Engineering Mechanics: A Critical Review and Analysis".120thASEE Paper ID #6516 Annual conference and exposition. Atlanta American Society for Engineering Education, 2013
<https://www.asee.org/public/conferences/20/papers/6516/download>(accessed February 2018)
- Patrick, M. (2018)."Simulation and animation have similarities and differences"
<https://www.fayengineering.com/articles/simulation-and-animation>(accessed February 2018)
- Parent,R.(2012). "Computer Animation: Algorithms and Techniques".
 Ohio: Elsevier. ISBN 978-0-12-415842-9.
- Rick, De Mott. (2006). Mova Contour Moves "Motion Capture To Reality Capture" Monday, July 31, 2006 Animation World Network<https://www.awn.com/news>. (accessed February 2018)
- S. de Ribaupierre, et al. (2014)."Healthcare Training Enhancement Through Virtual Reality and Serious Games."Chapter 2. springer www.springer.com ISBN 9783642548154-
- Santo,H. (1993). "Edugraphics '93" : First International Conference on Graphics Education. Lisbon: Association for Computing Machinery.
https://en.wikipedia.org/wiki/Serious_game(accessed in February 2018).
- Sheba,G. et al (2013). "Using Animation as an Information Tool to Advance Health Research Literacy among Minority Participants"AMIA Annu Symp Proc. 2013: 475–484.PMCID: PMC3900192 Published online 2013 Nov 16
- Stephen,M. et al. (2005)."Medical-legal Illustrations, Animations and Interactive Media: Personal Injury Lawyers' Perceptions of Effective Attributes"The Journal of Biocommunication (JBC).Volume 31, Issue 3, ISSN: US0094-2499.Produced in the U.S.A. 2005 .The Journal of Biocommunication, Inc. All rights reserved.www.jbiocommunication.org/issues/31-3/pdf/Mader-Medical_Legal_Illustration
- Steven M. et al. (2003). "Motion sketching for control of rigid-body simulations transactions on graphics". vol. 22, no. 4, october 2003, pages 1034–1054.
- Stokowski Laura A.,(2013) A Digital Revolution: Games, Simulations, and Virtual Worlds in Nursing Education
https://www.medscape.com/viewarticle/780819_4(accessed in February 2018).
- Thalmann , D. (2001). "The Role of Virtual Humans in Virtual Environment Technology and Interfaces" Computer Graphics Lab", EPFL, Lausanne, Switzerland Frontiers of Human-Centered Computing, Online , 2001 - Springer
https://link.springer.com/content/pdf/10.1007/978-1-4471-0259-5_3.pdf
- Tsafrir,J. (2001). "Medical illustration: from caves to cyberspace"Health Information & Libraries Journal. Volume 18, Issue 2 pages 99-109 doi 10 1046/j.1471-1842.2001.d01-16.x
- Weber,S.(2002)."Media and the construction of reality.What does "media construct reality" mean?" From an ontological to an empirical understanding of construction.original version [german]: Stefan Weber: Was heißt "Medien konstruieren Wirklichkeit"? Von einem ontologischen zu einem empirischen Verständnis von Konstruktion. (Medienimpulse,Heft Nr. 40, Juni 2002) publisher: www.mediamanual.at, BMBWK, Abt. Z/11 Medienpädagogik, Bildungsmedien, Medienservice, Minoritenplatz 5, A-1010 Wien
- Wettlaufer, A. K.(2003). "In the mind's eye : the visual impulse in Diderot, Baudelaire and Ruskin", pg. 257. Amsterdam: Rodopi. (<http://en.wikipedia.org/wiki/Perception>). (accessed in February 2018)

Medya Endrüstrisinde Yeni Öyküleme Modelleri Bağlamında Televizyonun Geleceği “Netflix Örnekleme”

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Özet

Netflix Şirketi, abone olunan paketlere göre evlere posta servisi ile DVD gönderimi yaparak medya sektörüne giriş yapmıştır. İlk zamanlar, filmler izlendikten sonra internetten yenisini sipariş ederek eskilerini de yine posta yoluyla geri gönderimi yapılabilmekteydi. 25 Şubat 2007’de 1 milyarını DVD’sini teslim eden firma 2015 verilerine göre dünya çapında 57,4 milyon abone sayısına ulaşmıştır. Netflix’in başarısı üzerine Türkiye’de de benzer DVD kiralama servisleri kuruldu ancak korsan sektörü sebebiyle aynı başarıyı gösterememişlerdir. Sonraki süreçte Netflix dijital dünyaya ayak uydurarak internet üzerinden film kiralama hizmetini sunmaya başlamıştır. Birçok farklı platformda uygulama geliştirerek, abone sayısını genişleten Netflix, 130 ülkede daha servis vermeye başlayarak dünyanın en büyük dijital içerik sağlayıcılarında biri haline gelmiştir.

Netflix üyeliğine sahip kullanıcılar, çevrimiçi bağlanarak, portalda bulunan dizi, film ve video içeriklerine ulaşabilmektedirler. Televizyonun geleceği olarak konumlandırılan Netflix tarzındaki TV portalları, teknolojik ve estetik çekicilikleriyle, hedef kitlelerine prestij imkanı sunmaktadır. Dolayısıyla Netflix benzeri TV portalların hemen hemen hepsi kendilerini televizyonun geleceği olarak konumlandırmaktadırlar. Netflix, reklam ve tanıtım kanallarını kullanarak, özgün ve kaliteli programlarıyla ön plana çıkmaktadır.

Çalışmamız kapsamında Netflix TV Portalının konumlanışını televizyon sektörünün geleceği açısından analiz ederek, çeşitli istatistiklere göre yorumlamaya çalışacağız. Çalışmamız Haziran 2018 tarihindeki veriler dikkate alınarak çözümlenmeye çalışılmıştır. Çalışma kapsamında, en etkin kitle iletişim araçlarının başında gelen televizyonun yeni bir formu olan Netflix TV Portalı örneği üzerinden bir çok güncel veriye ulaşarak analiz edilmiştir. Analizimizde, portalın sosyal medya ağlarındaki popülerliğinden, sitenin günlük ziyaretçi sayılarına ve en çok izlenen yapımlara varıncaya kadar çeşitli bilgiler tasnif edilip, analizi yapılmaya çalışılmıştır.

Medyada Kadın Temsili Sorunu Üzerine Bir Değerlendirme

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Özet

Kadının medyada temsilinin sorunsallığı üzerine yapılan tartışmaların başlatıcısı feminist hareketler olmuştur. Bu yöndeki feminist hareketlerde amaç, medyada kadın imgesinin yer alışındaki mevcut durumu dönüştürmek ve toplumsal cinsiyet eşitliği bağlamında yönlendirebilmek yönünde gerçekleşmektedir. Çelenk (2010:230) 'e göre medyada kadın temsili 1970'li yıllarda feminist medya çalışmaları aracılığıyla kadını ikincil konuma iten toplumsal süreçlerin medyadaki kadın temsilleri ile etkileşim içinde kurulduğuna dikkat çekmiştir. Bu dönemde iletişim çalışmaları alanında kültürelci perspektiflerin hakim olması, medya temsilinin "inşacı" olduğu, başka bir deyişle, "toplumsal"ı yansıtmaktan çok inşa ettiği görüşünü öne çıkarmıştır. Feminist medya çalışmalarının bu inşa meselesini, kadınların toplum hayatındaki ikincil konumunu pekiştiren bir toplumsallığın sembolik yeniden üretimi olarak yorumladığı açıktır. Medyanın toplumsal cinsiyet algısını pekiştirdiği gerçeğinden hareketle- ki bu algının kadını ikincil konuma yerleştirilmesi- toplumsal kurumların temsillerinde yer alan kadın cinsiyeti ve toplumsal cinsiyet eşitliği adına yapılan her tür girişimi de sonuçsuz bırakabileceğini düşündürebilmektedir. Bu noktadan değerlendirildiğinde literatürde incelenmiş medyada yer alan her tür içeriğin kadının sosyal rolü adına tercih edilmeyen biçim taşıdığı görülmektedir. Çalışmada toplumsal cinsiyet çalışmaları içinde kadın çalışmalarının yer aldığı ve sorunsal olarak vurgulanan özellikler ortaya konulup değerlendirilmektedir. Buna göre medyada, kadın sorunlarına ilişkin duyarsızlık, kamuoyunun önünde kadına ikincil toplumsal cinsiyet olarak hiyerarşik bir algının yerleştirilmesi vb. olumsuz süreçler yer almaktadır ve bu süreçler bu algının meşruiyet kazanmasına da sebebiyet vermektedir.

Anahtar Kelimeler: Medya, Kadın, Toplumsal Cinsiyet, Kadın sorunları

Giriş

Şüphesiz kadın cinsiyeti ile ilgili araştırmalar tüm dünyada ve Türkiye'de sosyal bilimler çerçevesinde önemli bir çalışma alanı olarak yer almaktadır. Hükümet politikalarında, üniversitelerde, araştırma merkezlerinde toplumsal cinsiyet ve doğrudan kadını ilgilendiren konular öncelikli olarak çalışılmakta ve kadın sorunlarının çözülmesi için işbirlikleri çerçevesinde çalışmalar yapılmaktadır. Kadın sorunları denildiğinde ise ilk akla gelen problematik alan kadına şiddet meselesi olmaktadır. Kadına şiddet olgusunun ortadan kaldırılması kadın çalışmalarındaki temel meselelerden biri olmakta ve bu doğrultuda hükümetler ve STK'lar da ortak olarak çalışmalar yürütmektedir. Bu çalışmalar dünyada BM önderliğinde yer almakta ve kadına şiddeti doğuran ve bunu yaygınlaştıran her tür dinamik analiz edilmekte ve şiddet ortadan kaldırılmaya çalışılmaktadır. Aile ve Sosyal Politikalar Bakanlığının(2016), 2016-2020 dahilinde kadına yönelik şiddetle mücadele ulusal eylem planı çerçevesinde 4 yıllık süreçte ülkedeki her tür kurumun alması gereken önlemler ve çalışmalar sıralanmıştır. Türkiye'de 2013 yılında 6284 sayılı kanun kapsamında kadına karşı şiddetin önlenmesine dair kanuna ilişkin uygulama yönetmeliği çıkarılmış ve kadına, çocuğa ve aile bireyleri hakkında şiddetin önlenmesine yönelik usul ve esaslar düzenlenmiştir. Bu bağlamda kadın konuklarının açılması yönetmeliği ve şiddet önleme ve izleme merkezleri hakkında yönetmeliklerin oluşturulması başlıca atılan adımlardır.¹

Kadına yönelik şiddet sorununun yanısıra çocuk evlilikler ve bu evliliklerin yasal zemini olmayışına dikkat çekmek söz konusu edildiğinde medyaya büyük görevler düşmektedir. Çocuk evlilikler sorununa bakıldığında BM verilerine göre dünya çapında 700 milyondan fazla kadının 18 yaşına gelmeden evlendiği görülmektedir. Ayrıca bunların üçte birinden fazlasının evlilik yaşı ise 15 yaşından da küçüktür. Yine yoksul kız çocuklarının erken evlenme olasılıkları varlıklı olan yaşlılarına göre 2,5 kat daha fazladır (ASPB, 2016:6). Bununla birlikte dünyada her üç kadından birinin eşi veya birlikte olduğu erkek tarafından fiziksel veya cinsel şiddete maruz kaldığı gerçeği yapılmış çalışmalarla ortaya çıkarılmıştır. Yine öldürülen kadınların % 38'inin faili eşleri veya birlikte oldukları erkekler olduğu görülmüştür. Bu kapsamda kadına yönelik şiddetle mücadele 4 başlık altında ortaya konulmuştur(ASPB, 2016b:4)

-Mevzuat çalışmaları

-Eğitim ve farkındalık artırma çalışmaları

-Kurumlar arası işbirliği ve koordinasyonu artırma

-Şiddet mağduru kadınların korunması ve desteklenmesine yönelik kurumsal mekanizmaların güçlendirilmesi

¹ Aile ve Sosyal Politikalar Bakanlığı'nın 2016-2020 yılları arasını kapsayan Kadına Yönelik Şiddeti Önleme adına yapılabilecek her tür çalışma kapsamı içinde özellikle Sakarya ili içinde söz konusu sorunu önleme adına çeşitli çalışmalar yapılmaktadır. Valilik bünyesinde oluşturulmuş her kamu kuruluşundan temsilcilerin yer aldığı komisyonda çeşitli projeler, çalıştaylar, konferanslar ve eğitim seminerleri ile tüm kamu kuruluşları liderlerine supervizyon hizmeti verilmektedir.

Bu başlıklar altında kadına yönelik şiddetle mücadelede çalışmalarını sürdüren Aile ve Sosyal Politikalar Bakanlığı medyada yayınlanmak üzere çok sayıda kamu spotları ve belgesel niteliğinde kısa filmler hazırlamıştır. Oral (2016:91) ‘a göre kamu spotları hakkında genel bir tarama yapıldığında televizyon ekranlarında en çok sırasıyla devlet kuruluşları, özel kuruluşlar ve sivil toplum örgütlerinin kamu spotu yayınlattığı görülmektedir. Bunların arasında en çok kamu spotu yayınlatan grubun, devlet kuruluşları olduğu ve bunların içinde de en çok yer alanların, T.C. Sağlık Bakanlığı, T.C. Aile ve Sosyal Politikalar Bakanlığı, T.C. Emniyet Genel Müdürlüğü, T.C. Adalet Bakanlığı olduğu, bunları diğer kurum ve kuruluşların takip ettiği gözlenmektedir. Oral, sağlık alanında kamu spotlarının etkililiği üzerine çalışma yapmış ve kamu spotlarının kitleler üzerinde etkili olduğu sonucuna varmıştır.

Şüphesiz toplumsal sorunlara dikkat çekmek ve farkındalık yaratma adına medyanın önemi kaçınılmazdır. Bu sebeple toplumsal cinsiyet çalışmaları dahilinde de kadın ve erkeğin rollerine ve sorumluluklarına ilişkin olarak medya önemli bir araç olarak kullanılabilir.

1. Görsel Medya ve Kadın Temsili

Televizyon, geniş kitlelere seslenmesi noktasında öncelikli kitle iletişim araçlarından biri olarak yer almaktadır. Televizyon ayrıca toplumda kültürel yapının ayrılmaz bir parçasıdır ve sosyal yapıyı anlamada ve açıklamada önemli dinamikler sunmaktadır. Televizyon programlarının niteliği, takibi, sevilen ve tercih edilenleri vb. hususlar söz konusu toplumun kültürel dinamikleri hakkında bilgi edinmemizi sağlamaktadır. Öte yandan televizyon ile ilgili ilk dönem çalışmaları içerisinde önemli bir yer tutan Halloran vd. (1973)’e göre televizyon toplumsal davranışlara yön veren en temel etmendir. Özellikle de şiddet ve saldırganlık gibi toplumsal bireyler üstündeki kötü etki edebilecek duyguların ana kaynağı olarak görülmektedir. Televizyon rasgele bir gözlemsel öğrenim kaynağı hizmeti görür ve bu öğrenim, çocuğun kendisini televizyondaki kişilerle özdeşleştirmesi yanında deneyim oluşturur. Televizyonda gösterilenin ‘gerçekçiliği’ gözlemsel öğrenimi doğrudan etkiler ve özellikle düşle gerçeği ayırma süreci-içindeki çocuklarda bu konu büyük önem taşır. Dolayısıyla çocuklar televizyonda gördükleri dünyanın gerçek dünyayı yansıttığına inanırlar. Yetişkinler dahi gerçek yaşamdaki rollerini oynamak için televizyondaki örneklerle dayanırlar. Araştırmalar televizyonun verdiği şiddetin saldırgan davranışı dürttüğünü gösterir ve bu nedenle çocuklar televizyonda gördükleri saldırgan davranışları kolaylıkla öğrenebilirler.

Salırgan davranışların öğrenilebilir olmasında medya, özellikle de televizyon birincil konumdadır. Şiddetin insan doğasına taşınan açıklamaları dışında diğer taraftan bireyin yaşantı edinimleri esnasında şiddetin öğrenilerek kazanıldığına dair açıklamalarıyla sosyal öğrenme kuramı (A. Bandura) ilgi çekicidir. Ona göre şiddet öğrenilmiş bir davranıştır. Şiddet algısı sosyalleşme sürecinde bireyler tarafından içselleştirilmekte bu nedenle de yetişkin çağında bu durum sorgulanmamakta ve normal olarak karşılanmaktadır (Çötök, 2015). Dolayısıyla aile içinde yaşanan iletişim problemlerine dayalı öğrenilen şiddetin yanında kitle iletişim araçları içinde televizyondan öğrenilen şiddet ve saldırganlık, kişide bu dürtülere dair eğilimi doğrudan üretmektedir. Bu noktada medyada yer alan özellikle de toplumsal cinsiyet bağlamında ikincil konumda sergilenen kadına şiddet sorunu bu sorunu pekiştirme ve çözüm arayışlarını ortadan kaldırılmasına sebebiyet verebilmektedir. Kadına şiddet sorununu da anlayabilmek şüphesiz şiddet olgusunu anlama ile başlayabileceği gibi o toplumsal yapıya bağlı olarak cinsiyet ilişkilerinin de irdelenmesini gerekli kılar. Sen (2006:296)’in de belirttiği gibi cinsiyetçi toplumlarda kadınların eşitsiz muamelelere (şiddete) maruz kalmaları türünden geleneksel eşitsizlikler ya da diğer ırksal gruplara mensup kişilere karşı uygulanan ayrımcılık; varlığını (geleneksel mazlumların itaatkar rolleri de içinde olmak üzere) devralmış inançların sorgusuz sualsiz kabullenilmesine borçludur. Geçmiş uygulamaların ve varsayılan kimliklerin çoğu sorgulanma ve ince eleyip sık dokuma karşısında dağılıp gitmiştir. Ona göre, gelenekler tek bir ülke ve kültürde bile değişim gösterebilmektedir. Şiddetin kültürel yapıyla beraber öğrenilmesi ve içselleştirilmesi bağlamındaki temellendirme günümüzde birçok araştırma sonuçlarıyla da doğrulanmaktadır.

Televizyonun toplumsal yaşama doğrudan etkilerinin yanında toplumsal cinsiyet algısı, kadın ve erkek rolleri, sorumlulukları, kadın ve erkek ilişkisi vb her tür ilişkisel iletişimi yönlendiren yapısı göz ardı edilemez. Televizyonda toplumsal cinsiyet özellikle de kadın temsili söz konusu edildiğinde kadın imgesini ortaya koymada ortak kullanılan çerçeveler şöyle sıralanabilir. (Erzurum,2014:108)

1-Haberin öznesi olarak kadın: Haberde kadın;

-Doğal- eşit bir varlık olarak mı?

-Eş, anne, fedakâr kadın olarak mı?

-Nesneleştirme;

*Magazin nesnesi

*Cinsel haz nesnesi

*Örgüt-eylem nesnesi

*Araçsal varlık

2. Sunucu olarak ve içerik üretiminde kadınlar: Bu aşamada habercilerin ve kameramanların, haberin sunuluşunda yer alan öznelerin içinde kadınların payı ve dış ses kullanımları medyada kadın temsiliinin nasıl yer aldığı ile ilgili ipuçları sunmaktadır.

Öte yandan görsel medya içinde dizi filmlerin en çok tercih edilen programlar olduğu görülmektedir. Dizi filmler içinde kadın imgesinin nasıl sembolize edildiği, en az haber programlarında kadın cinsiyetinin nasıl yer aldığı

kadar önemli bir durumdur. Aydın vd. (2014)' in yapmış oldukları araştırmaya göre özellikle yerli dizilerde yer alan kadın imgesi şöyle sıralanabilir.

- Dizilerde düşünsel boyuttan çok duygusal-duygulanımsal boyut ön plandadır.
- Dizi içinde farklı hatta bazen çelişkili içerikler bir arada bulunabilmektedir.
- Mutlak evliliği ve anneyi kutsayan aile odaklı söyleme sahiptirler.
- Fiziksel açıdan egemen güzellik kalıplarına uygun güzel kadınlar ve erkekler genellikle ana kahramanlardır.
- Geleneksel rollerle modern kalıplar birleştirilir.

Öte yandan kadın imgesi dizi filmlerde beden imgesi ile tanımlanmakta, kadın bedeni yüceltilmekte, estetiği temsil etmekte, fiziksel çekicilik mutlak suretle ön plana alınmaktadır.

2. Yazılı basında Kadın İmgesi

Yazılı basında kadının yer aldığı haber metinleri incelendiğinde kadınla ilgili olarak yer alan başlıca olgunun kadına şiddet haberleri olduğu görülmektedir. Öztunç,(2017:4)'a göre toplumda meydana gelen şiddet haberleri, gerilim ve olumsuzluk yarattığından dolayı daha fazla ilgi çekmekte ve yazılı medya bunu kullanmaktadır. Kadına yönelik şiddet olayları da bu çerçevede değerlendirilmektedir. Yazılı basın bu tür haberleri sunarken suç olgusu üzerinde farkında olarak veya olmayarak, suçu övme, suç tekniğini öğretme, işlenen suçu olağan, çekici, heyecan yaratıcı hale getirme, suç delillerinin karartılması veya adaleti yanıltma vb. gibi etkilerin ortaya çıkmasına dahi neden olabilmektedir.

Yazılı basının kadına yönelik şiddet temsiliinde toplumda var olan cinsiyet eşitsizliğini yeniden ürettiğine ilişkin çalışmalar bulunmaktadır. Bu çalışmalarda yayınlanan haberlerde cinsiyetçi bir söylemi benimseyen kuruluşların kadına yönelik şiddeti nasıl meşrulaştırdığı ve doğallaştırdığı üzerinde durulmaktadır. Dolayısıyla cinsiyetçi söylemler ataerkil yapıyı pekiştirmektedir (Erol, 2014:38). Ataerkilliğin kanıtı bilindiği gibi bir cinsiyetin doğal olarak diğerinden üstün olduğu sav'dır. Bu durum dünyanın hemen hemen her yerinde bulunan bir model olarak erkeklerin kadınlara hükmettiği toplumsal bir örgütlenme şekli olarak görülmektedir (Kaya, 2012: 330).

Öte yandan Odabaş (2012:209) 'a göre ataerkillik sadece kadın bedenlerini değil, erkek ve diğer cinsel azınlıkların bedenlerini de şekillendiren ve kuşatan bir toplumsal düzendir. Bu düzen erkeklerin bedenlerine de sert, sağlam, başarılı, sağlıklı, kaslı ve güçlü olma, evi geçindirme, çok para kazanma, kadın gibi kıvrıtmama, ağlamama ve sızlanmama, hasta olmama, vs. değerleri yükler. Erkekleri hayatta sürekli bir erkek olma mücadelesi vermeye zorlar. Erkekler bu mücadelede bir yandan ataerkil değerleri ve eril kültürü üretirler ve paradoksal bir biçimde bu kültürün mahkûmu olurlar.

Sonuç yerine

Medyada kadın imgesinin yer alışı toplumsal yapıda toplumsal cinsiyet algısını doğrudan etkileyen dinamiklerin başında gelmektedir. Kadının medyada toplumsal kültürel ve siyasal olarak konumlanması, kadın cinsiyetine yüklenen anlam, haber programlarına, reklamlara, dizilere, filmlere yansıdığı gibi, çift taraflı etkileşim ile medyada kadının yer alışı şekli doğrudan toplumsal kitleleri de etkilemektedir. Bu etkinin sonuçları olumlu veya olumsuz olarak toplumsal tabana yayılmaktadır ki olumsuz etkilerin başında kadına şiddet yer almaktadır. Medyada özellikle de kadına şiddet olgusu haber bültenlerinde sık sık karşılaşıldığı şekilde sayıca fazlalığı ile meşru hale getirilme riski taşımaktadır. Öte yandan dizi filmlerde halen bu olgunun yer aldığı sahnelerin ortaya konması ve ataerkilliğin üst düzeyde savunulduğu- sorgulanmadığı sahnelerin yer alışı, kitleleri doğrudan olumsuz etkileyen toplumsal cinsiyet algısı olarak karşımıza çıkmaktadır.

Diğer taraftan medyanın özellikle de medyadaki dilin erkekler tarafından kurulmuş bir söylemi söz konusudur. Bu söylem içinde kadınların konumlanması ataerkil algıyı tekrar ve tekrar üretmektedir. Bu üretimin dönüştürülmesi ve medyada kadın imgesinin ortaya konmasında kadınların sadece cinsel kimlikleriyle değil ekonomiden-politikaya, kültür-sanattan spora her tür alanda özne olarak yer alışının medyada yansıtılması gerekmektedir. Şüphesiz medyada kadın ve erkek cinsinin medyada yer alışı biçimlerine ilişkin zihniyet değişikliği iyi bir medya okuryazarlığı sürecine sahip olmaktan geçecektir. Arsan(vd 2009)'dan aktaran Ersöz (2016:77)'e

göre medyada kadının konumlanması; ev işi yapan ama bakımlı fiziksel olarak çekici, boyun eğen, talep eden sabretmesi gereken, rıza göstermesi gereken bir cins olarak yer almaktadır. Erkeğe ise tam zıddı olarak üzerine gidilmeyecek, rahat bırakılacak, evliliğe ikna edilecek ve zorlanmayacak bir baskın karakter olarak yer verilmektedir. Bu bakış açıları cinsiyetlerin kendilerini toplumsal yaşam içinde konumlandırmalarına dair öğretici bir algı sunmaktadır. Bu algı cinsler arasında eşitsizlik yarattığı gibi bu eşitsizlik de kadına şiddet, kadının ikincil konumda görülmesi vb. birçok sıkıntıyı beraberinde getirmektedir.

Medyada toplumsal cinslerin kurgulanışı ve aralarındaki ilişkilerin analizi için küçük yaşlardan itibaren verilecek medya okuryazarlığı eğitimleri gereklidir. Medya okuryazarlığı, medyadaki dilin kötüye kullanımından, cinsel içerikli ve şiddet içerikli programların kaldırılmasına, medyada toplumsal cinsiyet eşitliğinin gözetilmesinden, kadın erkek cinslerin rolleri ve sorumluluklarına kadar A dan Z'ye medyanın içinde yer alan her tür görsel uyarıcı ve konularının incelenmesi ve olumsuz durumların eleştirilerek gerekli makamlarca ortadan kaldırılmasını sağlayacaktır. Küçük yaşlardan itibaren kazandırılacak medya okuryazarlığı becerisi bu bağlamda medyada kadın ve erkek toplumsal cinsile ilgili her tür olumsuzluğu ortadan kaldırmaya yarayacak farkındalığı kazandıracaktır.

Kaynakça

- Aile ve Sosyal Politikalar Bakanlığı (2016). “Kadına Yönelik Şiddetle Mücadele Ulusal Eylem Planı (2016-2020), Ankara: Kadının Statüsü Genel Müdürlüğü
- Aile ve Sosyal Politikalar Bakanlığı (2016b). Türkiye’de Kadına Yönelik Şiddetle Mücadele, Ankara: Kadının Statüsü Genel Müdürlüğü.
- Aydın, B., Kurt, M., Karbay, E. B. (2014). Kuzey- Güney’in Doğu- Batı ekseninde çözümlenmesi: Dizideki kadınlık Erkeklik Halleri, Toplumsal Cinsiyet ve Medya içinde”, s:155-202, ed: Huriye Kuruoğlu, Bermal Aydın, Ankara: Detay Yayıncılık
- Çelenk, S. (2010). “Kadınların Medyada Temsili ve Etik sorunlar”, Televizyon Haberciliğinde Etik, ed: Bülent Çaplı, Hakan Tuncel, Ankara Üniversitesi İletişim Fak.
- Çötök, N. (2015), Toplumsal Cinsiyet Rolü Dâhilinde Kadına Şiddet Olgusuna Karşı Kadın Algısı, International Journal of Social Sciences and Education Research, 1(3), 937-952
- Erol, Deniz, D.(2014). Toplumsal Cinsiyet Bağlamında Türkiye Yazılı Basınında Şiddet Haberleri ve Haber Fotoğrafları, Toplumsal Cinsiyet ve Medya içinde”, s:31-67, ed: Huriye Kuruoğlu, Bermal Aydın, Ankara: Detay Yayıncılık
- Ersöz, Günindi, A. (2016). Toplumsal Cinsiyet Sosyolojisi, Ankara: Anı Yayıncılık
- Erzurum, F. (2014). Televizyon Ana Haberlerinde Kadınların Temsil Biçimleri/Kadınların Temsilleri, “Toplumsal Cinsiyet ve Medya içinde”, s:98-125, ed: Huriye Kuruoğlu, Bermal Aydın, Ankara: Detay Yayıncılık
- Halloran, J., Masson, P., Brown, R., & Quail ., (1973). Televizyonun Etkileri, İstanbul: İstanbul reklam Yayınları
- Kaya, E. (2012). Toplumsal Cinsiyet Tabakalaşması, Sosyoloji içinde, Yazar: John Macionis, ed: Vildan Akan, Ankara: Nobel Akademi Yayıncılık
- Odabaş, S. (2012). İnternette Erkeklik, Cinsel Sağlık Politikası ve Ticareti, Doğu Batı Düşünce Dergisi, ‘Toplumsal Cinsiyet’ ,y:16, s:63, Ankara: Doğu Batı Yayınları
- Oral, R. (2016). Televizyonda Yayınlanan Kamu Spotlarının Hedef Kitlenin Tutum Ve Davranışları Üzerindeki Etkisi: Beyhekim Devlet Hastanesi Çalışanları Örneği, sosyal Bilimler Enstitüsü, Yayımlanmamış Yüksek Lisans tezi, dnş: Doç. Dr. Abdulgani Arıkan, Konya: Selçuk Üniversitesi
- Öztunç, M (2017). Kadına Yönelik Şiddetin Yerel Basında Temsili (Sakarya İli Örneği), İstanbul Üniversitesi Sosyal Bilimler Enstitüsü Yayımlanmamış Doktora Tezi, Dnş: Doç. Dr. Ceyda Ilgaz Büyükbaykal
- Sen, A. (2006). Kimlik ve Şiddet Kader Yanılsaması, İstanbul: Türk Henkel Yayınları.

Mesleki Ve Teknik Lise Öğrencilerinin Derse Katılım Düzeylerinin Belirlenmesi

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Özet

Bu araştırmanın amacı mesleki ve teknik liselerde öğrenim gören öğrencilerin derse katılım düzeylerini belirlemektir. Bununla birlikte öğrencilerin derse katılım düzeylerinde, cinsiyet ve sınıf düzeylerine göre anlamlı bir farklılık olup olmadığı belirlenmiştir. Araştırma betimsel tarama modelinde gerçekleştirilmiştir. Araştırmanın çalışma grubu rastgele örnekleme yöntemi ile Sakarya İli merkez ilçedeki mesleki ve teknik liselerden seçilmiştir. Üç liseden toplam 500 öğrenciye ulaşılmıştır. Veriler, Wang, Bergin ve Bergin'in (2014) geliştirmiş olduğu ve Sever (2014) tarafından Türk kültürüne uyarlanan "Derse Katılım Envanteri (Classroom Engagement Inventory)" ile toplanmıştır. 23 madde ve beş boyuttan oluşan envanterin Cronbach-Alpha iç tutarlık katsayısı 0.93 bulunmuştur. Verilerin analizi için normal dağılım sonuçlarına göre parametrik ve non-parametrik testler yapılmıştır. İstatistiksel analiz işlemleri sonucunda elde edilen bulgulara göre öğrencilerin bazen derse katıldıkları belirlenmiştir. Genel olarak öğrencilerin derse katılım düzeyleri cinsiyet ve sınıf düzeyi değişkenlerine göre farklılık göstermemektedir. Bilişsel, duyuşsal ve davranışsal katılım alt boyutlarında ise değişkenler açısından farklılıklar olduğu tespit edilmiştir.

Anahtar Kelimeler: *Mesleki ve Teknik Lise, Derse Katılım, Bilişsel Katılım, Duyuşsal Katılım, Davranışsal Katılım, Öğrenci.*

Giriş

Eğitim kurumlarında öğrenci katılımı, öğrencilere deneyim kazandırmak, öğrencilerin gelişimlerini desteklemek, öğrenme çıktıları kazanmalarını sağlamak ve dolayısıyla kurumların performansını arttırmak amacıyla, hem öğrenciler hem de kurumlar tarafından zaman, çaba ve diğer bütün kaynakların işe koşulduğu bir süreçtir (Trowler, 2010). Genellikle öğrenci katılımı, öğrencilerin derste yapılan öğrenme-öğretme etkinliklerinde aktif rol alması ve burada gösterdiği performansın değerlendirilmesi olarak ifade edilmektedir (Kuh, 2009; Akt: Yıldırım, Sökmen, Taş ve Dilekmen, 2016).

Fredricks, Blumenfeld ve Paris'e (2004) göre katılım; bilişsel, duyuşsal ve davranışsal boyutlarla açıklanmaktadır. Bilişsel katılım, öğrenme-öğretme sürecine öğrencilerin psikolojik açıdan katılmaları ve öğrenme stratejilerini üst düzeyde kullanmalarınıdır. Duyuşsal katılım, öğrencilerin derse katılmaya istekli olmaları, öğretmenleri ve arkadaşları ile iyi ilişkiler kurmaları, öğrenme-öğretme sürecinde yapılan tüm etkinliklerden zevk almalarıdır. Davranışsal katılım, öğrencilerin okul ve sınıf kültürüne uygun olumlu davranışlar göstermeleri, öğrenmeye çaba harcamaları, okul içinde ve okul dışında yapılan etkinliklere katılmalarıdır (Fredricks, Blumenfeld ve Paris, 2004).

Okulda öğrenme-öğretme sürecinde öğrencilerin bazıları derse katılım gösterirken bazıları da derse katılmamaktadır. Derse katılım, kimi öğrenciler için kolay ve eğlenceli iken kimi öğrenciler için de zor ve sıkıcı olmaktadır (Eryılmaz, 2014). Öğrencilerin derse katılmaları, kendi öğrenme sorumluluğunu almalarında ve etkili öğrenmelerinde önemli görülmektedir (Çelik, Örenoğlu-Toraman, ve Çelik, 2018). Öğrenme öğretme sürecinde öğrencilerin öğrenebilmesi için kendilerini derse vermeleri ve bilişsel, duyuşsal ve davranışsal açıdan derse katılmalarının sağlanması gerekmektedir (Yılmaz, 2017). Verimli bir derse katılımında bu üç boyut işe koşulmalıdır. Örneğin, öğrenci derse fiziksel olarak katılım göstermiş olsa dahi duyuşsal ve zihinsel olarak kendini derse vermemiş olabilir (Saritepeci ve Yıldız, 2014). Öğrenciler, derse katılmaya istekli olduklarında, yaptıkları çalışmalara ilgi duyarlar ve karşılına bir engel ya da zorluk çıksa da bunu aşarak zevkle çalışmalarına devam ederler. Öğrencilerin derse katılmaları, öğrenme-öğretme sürecinin başarılı bir şekilde gerçekleştiğini gösteren önemli unsurlardan biridir (Fletcher, 2015). Berliner'e (1984) göre öğrenmenin gerçekleştiği en uygun zaman öğrencilerin ders etkinliklerine katıldıkları zamandır. Bu zaman diliminde öğrenciler etkinliklerde aldıkları görevi başarılı bir şekilde tamamlarsa akademik başarı da sağlanmış olur (Akt: Güner-Yıldız ve Melekoğlu, 2016).

Alan yazında derse katılımı ilgili yapılan çalışmalar incelendiğinde genellikle derse katılım ölçeklerini geliştirme ve uyarlama çalışmaları (Eryılmaz, 2014; Yıldırım, Sökmen, Taş ve Dilekmen, 2016) ile farklı lise türlerinde öğrenim gören öğrencilerin (Sever, Ulubey, Toraman ve Türe, 2014; Güneri, 2018; Çelik, Örenoğlu-Toraman ve Çelik, 2018) ve öğretmen adaylarının (Eren, 2013) derse katılımlarına yönelik ve derse katılımın diğer kavramlarla (akademik başarı, motivasyon, özyeterlik vb.) ilişkisini (Eryılmaz ve Aypay, 2011; Lee ve Reeve, 2012; Başören,

2015; Sarıtepeci ve Yıldız, 2014; Güner-Yıldız ve Melekoğlu, 2016; Güneri, 2018; Bala-Bulut, 2017; Çelik, Örenoğlu-Toraman ve Çelik, 2018) inceleyen çalışmalar bulunmaktadır. Sadece mesleki ve teknik lise öğrencilerinin derse katılımlarına yönelik bir çalışmaya rastlanılmamıştır.

Türkiye’de, ülkenin gelişmesi adına üretime katkı sağlayacak bireylerin nitelikli ve gerekli donanıma sahip bir şekilde yetiştirilmesi açısından mesleki eğitimin önemi sıklıkla gündeme gelmektedir. Mesleki eğitimin ilk basamağı olan mesleki ve teknik ortaöğretimde öğrenciler, genel kültür eğitimiyle birlikte onları mesleğe, iş alanlarına ve geleceğe hazırlayan mesleki eğitim sürecinden de geçmektedir (Türk, 2015). Bu süreçte öğrencilerin bilgi, beceri ve yeteneklerini geliştirmelerinde ve daha başarılı olmalarında derslere katılım sağlamları önemli görülmektedir. Bu bağlamda araştırmada mesleki ve teknik lise öğrencilerinin derslere katılım düzeylerinin belirlenmesi amaçlanmıştır.

Yöntem

Araştırma, betimsel tarama modelinde gerçekleştirilmiştir. Tarama araştırmaları, bireylerin görüşlerini betimlemeyi amaçlar ve “ne, nerede, ne zaman, hangi sıklıkta, hangi düzeyde, nasıl” gibi soruların cevaplandırılmasına olanak sağlar (Büyüköztürk, Kılıç-Çakmak, Akgün, Karadeniz ve Demirel, 2010: 231). Araştırmanın çalışma grubu rastgele örnekleme yöntemi ile Sakarya İli merkez ilçedeki mesleki ve teknik liselerden seçilmiştir. Üç liseden toplam 500 öğrenciye ulaşılmıştır. Öğrencilerin 133’ü kadın, 367’si erkek öğrencidir. 211 öğrenci 9. sınıfta, 134 öğrenci 10. sınıfta, 116 öğrenci 11. sınıfta ve 39 öğrenci de 4. sınıfta öğrenim görmektedir.

Veriler, Wang, Bergin ve Bergin’in (2014) geliştirmiş olduğu ve Sever (2014) tarafından Türk kültürüne uyarlanan “Derse Katılım Envanteri (Classroom Engagement Inventory)” ile toplanmıştır. 23 madde ve beş boyuttan oluşan envanterin Cronbach-Alpha iç tutarlık katsayısı 0.93 bulunmuştur. Alt boyutların güvenirlik katsayıları; birinci alt boyut “duyuşsal katılım” 0.877, ikinci alt boyut “davranışsal katılım-uyma/itaat” 0.827, üçüncü alt boyut “davranışsal katılım-sınıf katılımı” 0.746, dördüncü alt boyut “bilişsel katılım” 0.890 ve beşinci alt boyut “derse katılmama” 0.697 bulunmuştur (Sever, 2014: 178). Verilerin analizinde, verilerin normal dağılıp dağılmadığını belirlemek için cinsiyet ve sınıf düzeyi değişkenlerine göre normallik testi Kolmogorov Smirnov ve ShapiroWilk testleri yapılmıştır. Normal dağılım sonuçlarına göre parametrik ve non-parametrik testler yapılmıştır.

Bulgular

Meslek lisesi öğrencilerinin derse katılım düzeyleri ile ilgili istatistiksel bilgiler tablo 1’de gösterilmektedir.

Tablo 1. Öğrencilerin derse katılım düzeyleri

Boyutlar	N	Minimum	Maksimum	Ortalama	Standart Sapma
Duyuşsal Katılım	500	1,00	5,00	3,16	,988
Davranışsal Katılım-Uyma/İtaat		,75	3,75	2,45	,745
Davranışsal Katılım-Sınıf Katılımı		1,00	5,00	3,30	,908
Bilişsel Katılım		1,00	5,00	3,21	,847
Derse Katılmama		1,00	5,00	3,56	,964
Toplam Puan		1,30	5,00	3,27	,673
Derse Katılım Düzeyleri					

Aritmetik puan ortalamaları; 1.00-1.80 arası “hiçbir zaman”, 1.81-2.60 arası “nadiren”, 2.61-3.40 arası “bazen”, 3.41-4.20 arası “çoğunlukla” ve 4.21-5.00 arası “her zaman” şeklinde yorumlanmıştır. Tablo 1’e göre öğrencilerin derse katılım düzeyleri için toplam puan ortalaması 3.27 bulunmuştur. Buna göre meslek lisesi öğrencilerinin derslere **bazen** katıldıkları söylenebilir. Alt boyutlar açısından puan ortalamaları, duyuşsal katılım 3.16, davranışsal katılım-uyma/itaat 2.45, davranışsal katılım-sınıf katılımı 3.30, bilişsel katılım 3.21 ve derse katılmama 3.56 şeklindedir. Bu bağlamda meslek lisesi öğrencilerinin derslerde, duyuşsal katılım, bilişsel katılım ve davranışsal katılım-sınıf katılımı için **bazen**, davranışsal katılım-uyma/itaat için **nadiren** katılım gösterdikleri söylenebilir. Bununla birlikte öğrencilerin **çoğunlukla** derse katılmamayı tercih ettikleri belirlenmiştir.

Meslek lisesi öğrencilerinin derse katılım düzeylerinin cinsiyete göre bir farklılık gösterip göstermediğini belirlemek için önce normallik testi yapılmıştır. Normallik testi sonuçları tablo 2’de gösterilmektedir.

Tablo 2. Cinsiyete göre normallik dağılımı

	Cinsiyet	Kolmogorof Smirnov			Shapiro Wilk		
		İstatistik	df	p	İstatistik	df	p
Duyuşsal Katılım	Kadın	,077	133	,054	,977	133	,024
	Erkek	,055	367	,009	,981	367	,000
Davranışsal Katılım-Uyma/İtaat	Kadın	,103	133	,002	,967	133	,003
	Erkek	,086	367	,000	,972	367	,000
Davranışsal Katılım-Sınıf Katılımı	Kadın	,081	133	,031	,981	133	,067
	Erkek	,066	367	,001	,980	367	,000
Bilişsel Katılım	Kadın	,065	133	,200*	,983	133	,103
	Erkek	,068	367	,000	,988	367	,005
Derse Katılmama	Kadın	,108	133	,001	,945	133	,000
	Erkek	,095	367	,000	,959	367	,000
Toplam Puan	Kadın	,038	133	,200*	,990	133	,440
Derse Katılım Düzeyleri	Erkek	,032	367	,200*	,997	367	,690

p<0.05

Tablo 2'ye göre öğrencilerin cinsiyetlerine göre derse katılım düzeyleri toplam puan için normal dağılım gösterirken ($p=0.2$, $p>0.05$), alt boyutlar için normal dağılım göstermemektedir ($p<0.05$). Bu bağlamda cinsiyete göre öğrencilerin derse katılım düzeylerini belirlemek üzere parametrik testlerden t-testi kullanılmıştır. Alt boyutlar için parametrik olmayan testlerden Mann-Whitney-U testi yapılmıştır. Sonuçlar tablo 3 ve tablo 4'te gösterilmektedir.

Tablo 3. Cinsiyete göre öğrencilerin derse katılım düzeyleri

	Cinsiyet	N	Ort.	s.s.	s.d.	t	p
Toplam Puan	Kadın	133	74,8476	15,01846	,691	,158	-,468
	Erkek	367	75,5820	15,66814			

p<0.05

Tablo 3'e göre meslek lisesi öğrencilerinin derse katılım düzeyleri cinsiyete göre anlamlı bir farklılık göstermemektedir ($p=-0,468$; $p>0.05$).

Tablo 4. Alt boyutlar için öğrencilerin cinsiyete göre derse katılım düzeyleri

	Cinsiyet	N	Sıra Ort.	U	p
Duyuşsal Katılım	Kadın	133	225,14	21032,000	,018
	Erkek	367	259,69		
	Toplam	500			
Davranışsal Katılım-Uyma/İtaat	Kadın	133	254,55	23867,500	,705
	Erkek	367	249,03		
	Toplam	500			
Davranışsal Katılım-Sınıf Katılımı	Kadın	133	246,30	23847,500	,695
	Erkek	367	252,02		
	Toplam	500			
Bilişsel Katılım	Kadın	133	250,05	24345,000	,966
	Erkek	367	250,66		
	Toplam	500			
Derse Katılmama	Kadın	133	276,05	21007,000	,017
	Erkek	367	241,24		
	Toplam	500			

p<0.05

Tablo 4 incelendiğinde, cinsiyete göre meslek lisesi öğrencilerinin derse duyuşsal katılımları erkek öğrencilerin lehine anlamlı bir farklılık göstermektedir ($U=2102$; $p<0.05$). Derslerde, erkek öğrencilerin (Ort.=259,69) kadın öğrencilere göre (Ort.=225,14) duyuşsal katılım düzeylerinin daha yüksek olduğu söylenebilir. Bununla birlikte cinsiyete göre öğrencilerin derse katılmama düzeyleri kadın öğrencilerin lehine anlamlı bir farklılık göstermektedir ($U=21007$; $p<0.05$). Kadın öğrenciler (Ort.=276,05), erkek öğrencilere (Ort.=241,24) göre daha fazla derse katılmamaktadır. Başka bir deyişle erkek öğrenciler kadın öğrencilere göre daha fazla derse katılım göstermektedir. Diğer alt boyutlar açısından cinsiyete göre anlamlı bir farklılık bulunmamıştır ($p>0.05$). Meslek lisesi öğrencilerinin derse katılım düzeylerinin öğrenim gördükleri sınıf düzeylerine göre farklılık olup olmadığını belirlemek üzere önce normallik testi yapılmıştır. Normallik testi sonuçları tablo 5’de gösterilmektedir.

Tablo 5. Sınıf düzeyine göre normallik dağılımı

	Sınıf	Kolmogorof Smirnov			Shapiro Wilk		
		İstatistik	df	p	İstatistik	df	p
Duyuşsal Katılım	9	,068	211	,018	,985	211	,022
	10	,074	134	,070	,965	134	,002
	11	,076	116	,093	,972	116	,014
	12	,124	39	,132	,938	39	,032
Davranışsal Katılım-Uyma/İtaat	9	,113	211	,000	,976	211	,001
	10	,084	134	,022	,960	134	,001
	11	,080	116	,068	,954	116	,001
	12	,114	39	,200*	,939	39	,034
Davranışsal Katılım-Sınıf Katılımı	9	,084	211	,001	,982	211	,008
	10	,062	134	,200*	,978	134	,029
	11	,117	116	,000	,941	116	,000
	12	,141	39	,050	,938	39	,034
Bilişsel Katılım	9	,088	211	,000	,988	211	,066
	10	,059	134	,200*	,979	134	,035
	11	,086	116	,034	,982	116	,124
	12	,091	39	,200*	,968	39	,315
Derse Katılmama	9	,096	211	,000	,965	211	,000
	10	,117	134	,000	,943	134	,000
	11	,147	116	,000	,932	116	,000
	12	,164	39	,009	,886	39	,001
Toplam Puan Derse Katılım Düzeyleri	9	,042	211	,200*	,994	211	,614
	10	,049	134	,200*	,993	134	,762
	11	,068	116	,200*	,977	116	,041
	12	,074	39	,200*	,980	39	,718

$p<0.05$

Tablo 5’e göre sınıf düzeyine göre öğrencilerin derse katılım düzeyleri toplam puanda normal dağılım gösterirken ($p=0.2$, $p>0.05$), alt boyutlar açısından normal dağılım göstermemektedir ($p<0.05$). Bu bağlamda öğrencilerin öğrenim gördükleri sınıfa göre derse katılım düzeylerini belirlemek için parametrik testlerden F testi-Anova yapılmış, alt boyutlar açısından farkı belirlemek üzere parametrik olmayan testlerden Kruskal Wallis H testi yapılmıştır. Sonuçlar tablo 6 ve tablo 7’de gösterilmektedir.

Tablo 6. Sınıf düzeyine göre öğrencilerin derse katılım düzeyleri

Sınıf	N	Ort.	s.s.	Varyans Kaynağı	s.d.	Kareler Toplamı	Kareler Ort.	F	p
9	211	74,088	13,195	Genel	1436,141	3	478,714	2,008	,112
10	134	77,458	15,980	Gruplararası	118239,241	496	238,386		
11	116	74,317	16,627	Gruplariçi	119675,382	499			
12	39	78,477	20,469						
Top.	500	75,386	15,486						

$p<0.05$

Tablo 6'ya göre meslek lisesi öğrencilerinin derse katılım düzeyleri sınıf düzeylerine göre anlamlı bir farklılık göstermemektedir ($F=2.008$; $p>0.05$).

Tablo 7. Alt boyutlar için öğrencilerin sınıf düzeyine göre derse katılım düzeyleri

	Bölüm	N	Sıra Ort.	Ki-kare	p	Farklılık
Duyuşsal Katılım	9	211	240,20	11,741	,008	
	10	134	284,14			9-10*
	11	116	226,72			10*-11
	12	39	261,37			
	Toplam	500				
Davranışsal Katılım-Uyuma/İtaat	9	211	240,90	3,728	,292	
	10	134	267,52			-
	11	116	242,54			
	12	39	267,62			
	Toplam	500				
Davranışsal Katılım-Sınıf Katılımı	9	211	241,40	1,655	,647	
	10	134	253,12			-
	11	116	260,16			
	12	39	262,01			
	Toplam	500				
Bilişsel Katılım	9	211	242,37	2,335	,506	
	10	134	257,54			-
	11	116	248,23			
	12	39	277,01			
	Toplam	500				
Derse Katılmama	9	211	231,99	7,713	,052	
	10	134	256,82			-
	11	116	263,42			
	12	39	290,47			
	Toplam	500				

$p<0.05$

Tablo 7'ye göre meslek lisesi öğrencilerinin sınıf düzeyine göre derse katılım düzeyleri alt boyutlarında sadece duyuşsal katılım boyutunda anlamlı bir farklılık bulunmaktadır (Ki-kare=11,741; $p<0.05$). Farklılıkların hangi ikili gruplardan kaynaklandığını belirlemek için yapılan Mann Whitney U testleri sonucunda 9. ve 10. sınıflar arasında ($U=11516,500$; $p<0.05$) 10. sınıftaki öğrencilerin lehine, 10. ve 11. sınıflar arasında ($U=6104,500$; $p<0.05$) yine 10. sınıftaki öğrencilerin lehine anlamlı bir farklılık bulunmuştur. Duyuşsal katılım açısından 10. sınıf öğrencileri 9. ve 11. sınıf öğrencilerine göre daha fazla derse katılım gösterdiği söylenebilir. Diğer boyutlar için öğrencilerin sınıf düzeylerine göre anlamlı bir farklılık bulunmamıştır ($p>0.05$).

Tartışma, Sonuç ve Öneriler

Mesleki ve teknik liselerde öğrenim gören öğrencilerin derse katılım düzeylerini belirlemek amacıyla yapılan bu araştırmada elde edilen sonuçlar şu şekildedir.

Mesleki ve teknik liselerde öğrenim gören öğrenciler, bazen derslere katılmaktadırlar. Katılmanın alt boyutları incelendiğinde ise öğrencilerin bilişsel ve duyuşsal katılım ve davranışsal katılım-sınıf katılımı boyutlarında derse katılımları daha fazla, davranışsal katılım-uyuma/itaat boyutunda ise derse katılımları daha düşüktür. Çelik, Örenoglu-Toraman ve Çelik (2018) tarafından yapılan araştırmada, öğrencilerin derse orta düzeyde katılım gösterdikleri belirlenmiştir. Aynı araştırmada derse katılımın alt boyutlarında ise öğrencilerin davranışsal katılım-sınıf katılımında ortanın üstünde oldukları, diğer boyutlarda ise derse katılımlarının orta düzeyde olduğu belirlenmiştir. Menteş'in (2011) araştırmasında ise öğrencilerin derse katılımının yüksek olduğu sonucuna ulaşılmıştır. Sırakaya (2015) tarafından yapılan araştırmada da öğrencilerin derse katılımı oldukça yüksek bulunmuş ve yapılan araştırmada deney grubunun yer aldığı derste kullanılan materyallerin öğrencilerin derse

katılımı üzerinde herhangi bir etkiye sahip olmadığı belirlenmiştir. Erişti'nin (1998) üniversite öğrencileri ile yaptığı çalışmada ise öğrencilerin büyük bir kısmının derse katılımının orta düzeyde olduğu belirlenmiştir.

Araştırmada öğrencilerin derse katılım düzeylerinde ölçekten alınan toplam puan açısından cinsiyete göre bir farklılık olmadığı sonucuna ulaşılmıştır. Alt boyutlarda ise duyuşsal katılım ve derse katılmama boyutlarında cinsiyete göre bir farklılık olduğu tespit edilmiştir. Duyuşsal katılım boyutunda, erkek öğrenciler kadın öğrencilere göre daha fazla derse katılım göstermektedir. Derse katılmama boyutunda, kadın öğrenciler erkek öğrencilere göre daha fazla derse katılmama eğilimindedir. Erişti'nin (1998) çalışmasında da cinsiyete göre derse katılımın fark göstermediği sonucuna ulaşılmıştır. Güneri (2018) tarafından yapılan araştırmada ise öğrencilerin derse katılım düzeyleri arasında kadın öğrenciler lehine farklılık olduğu ve bu farklılığın tüm alt boyutlarda da gözlemlendiği belirlenmiştir. İki araştırma arasındaki farklılığın araştırmaya katılan okulların farklılığından (mesleki ve teknik lise- Devlet/özel anadolu lisesi) kaynaklandığı düşünülebilir. Sever, Ulubey, Toraman ve Türe'nin (2014) çalışmasında da kadın öğrencilerin derse katılım oranlarının erkek öğrencilerden daha yüksek olduğu belirlenmiştir. Derse katılımın alt boyutları açısından ise davranışsal katılım-uyma/itaat ve bilişsel katılım alt boyutlarında yine kadın öğrencilerin derse katılımlarının daha fazla olduğu sonucuna ulaşılmıştır.

Meslek lisesi öğrencilerin öğrenim gördükleri sınıf düzeyine göre derse katılımları incelendiğinde duyuşsal katılım alt boyutu açısından 10. sınıf öğrencileri 9. ve 11. sınıf öğrencilerine göre derse daha fazla katılım göstermektedir. Sınıf düzeylerine göre öğrencilerin derse katılımlarında diğer alt boyutlarda farklılık yoktur. Güneri (2018) tarafından yapılan araştırmada ise 9. sınıf öğrencilerinin 11 ve 12. sınıf öğrencilerine göre ve 10 ile 11. sınıf öğrencilerinin 12. sınıf öğrencilerine göre derse daha fazla katıldıkları sonucuna ulaşılmıştır.

Araştırmada ulaşılan sonuçlara göre genel olarak mesleki ve teknik liselerde öğrenim gören öğrencilerin derslere katılımlarını teşvik eden uygulamalara ağırlık verilmesi ve derslerin interaktif bir şekilde işlenmeye özen gösterilmesi önerilebilir. Bununla birlikte kadın öğrencilerin derslere katılımını ve özellikle duyuşsal katılımlarını arttırmak için onların ilgi ve isteklerine uygun etkinliklerin uygulanması ve öğrenme öğretme sürecinde yapılan çalışmalarda kadın öğrencilere daha fazla görev ve sorumluluk verilmesi önerilebilir. Ayrıca 9., 11. ve 12. sınıf düzeyinde öğrenim gören öğrencilerin duyuşsal katılımlarını engelleyen faktörlerin incelenmesi ve bu yönde derslerde gerekli çalışmaların yapılması önerilebilir.

Mesleki ve teknik lise öğrencilerinin derse katılım düzeylerini belirlemek amacıyla yapılan bu çalışmada öğrencilerin derse katılım düzeylerini etkileyen faktörler olarak cinsiyet ve sınıf değişkenleri ele alınmıştır. Farklı değişkenlerin de incelendiği çalışmalar yapılabilir. Bu çalışma, öğrencilerden elde edilen verilerle yürütülmüştür. Öğretmenlerden veri toplamaya yönelik çalışmalar da yapılabilir.

Kaynakça

- Bala-Bulut, G. (2017). *The relationship among teachers' instructional behaviors, student motivation and student engagement: An observational study* (Unpublished master's thesis). Bilkent University, Ankara.
- Başören, M. (2015). *Lise öğrencilerinin matematik dersine katılımının, duygu düzenleme, algılanan araçsallık, umut ve başarı değişkenleriyle olan ilişkisi* (Yayımlanmamış doktora tezi). Abant İzzet Baysal Üniversitesi, Bolu.
- Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö. E., Karadeniz, Ş. ve Demirel, F. (2010). *Bilimsel araştırma yöntemleri*. Ankara: Pegem Akademi.
- Çelik, S., Örenoğlu-Toraman, S., ve Çelik, K. (2018). Öğrenci başarısının derse katılım ve öğretmen yakınlığıyla ilişkisi. *Kastamonu Eğitim Dergisi*, 26(1), 209-217. doi:10.24106/kefdergi.378129
- Eren, A. (2013). Prospective teacher's perceptions of instrumentality, boredom coping Strategies, and four aspects of engagement. *Teaching Education*, 24(3), 302-326.
- Erişti, B. (1998). *Üniversite öğrencilerinin öğretme-öğrenme sürecine katılım durumları* (Yayımlanmamış yüksek lisans tezi). Anadolu Üniversitesi, Eskişehir.
- Eryılmaz, A. (2014). Üniversite öğrencileri için derse katılım ölçeklerinin geliştirilmesi. *Uşak Üniversitesi Sosyal Bilimler Dergisi*, 7(2), 203-214.
- Eryılmaz, A. ve Aypay, A. (2011). Ergenlerin derse katılmaya motive olmaları ile öznel iyi oluşları arasındaki ilişkinin incelenmesi. *International Journal of Human Sciences*, 8(1), 1219-1233.
- Fletcher, A. (2015). Defining Student Engagement: A Literature Review. <https://soundout.org/defining-student-engagement-a-literature-review/> adresinden 02.08.2018 tarihinde indirilmiştir.
- Fredricks, J. A., Blumenfeld, P. C. & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109.
- Güner-Yıldız, N. ve Melekoğlu, M. A. (2016). Kaynaştırma sınıflarındaki öğrencilerin derse katılım ve problem davranışlarının incelenmesi. *Kesit Akademi Dergisi*, 2(3), 42-56.

- Güneri, B. (2018). *Öğrencilerin İngilizce dersi öz yeterlik inancı kaynakları, derse katılım düzeyleri ve algılanan araçsallıklarının öz yeterlik inançları ve tutumları üzerindeki etkisi* (Yayımlanmamış yüksek lisans tezi). Bülent Ecevit Üniversitesi, Zonguldak.
- Lee, W. ve Reeve, J. (2012). Teachers' estimates of their students' motivation and engagement: Being in synch with students. *Educational Psychology*, 32, 727-747.
- Menteş, C. (2011). *İlköğretim okulu 5. sınıf öğrencilerinin öğretmenlerine olan güven düzeyleri ile derse katılım düzeyleri arasındaki ilişki* (Yayımlanmamış yüksek lisans tezi). Abant İzzet Baysal Üniversitesi, Bolu.
- Sever, M. (2014). Derse katılım envanterinin Türk kültürüne uyarlanması. *Eğitim ve Bilim*, 39(176), 171-182.
- Sever, M., Ulubey, Ö., Toraman, Ç. ve Türe, E. (2014). Lise öğrencilerinin çeşitli değişkenler açısından derse katılımlarının incelenmesi. *Eğitim ve Bilim*, 39(176), 183-198.
- Sarıtepeci, M. ve Yıldız, H. (2014). Harmanlanmış öğrenme ortamlarının öğrencilerin derse katılım ve derse karşı motivasyonları üzerine etkisinin incelenmesi. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KEFAD) 15(1)*, 211-223.
- Sırakaya, M. (2015). *Artırılmış gerçeklik uygulamalarının öğrencilerin akademik başarıları, kavram yanılgıları ve derse katılımlarına etkisi* (Yayımlanmamış doktora tezi). Gazi Üniversitesi, Ankara.
- Trowler, V. (2010). Student engagement literature review. The Higher Education Academy. https://www.heacademy.ac.uk/system/files/studentengagementliteraturereview_1.pdf adresinden 02.07.2018 tarihinde indirilmiştir.
- Türk, E. (2015). *Türk eğitim sistemi ve ortaöğretim*. Ankara: Milli Eğitim Bakanlığı Ortaöğretim Genel Müdürlüğü.
- Yıldırım, G., Sökmen, Y. Taş, Y. ve Dilekmen, M. (2016). Öğrenci katılım ölçeğinin Türkçeye uyarlanması: Geçerlik ve güvenirlik çalışması. *Trakya Üniversitesi Eğitim Fakültesi Dergisi XV. Uluslararası Katılımlı Sınıf Öğretmenliği Eğitimi Sempozyumu (11-14 Mayıs 2016) USOS 2016 Özel Sayısı*, 68-79. Doi: 10.24315/trkefd.364039
- Yılmaz, M. B. (2017). Dijital değerlendirme araçlarının ortaokul öğrencilerinin derse bağlılıklarına etkisi: İki farklı okulda durum. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 17 (3), 1606-1620.

Metacognitive Calibration In Adaptive Learning For Management Students With Different Grades

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Abstract

Students' judgmental accuracy in what they know plays an important role in their learning effectiveness. In this paper, we compare students' metacognition and their class performance in an introductory information systems course. Students use an interactive and adaptive learning system that delivers individualized contents based on each student's knowledge level. This system continuously monitors and assesses each student's knowledge and skills with specific learning objectives, and then identifies the areas that need to be improved. Student metacognition and performance data were collected from over 600 college students with management majors when they were using the system. The preliminary findings show that metacognitive calibration has a significant different impact on students who receive passing vs. non-passing grades. The results shed light on how students behave in a self-regulated learning environment and how instructors help students improve their metacognitive and self-monitoring skills.

Mevlana Celaleddin-İ Rumi’de Nefsin Eğitimi ve Modern İnsandaki İzdüşümleri

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Özet

Tasavvufî düşüncede insan iki yönlüdür; ruhsal yönüyle Tanrı’ya, nefsi yönüyle de diğer canlılara dönüktür. Bununla birlikte, insanın nefsi de, ruhu da kendine ait birtakım özellikler taşır. Ruh baştan mükemmel ve olumlu özelliklere sahip olup, nefsin tesiri altında kaldıkça olumsuz özellikler kazanabildiği, başka bir ifadeyle kirlenebildiği gibi, nefis (insan nefsi) baştan kirlî ve zayıf olup ancak birtakım metotlarla eğitildikçe ve ruhun tesiri altına girdikçe güzelleşebilir ve olumlu özellikler kazanabilir. Bu açıdan, hem ruhun saflığının korunması hem de nefsin hayvanîlikten kurtularak mükemmelleşmesi nefsin eğitime bağlıdır. Dolayısıyla tasavvufî düşüncede nefsin eğitimi son derece önemlidir, hatta tasavvufî düşüncenin baştan sona nefsi mükemmelleştirmeye dönük olduğunu söylemek yanlış olmaz. 13. Yüzyılda yaşamış olan ünlü mutasavvıf Mevlana aynı zamanda bir “nefs eğitmeni”dir. O, hem kendi nefsini eğiterek ondaki potansiyel güzellikleri ve olumlu kabiliyetleri aktif hale getirmiş, hem rehberliğini yaptığı binlerce insanı eğiterek kamil insan (perfect man) seviyesine çıkarmış, hem de insan nefsinin eğitmede genel prensipleri belirleyerek, yüzyıllar sonrasına ve günümüze ışık tutmuştur. Bugün modern psikolojide ve özellikle insanın ruhsal eğitiminde Mevlana’nın görüşlerine çok fazla müracaat edildiğini görüyoruz.

Ben tebliğimde önce tasavvufî düşüncede nefsin anlamı, yeri ve özelliklerinden bahsedeceğim. Daha sonra Mevlana’nın nefsin eğitimiyle ilgili düşüncelerine değineceğim. Son olarak da, Mevlana düşüncesinde günümüz insanını mutlu ve mükemmel yapabilmenin imkânlarını ortaya koymaya çalışacağım.

Anahtar Kelimeler: *Tasavvuf, Mevlana Celaleddin Rumi, nefis, nefis eğitimi, kamil insan.*

Modelling Of Mortality – Presentation Of Deras Software Using In Demographic Education

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Abstract

Population aging is very often discussed topic. People live until higher age. The age of living is increasing because of a few reasons. As the first one could be mentioned the increasing level of health care. The second one could be healthier life style – increasing interest of people about healthy diet, more sport, etc. Mainly these reasons caused increasing of life expectancy. On the other hand numbers of death are increasing (especially at the higher ages). That is why the reliability of demographical data is increasing at higher ages. Because of the aging population the evolution in these ages is more and more important. That is why the modelling of mortality is increasingly important. It is important to have the best imagination about the evolution of mortality at the highest ages. One of the approaches of modelling of mortality is the using of analytical functions.

The aim of this article is the presentation of selected mortality models. These models could be divided into several groups (exponential, logistic, polynomial, etc.). Gompertz law of mortality, Gompertz-Makeham function or Coale-Kisker model could be included among exponential functions. Kannisto, Thatcher or Heligman-Pollard model could be included into logistic group.

The other aim is the presentation of software DeRaS in which these models are implemented. In this article will mentioned procedure required for the calculation of mortality tables in DeRaS. The advantages of fit will be mentioned after that. Results will be presented at the end of this part. Here will be used the possible options of DeRaS software.

The data about mortality of Czech population will be used for the calculations. The data are from the Czech Statistical Office database. The data for the last disposable year will be used for the calculation (2016).

Key words: *Models of mortality, age, DeRaS software*

Introduction

The aging of population is discussed topic in last days. People live until higher ages and higher number of deaths at these ages is connected with it. So it is very important to make changes in social system and in health care system for the future. The modelling of mortality is increasingly important because of this reason.

Methodology

For the modelling of mortality could be used several approaches. One of these are the analytical functions. The functions presented in this article are using at the ages 60+.

Models Of Mortality

Gompertz function

The Gompertz law of mortality is one of the oldest models of mortality. It could be written like

$$\mu(x) = a \cdot e^{b \cdot x},$$

where x is the age, a , b are parameters of the model, $\mu(x)$ is the force of mortality (Gompertz, 1825).

The force of mortality can be roughly expressed as $\mu(x + 0,5) \doteq m_x$, where the age-specific death rate (m_x) is given as:

$$m_x = \frac{M_x}{E_x},$$

where M_x is the number of deaths at age x and E_x is the exposure to risk for x -year olds.

This model assumes exponential increase in mortality with an increasing age.

This model was improved by many authors, e.g. Gavrilov & Gavrilova (2011, 1) or Koschin (1999).

The Gompertz-Makeham function

The Gompertz law of mortality was improved by W. M. Makeham. The other parameter was included into the function. This parameter expresses deaths independent on the age (Makeham, 1860).

$$\mu(x) = c + a \cdot e^{b \cdot x},$$

where x is age, a , b and c are parameters of the model.

The Gompertz-Makeham function could be written in simpler version:

$$\mu(x) = c + a \cdot b^x,$$

where x is the age, a , b , c are parameters of model.

The Gompertz-Makeham function is very often used function for modelling of the intensity of mortality at higher ages. It almost ideally describes mortality from 60 to 85 years. But the constant increase in mortality is not true for the ages 85+. The Gompertz-Makeham function was also very important for the scientific research of Thatcher, Kannisto Vaupel (1998) or Gavrilov and Gavrilova (2011, 2).

Coale-Kisker model

Coale-Kisker model is focused on changes of deaths rates between two consecutive ages. Authors assume not constant increase at the highest ages but linear decrease. Coale and Kisker based on determination of variable k_x by Coleho, Magalhães, Bravo. This variable could be written like

$$k_x = \ln\left(\frac{m_x}{m_{x-1}}\right),$$

where m_x is the age-specific death rates.

Variable k_x is decreasing from the age 85:

$$k_x = k_{85} - (x - 85) \cdot s,$$

where x is age, k_{85} and s are parameters of the model.

This model is based on two assumptions:

1. The age-specific death rates have to be equally reliable around the age 85.
2. This assumption relates to the value of the age-specific death rate in the age considered as the highest achievable (the authors set it for 110 years). If the age-specific death rate is determined at this age then it will allow us to estimate the parameter s . The age-specific death rate at the age of 110 was set at 1.0 for males and 0.8 for females (both values are based on the level of death rates in the Swedish population).

The final model then corresponds to an exponential-quadratic function. It could be expressed as

$$\mu(x) = e^{a \cdot x^2 + b \cdot x + c},$$

where x is age, a , b and c are unknown parameters (Thatcher et al., 1998).

The model of Coale and Kisker was further dealt with by Thatcher, Kannisto and Vaupel (1998) or Burcin, Tesárková and Šídlo (2010).

Heligman and Pollard model

The original form of the model was focused on modeling of mortality throughout the whole age range:

$$q_x = A^{(x+B)^C} + D \cdot e^{-E \cdot (\ln(x) - \ln(F))^2} + \frac{G \cdot H^x}{1 + G \cdot H^x},$$

where x is age, A , B , C , D , E , F , G and H are unknown parameters.

The model tries to eliminate the dearth of all other models which model mortality only at higher ages. The aim of the authors was to create a model that would be appropriate to capture mortality even in the lower age (Boleslawski, Tabeau, 2001).

Since the other models deal with modeling of the intensity of mortality only for older people, I will only consider the third part of the original eight-parameter version of the model.

The model of Heligman and Pollard is shaped as follows:

$$q_x = \frac{G \cdot H^x}{1 + G \cdot H^x},$$

where x is the age, G and H are unknown parameters.

Therefore, the same function is used as in the Himes-Preston-Condran model. The difference, however, is that the model of Heligman and Pollard models the probability of dying rather than age-specific death rates.

One of the first logistics models was designed by Perks in 1932. Perks first noted that mortality rates can be

described by a curve - a logistic function.

Kannisto model

Another logistic model is the Kannisto model. Kannisto found that mortality rates in modern populations are very close to one of the simplest forms of a logistic function in which logit (μ_x) can be expressed as a linear function of the age. The same model function was used by Himes, Preston and Condran in 1994.

$$\mu_x = \frac{a \cdot e^{b \cdot x}}{1 + a \cdot e^{b \cdot x}},$$

where x is the age, a , b are unknown parameters.

Logit (μ_x) is a linear function of age written in the form:

$$\text{logit}(\mu_x) = \ln(a) + b \cdot x$$

Thatcher model

Another form of the logistics model was introduced by Thatcher. It differs from the basic logistic function by including the other parameter (characterizing age-independent mortality).

$$\mu_x = c + \frac{a \cdot e^{b \cdot x}}{1 + a \cdot e^{b \cdot x}},$$

where x is the age, a , b and c are unknown parameters (Thatcher, 1999).

As was mentioned above, a number of authors have used the logistic function for modeling mortality. Later they were followed by another Canudas-Romo (2008).

Software Deras

DeRaS (see Figure 1) has been designed for modelling of mortality using the above-mentioned models. Before computing, you first need to insert an Input File and choose where we want to store outputs (Output Directory). Finally, we set a calculation period - the mortality tables can be calculated for several years to determine the time series.

The software also offers a choice of age range in which the model parameters will be estimated (minimum output age and maximum output age). Finally, you need to set the maximum output age (the age until which mortality tables are counted).

In the next step, we can choose which analytic functions will be used to calculate mortality tables. DeRaS also offers a choice between full and abridged mortality tables.

A great advantage is the creation of figures. DeRaS offers a figure for the probability of dying, life expectancy, etc. For the probability of dying, it is possible to create a combined figure that compares all models.

Sample of DeRaS Software Environment:

Figure 1: Enviroment of DeRaS software

Source: DeRaS (2012)

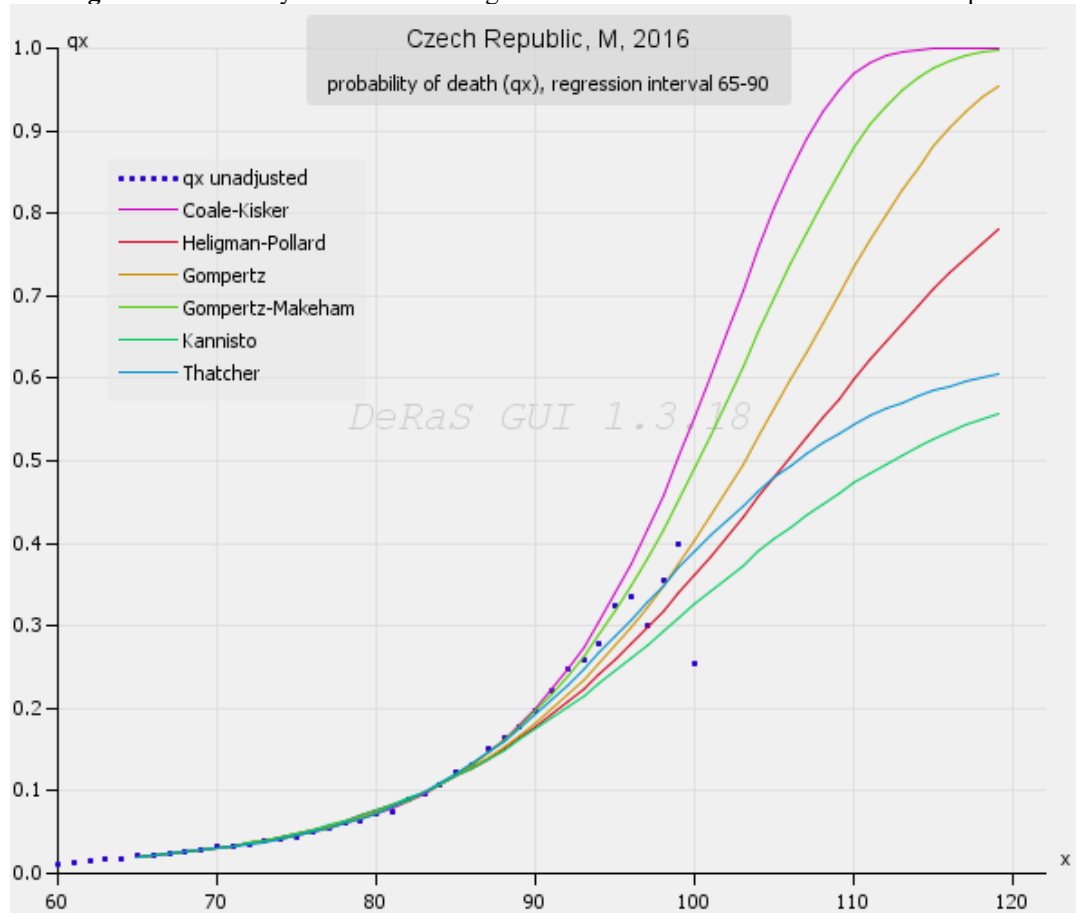
For the estimation of unknown parameters is used nonlinear regression procedure.

Results

For the calculations was used the data about mortality of the Czech population for the last available year (i.e. 2016). As the input data was used the number of deaths according age and gender, the number of mid-year population according age and gender, and the number of live births sorted by gender.

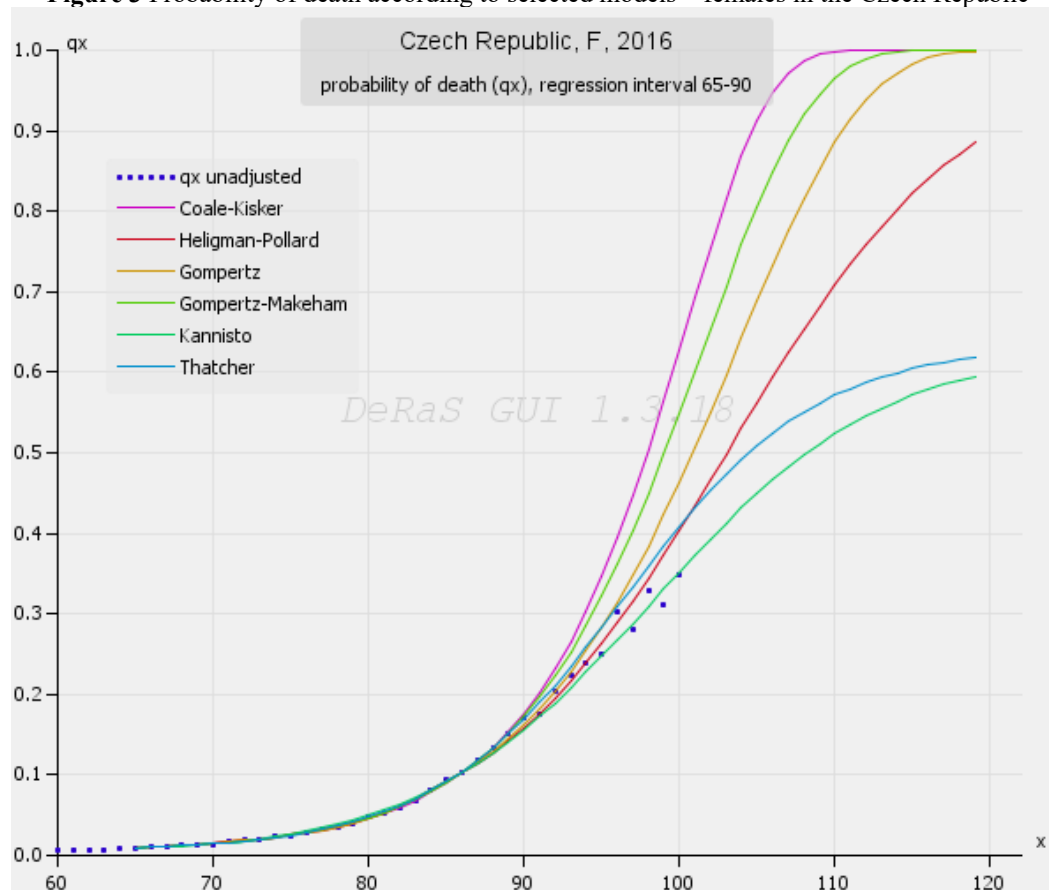
For the demonstration of the output is used a combined figure for probability of death.

The figure (Figure 2) shows modeling probabilities of dying for the Czech males according to every single model. The figure also contains empirical probability of death. The results show that the highest values are given by Coale - Kisker and Gompertz - Makeham model. On the other hand, the lowest values we obtain for the Kannisto and Thatcher model.

Figure 2: Probability of death according to selected models – males in the Czech Republic

Source: data CZSO, author's calculation (DeRaS, 2012)

The following figure (Figure 3) contains modeling probabilities of dying for the Czech females. Based on the obtained results, it can be said that the highest values are provided by the Coale-Kisker model, the lowest values are provided by Kannisto and Thatcher model. And as the average model can be classified the Heligman-Pollard model.

Figure 3 Probability of death according to selected models – females in the Czech Republic

Source: data CZSO, author's calculation (DeRaS, 2012)

Conclusion

One of the aims of this article was modelling of mortality in at ages 60+ by using selected analytical functions. Based on the obtained results, we can conclude that the highest values for probability of dying are achieved by using the Coale-Kisker model or the Gompertz-Makeham function. On the other hand, we get the lowest values for the Thatcher or Kannisto model. Among the average models we can include the Heligman-Pollard model. Another aim was to introduce the DeRaS software in which these models are implemented. Its advantage is the speed of getting the outputs. Several functions can be used to model of mortality, and it is possible to determine the age range to be used for the estimation of parameters. The software also offers graphical outputs and a choice between full and abridges mortality tables.

References

- Boleslawski, L. & Tabeau, E., (2001). Comparing Theoretical Age Patterns of Mortality Beyond the Age of 80. In: Tabeau, E., van den Berg J., A. and Heathcote, Ch. (eds.) 2001. *Forecasting Mortality in Developed Countries: Insights from a Statistical, Demographic and Epidemiological Perspective*. s. 127 – 155. ISBN 978-0-7923-6833-5.
- Burcin, B., Tesárková, K. & Šídlo, L., (2010). “Nejpoužívanější metody vyrovnávání a extrapolace křivky úmrtnosti a jejich aplikace na českou populaci.” *Demografie* 52, 2010: 77 – 89.
- Canudas-Romo, V., (2008). The modal age at death and the shifting mortality hypothesis. *Demographic research* 19 (30), 2008, pp. 1179-1204.
- CZSO (2018). [5. 6. 2018]. Available from: <<http://www.czso.cz/>>
- Burcin, B., Hulíková, Tesárková, K. & Kománek, D., (2012). *DeRaS: software tool for modelling mortality intensities and life table construction*. Charles University in Prague, Prague. <<http://deras.natur.cuni.cz>>
- Gavrilov, L., A. & Gavrilova, N., S., (2011). “Mortality measurement at advanced ages: a study of social security administration death master file.” *North American actuarial journal* 15 (3): 432 – 447.
- Gavrilov, L., A. & Gavrilova, N., S., (2011). “Stárnutí a dlouhověkost: Zákony a prognózy úmrtnosti pro stárnoucí populaci.” *Demografie* 53, 2011: 109 – 128.

- Gompertz, B., (1825). On the Nature of the Function Expressive of the Law of Human Mortality, and on a New Mode of Determining the Value of Life Contingencies. *Philosophical Transactions of the Royal Society of London* **115**, pp. 513–585.
- Fiala, T., (2002). *Výpočty aktuárské demografie v tabulkovém procesoru*, 1. vyd. Praha : Oeconomica, 2002. 218 s. ISBN 80-245-0446-4.
- Koschin, F., (1999). “Jak vysoká je intenzita úmrtnosti na konci lidského života?” *Demografie* 41 (2), 1999: 105 – 109.
- Makeham, W., M. (1860). On the Law of Mortality and the Construction of Annuity Tables. *The Assurance Magazine, and Journal of the Institute of Actuaries* **8**, pp. 301–310.
- Pavlík, Z., Rychtaříková, J. & Šubrtová, A., (1986). *Základy demografie*. Praha, 1986.
- Thatcher, R., A., Kanistö, V. & Vaupel, J., W., (1998). *The Force of Mortality at Ages 80 to 120*. Odense University Press, 1998. ISBN 87-7838-381-1.

Modelling Of The Open-Ended Items For Assessing Multiple Proficiencies In Mathematical Problem Solving

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Abstract

This study aims to investigate a sound model by comparing the unidimensional, multidimensional, and multi-dimensional item bundles models. Answering the open-ended question is one of the most important tasks for assessing the product and process of mathematical problem solving through the use of multiple proficiencies. Its use may cause a violation of item local independence due to its being multiple scores from a common open-ended task on multiple proficiencies. The instrument involves seven tasks encompassing three item bundles that share a common open-ended question for Thai sixth-grade students. The results show that all multi-dimensional models fit better than the unidimensional model. Although the bundles model is the best fit, the two multidimensional models have very similar values in terms of their reliabilities, correlations, and weighted fit statistics. In a real-world context, the multidimensional model is an adequate simpler explanation and, at an international level, provides richer information to the classroom teacher. Further analysis focused on the appropriate amount and the types of common tasks for using the item bundles model and demonstrate the magnitude of the bundle effect that impacts parameter estimates and test precision.

Keywords: *Assessment design; MRCML model; multidimensional proficiencies; problem solving; Rasch analysis*

Introduction

Assessing mathematical problem solving (MPS) is one of the most interesting issues because it significantly contributes to the outcomes of mathematics education (National Council of Teachers of Mathematics (NCTM), 2000). In recent years, 'embedded assessment' has been a major topic of interest, debate, and experimentation in the nationwide efforts at educational reform in each country (Hickendorff, 2013; Jones, Swan, & Pollitt, 2014), particularly in mathematics (Arieli-Attali & Cayton-Hodges, 2014; Stylianou, 2013). Assessing MPS focuses not only on the product of teaching but also on the process of thinking. Therefore, by answering the open-ended question is the most efficient task for eliciting the multiple proficiencies of the students because they need to use their responses to the previous step to solve problems in the subsequent step before obtaining the final answer.

Past researchers Hickendorff (2013), Jones et al. (2014), and Youngchim, Pasiphol, and Sujiva (2015) revealed that the strength of using the multidimensional approach to examine and develop problem solving tasks and cognitive processes but they only emphasize formal test administration rather than the embedded assessment in the curriculum. Besides, past studies focus on students' profiles based on the differences in the dimensions rather than the levels of proficiency, reflecting on students' progress in each dimension (i.e. progress variables), which is a major focus of instruction and assessment activities (Black, Wilson, & Yao, 2011). It is important to note that the tasks are not designed to provide information on the separate dimensions, particularly when items require multiple latent traits within one single task.

The aim of this study is to investigate a sound model for assessing MPS relating to the modeling of items in a common open-ended question by comparing three models namely unidimensional (UD), multidimensional (MD), and multidimensional item bundles (MDB) models. The results of this study are important because they provide evidence for selecting the model with the flexibility and appropriateness for assessment in the real-world context. The idea that students can obtain the right answer for wrong reasons needs to be taken into account when developing assessment tools.

Modelling Of Items In The Common Open-Ended Question

According to Webb (1998), developing a task requires identifying the specific assessment objectives, revealing the extent to which a student possesses knowledge of the idea being assessed, and disclosing how students have integrated their knowledge of this idea into other ideas or contexts. Therefore, the tasks for assessing MPS frequently require a number of cycles for piloting and revising the questions particularly true for open-response questions in which students are asked to generate and write more than one way of stating the answer and for higher order thinking, eliciting the knowledge to be assessed, and revealing something of the process of MPS through the use of three dimensions namely procedures (PC), strategies (ST), and reasoning (RE). Researchers compared the three models of item modeling namely UD, MD, and MBD models. Although the three models are related to a common open-ended question or a common prompt, the measurement models are different for the design matrices specifying the relationship between the response to the items and the structural parameters assumed to underlie a given measurement situation.

In the UD, the sum of scores received from 14 items, ranging from 0-56 can be treated as the student's response for a single estimate of MPS (see Figure 1). It has the advantage of parsimony in modeling student proficiency and summarizing student's MPS with a single number, which represents the performance on the 14 items. The probability of a student's response is in category k of item i (P_{ik}), as opposed to the previous category $k-1$ (P_{ik-1}), for each of the 14 items depicted in Equation 1. This equation is related to the level of that student's ability on unidimension (θ) and the relative difficulty of categories k (δ_{ik}) for disclosing the level of MPS.

$$\log(P_{ik}/P_{ik-1}) = \theta - \delta_{ik} \quad (1)$$

Analyzing the data compositely with the ACER ConQuest Version 2.0 (Wu, Adams, Wilson, & Haldane, 2007) produces estimates for a total of fifty-seven parameters: fifty-six item (δ) and step (τ) difficulties, and one population variance. In the analysis, we constrain the population mean to zero so that all item parameters can be estimated while ensuring parameter identification.

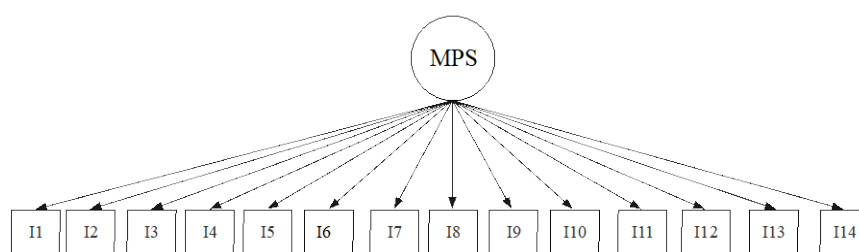


Figure 1: Unidimensional model

The MD can be viewed as a compromise between the UD and consecutive models that incorporate the best of both approaches (Allen & Wilson, 2006; Briggs & Wilson, 2003). The UD composites the scores with the single variable, and the consecutive approach summarizes the scores on items associated with each of the three MPS variables namely PC, ST, and RE (see Figure 2). The scores on each dimension provide distinct information about each examinee by incorporating the correlation between the dimensions directly into the model. There is a direct influence of the latent MPS for each dimension on the items assigned to the dimension depicted through the straight arrows but there is also an influence from all the other dimensions through the curved lines. The curved lines are represented associations rather than causes.

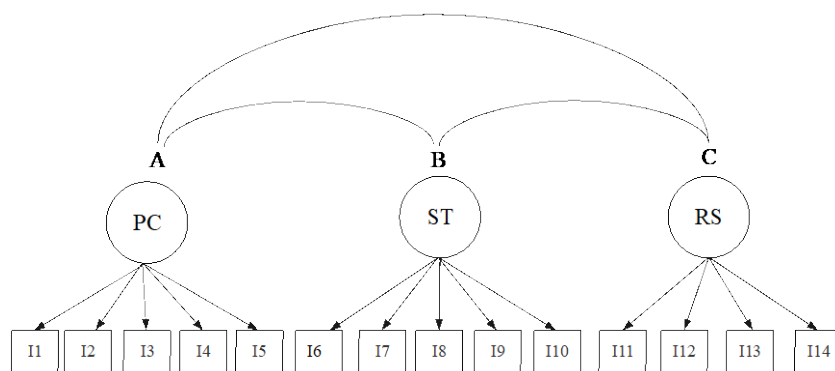


Figure 2: Multidimensional model

This model can be modeled using the Multidimensional Random Coefficient Multinomial Logit (MRCML) model

to estimate latent MPS across the three dimensions simultaneously. The MD uses the formulation from Equation 2 (compare with Equation 1):

$$\log(P_{ik}/P_{ik-1}) = \theta_d - \delta_{ik} \quad (2)$$

The major difference between Equations 1 and 2 is that, here, the person estimate, θ_d , is now also subscripted by the dimension, d. The multiple d values allow the researcher to model examinees' level of MPS on each of the separate dimensions represented in the scale. There are now three population means for this analysis (constrained to zero for identification), three variance estimates and six covariance estimates. Altogether, a total of sixty-two parameters are estimated using ConQuest.

Rosendaum (1988) introduces the term 'item bundle' to denote precisely the type of item subset and drawing attention to the possibility of generalizing the concept of conditional independence so that it would allow tests composed of item bundles to be calibrated in ways similar to tests that adhere to the usual formulation of conditional independence. In the case of the strict bundle independence model, that is, a model without parametric dependence between bundles (B), then the maximum number of parameters that can be estimated for each bundle (B1, B2, B3) is the $M^R - 1 = 5^3 - 1 = 124$ response pattern, where M is the number of item categories and R is the number of item bundles (see Figure 3). The MDB model uses the formulation from Equation 3 (compare with Equations 1 and 2):

$$\log(P_{ck}/P_{ck-1}) = \theta_d r_c - \delta_{ck} \quad (3)$$

The probability of a student's response is in category k of bundle c (P_{ck}), as opposed to the previous category ck-1 (P_{ck-1}), for each items bundle. This equation is related to the level of the student's ability on each dimension (θ_d) and the relative difficulty of categories k (δ_{ck}) to bundle c with the level of MPS. In addition, this model adds the score of each category on bundle c (r_c) for this study.

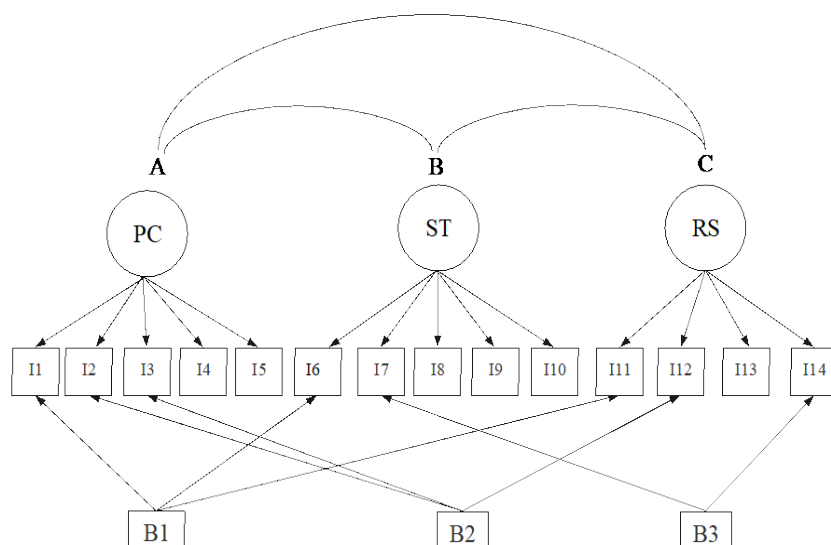


Figure 3: Multidimensional item bundles model

Methodology

The construct modeling approach is an example of an assessment system called the Berkeley Evaluation and Assessment Research (BEAR) Assessment System, which is largely based on performance assessment particularly on assessment that are embedded in the pedagogy and curriculum rather than administered as formal 'tests'. This approach is based on the ideas of developmental assessment (Wilson, 2005). The elements of the system are based on four principles, namely (i) construct maps (a developmental perspective on student learning); (ii) design of tasks (a match between instruction and assessment); (iii) outcome space (teacher management and responsibility), and (iv) measurement model / Wright map (generating quality evidence) described in detail by Wilson and Sloane (2000).

The PC construct map represents the degree to which a student selects an appropriate solution and obtain the correct answers. This construct map contains five levels of the learning progression to capture student successes in four operations of whole numbers, addition, subtraction, multiplication, and division. It describes the development of mathematical procedures as progressing from exploring inappropriate solutions and obtaining the wrong answers to show an appropriate solution and operation without error. The ST construct map captures students' ability to choose and use strategies for representing the algorithm and notation with reflection for familiar or unfamiliar problems. The expectation at higher level is that students can demonstrate the ability to move from concrete to abstract representations such as drawing a diagram, guessing, checking, and improving a solution,

making an organized list, making a table, working backwards, using logical reasoning, looking for a pattern, and/or using a model. The RE construct map examines the quality of the student's demonstration of logical reasoning with strong explanations that include both clear text and proper mathematical notation.

The design of tasks is focused on the number and operation involved in solving the four fundamental mathematical operations of cardinal number prompts. All the MPS items are created based on the desired performance of the Basic Education Core Curriculum of Thailand, Ministry of Education (2008) for Thai sixth-grade students. The learning standards consist of (i) an understanding of diverse methods of presenting numbers and their application in real life; (ii) an understanding of the results of operations of numbers, the relationship of operations, and the application of operations for problem solving; (iii) the use of estimation in calculation and problem solving, and (iv) an understanding of the numerical system and the application of numerical properties.

The outcome space is one scoring guide for each of the three MPS variables based on the student's level of proficiency on an assessment task is determined. The guide is used throughout the entire class for all assessments relating to a particular dimension. The definition of PC, ST, and RE are contained in the scoring guides, which describe the thinking process needed to reach the various scoring levels ranged from 0 to 4 on the elements of the variables (see Figure 4).

Score	Uniform Level	Procedures (PR)	Strategies (ST)	Reasoning (RE)
4	proficiency is above and beyond what is asked of the student	<ul style="list-style-type: none"> -Systematically explore a problem to gain an understanding of how relevant information to make structure and conjectures. - Use of procedures and operations without arithmetic/solution errors in multiple-step. -Show an appropriate solution and get the correct answers. 	<ul style="list-style-type: none"> -Use the multiple strategies to understand all information pertained to the problem. -Choose and use the multiple strategies representing the complex algorithm or procedures, such as drawing a diagram, guessing and improving, making an organized list, making a table, working backwards, using logical reasoning, looking for a pattern, or/and using a model. -Demonstrate the ability to move from concrete to abstract representations. 	<ul style="list-style-type: none"> -Makes predictions and justifications using information from their work effectively, accurately, and thoroughly. -Make a reasonable estimate and evaluate reasonableness of solutions, analysing the effect of the use each, and how they relate to each other -Be able to use deductive arguments to justify decisions and may result in formal proofs. -Demonstrates logical reasoning with strong explanations that include both words and proper mathematical notation.
3	proficiency is mostly complete and appropriate performance	<ul style="list-style-type: none"> -Solve a one-step and two-step solutions correctly but they will not complete all the steps. -Mostly explore a problem by using procedures and operations appropriately. - Show an appropriate procedures and operations but may still get incorrect answers because of miscalculations or misconception in the minor part of the notation. 	<ul style="list-style-type: none"> -Use a variety of strategies for representing algorithm or procedures appropriately and systematically with the major part of mathematical basis. -Use both words and proper mathematical notation for explanation, such as drawing the pictures, making a guess and test it, or/and eliminating possibilities, etc. 	<ul style="list-style-type: none"> -Construct argument with an adequate mathematical basis. -Demonstrates logical reasoning with appropriate explanations that include both words and proper mathematical notation. -Mostly make predictions and justifications effectively and accurately by using information from their work. -May show inappropriate predictions and justifications in the minor part of the problem.
2	proficiency is partly appropriate but missing something important	<ul style="list-style-type: none"> -Begin to solve basic, one-step equation in a limited way based on their observations of familiar problems. -Can identify, recall, recognize of the mathematical content. For example--recognize a multiplication table listing all the multiples of positive integers from 1 through 12 etc. ($2 \times 3 = 6$, $12 \times 3 = 36$). - Use of procedures and operations inappropriately because they are not adequate conceptual understanding. -May show a major misconception of procedures and operations. -Demonstrate the wrong answers based upon an inappropriate solution and errors in the major part of the notation. 	<ul style="list-style-type: none"> -Use strategies for representing algorithm or procedures with the minor part of mathematical basis. -Choose and use the beginning strategy for exploring one or/and two steps a problem in the simple algorithm or procedures based on their observations of familiar problems but they give partly support or relevant answer, such as—using the words or/and the simple formulas. 	<ul style="list-style-type: none"> -Make argument with a little mathematical basis. -Partially demonstrate logical reasoning and conceptual understanding in some but not all. -Show inappropriate predictions and justifications in the major part of the problem.
1	proficiency is inappropriate	<ul style="list-style-type: none"> -Use of procedures and operations inappropriately because they are inadequate content knowledge and conceptual understanding. -Do not start to solve a simple problem because they do not identify, recall, recognize of the mathematical content. For example--do not recognize a 	<ul style="list-style-type: none"> -Be unable to use strategy with mathematical basis. -Use only words for explaining but do not support or relevant answer. 	<ul style="list-style-type: none"> -Make arguments with no mathematical basis. -Lack of logical reasoning and accuracy. -Unable to predict and justify by using information from their work.

		multiplication table listing all the multiples of positive integers from 1 through 12. -Demonstrate the wrong answers based upon an inappropriately simple solution and errors in their calculations.		
0	an off-task	-Do not answer, attempt, or give relevant responses.	-Do not answer, attempt, or give relevant responses.	-Do not answer, attempt, or give relevant responses.

Figure 4: The MPS scoring guide in each dimension

The measurement model used is the Multidimensional Random Coefficients Multinomial Logit Model (MRCLM) by Adams, Wilson, and Wang (1997). MRCLM is a general and flexible model that allows for the specification of a large number of multidimensional item response models (Draney, Yamada, & Xie, 2000). The MRCLM describes the proficiency of person N as a V -dimensional vector $\theta = (\theta_1, \dots, \theta_V)$. The relationship between items and dimensions is specified by a scoring function, such that a response in category j to item i is represented by a V column vector of length V $\mathbf{b}_{ik} = (b_{ik1}, \dots, b_{ikV})'$. These column vectors are then collected into a scoring submatrix \mathbf{B}_i for item i , and these submatrices are collected into an overall scoring matrix \mathbf{B} . There are p item parameters, which are collected into a parameter vector $\xi = (\xi_1, \dots, \xi_p)$. The relationship between item responses and parameters is specified by a design matrix \mathbf{A} . This matrix is composed of design vectors \mathbf{a}_{ij} , each of length p , which, when multiplied by the parameter vector ξ , form a linear combination of the parameters operative for response j to item i . The probability of a response j to item i is then given by

$$P(X_{ij} = 1 | A, B, \xi | \theta) = \frac{\exp(b_{ij}\theta + a'_{ij}\xi)}{\sum_{k=1}^J \exp(b_{ik}\theta + a'_{ik}\xi)} \quad (4)$$

Data was collected from 409 Thai sixth-grade students in seven elementary schools in the northern and north-eastern regions of Thailand. This study employs four measurement models to investigate a sound model for assessing MPS relating to the modeling of items in the common open-ended question. These models consist of the Rasch model (Rasch, 1960), the partial credit model (Masters, 1982), Rasch models for item bundles (Wilson & Adams, 1995), and the MRCLM (Adams et al., 1997). The parameter are estimated using ACER ConQuest Version 2.0 (Wu et al., 2007). The model fit, reliability and item fit comparisons provide the evidence for selecting the model with the flexibility and appropriateness for assessment in a real-world context.

Results

Model fit and reliability comparisons

The fits of the various models are compared considering the difference in deviance between the two models. The resulting statistic is distributed as approximately the χ^2 , with degrees of freedom equal to the difference in the number of parameters in the two models. The information about the fit of the various models indicates that the MDB model fits the data significantly better than the two models at the $\alpha = .01$ level (see Table 1). Based on a comparison of Akaike's Information Criterion (Akaike, 1981), the MBD fits the data better than the MD and UD. Comparing the UD and MD models, however, the MD shows a fit that is significantly better at the $\alpha = .01$ level than the UD model ($\chi^2=63.826$, $df=5$). This result is at least suggestive that the MD is better than the UD model for these data. Regarding the reliabilities of the three models in the MPS data, under the MD model, the reliability for each dimension comes closer to the unidimensional reliability estimate than the MDB model, particularly the ST dimension. This result suggests that the MD model results in a higher reliability than the MDB model for these data. Nevertheless, in the case of the PC dimension in each model, the reliability is lower than the other two MPS variables. Moreover, in a bundle saturated model, the plain multidimensional model likely over-estimated the reliability (Wilson & Adam, 1995). The correlation between dimensions for each of the three models, in all three models, the correlations are high between dimensions are high, especially the correlation between the ST and RE. The correlations are very similar for both models.

Table 1. Model Fit Comparison, Reliability, and Correlation Estimates between Dimensions

Model Fit Comparison	AIC	Deviance	Number of parameters
1. UD	11726.257	11612.257	57
2. MD	11672.432	11548.432	62
3. MBD	11508.025	11378.025	65
Reliability	PC	ST	RE
1. UD		0.803 (all items)	
2. MD	0.710	0.710	0.710
3. MBD	0.677	0.677	0.677

Correlation Estimates between Dimensions		PC	ST
1. MD	ST	0.861	
	RE	0.874	0.887
2. MBD	ST	0.871	
	RE	0.875	0.895

Construct validity, Wright map comparisons

The person ability estimates and the item difficulty estimates from the MRCLM analysis can be summarized graphically using a Wright Map (Wilson, 2005). The results found that the Wright Map of the MD, and MDB models are very similar in the person ability estimates and the item difficulty estimates. Consequently, researchers decided to present the comparison between unidimensional and multidimensional constructs (see Figure 5). The Wright Map of unidimensional construct demonstrates that most items are generally inconsistent, particularly for some noticeable overlap in the levels and some surprisingly low threshold values in level 5. Specifically, Item 1, 3, 4, and 5 have threshold estimates in level 5 that are easier than expected. The Wright Map displays the thresholds for each item step of the MD model that have been separated into dimensions such as PC, ST and RE. The Wright Map shows that most of all are generally consistent in this regard, except for some noticeable overlap in the levels and some surprisingly low threshold values in level 4 and 5 in PC dimension. Specifically, the PC (Item 2, 4, and 5) items have threshold estimates in level 5 that are easier than expected.

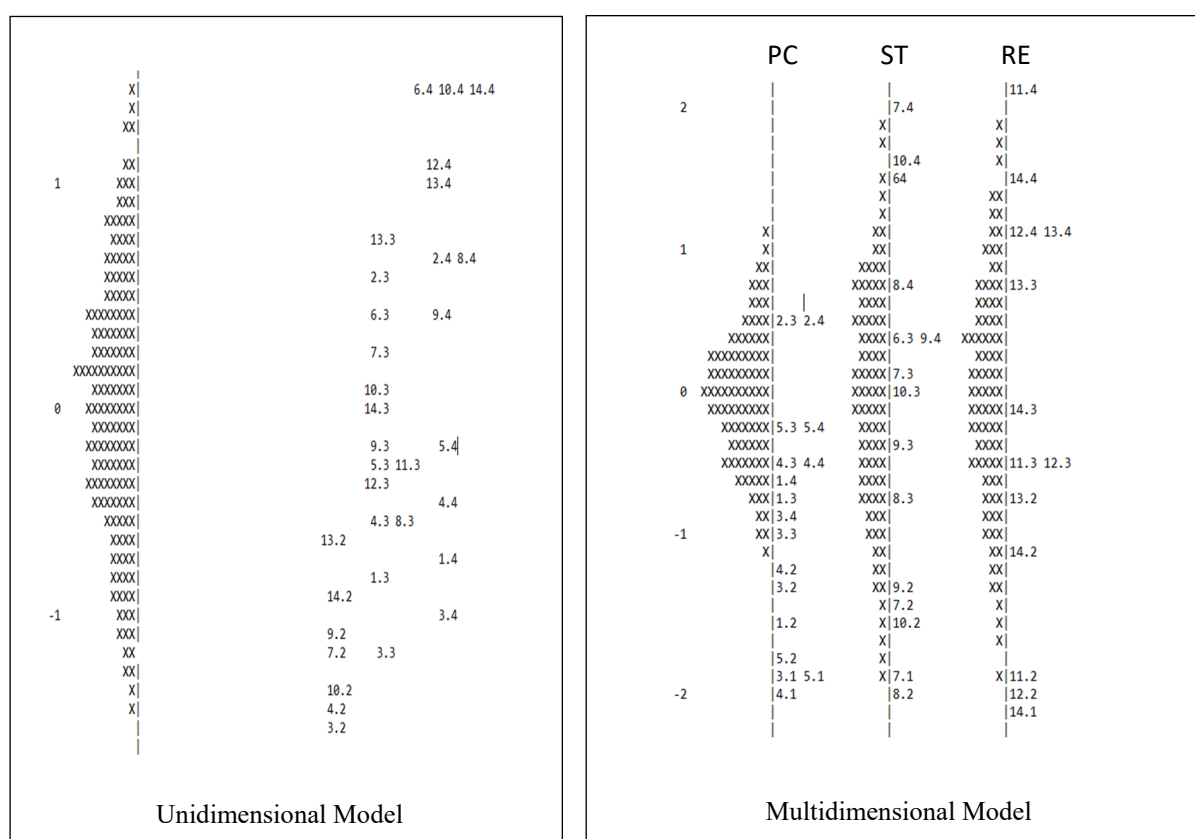


Figure 5: Wright Map Comparison between unidimensional and multidimensional models

Item fit

Regarding the weighted mean square fit statistics of the items for the three models, three out of the 14 items in the UD construct, i.e., Items 2, 5, and 13, have a weighted mean square fit statistic that falls outside the range of the 95% confidence interval (see Table 2). Out of these three items that have a significant misfit, there is one item (Item 5) that falls outside of the acceptable effect size range of 0.75 to 1.33. Considering the item fit of the other two models, however, only one or two of the 14 items in the two multidimensional models have a weighted mean square fit statistic that falls outside the range of the 95% confidence interval, and they are all from the original subset of three. Out of these items that have a significant misfit, all the items fall within the acceptable effect size range. This result is at least suggestive that the fit of the items of the MD construct is better than that of the UD construct for these data.

Table 2. Weighted Fit Statistics for the Fourteen Estimated Item Parameters of the Three Models

Dimension	Item	UD			MD			MBD		
		MNSQ	CI	T	MNSQ	CI	T	MNSQ	CI	T
PC	1	1.13 (0.83, 1.17)		1.5	0.99 (0.83, 1.17)		-0.1	0.92 (0.82, 1.18)		-0.9
	2	0.87 (0.88, 1.12)		-2.1	0.87 (0.89, 1.11)		-2.4	0.91 (0.87, 1.13)		-1.5
	3	1.07 (0.76, 1.24)		0.6	0.95 (0.76, 1.24)		-0.4	0.86 (0.76, 1.24)		-1.1
	4	1.07 (0.85, 1.15)		0.9	0.97 (0.85, 1.15)		-0.4	0.94 (0.85, 1.15)		-0.7
	5	1.51 (0.87, 1.13)		6.7	1.28 (0.88, 1.12)		4.1	1.29 (0.87, 1.13)		4.1
ST	6	0.97 (0.87, 1.13)		-0.4	1.06 (0.86, 1.14)		0.8	1.01 (0.86, 1.14)		0.1
	7	0.91 (0.84, 1.16)		-1.1	0.99 (0.85, 1.15)		-0.1	1.03 (0.84, 1.16)		0.4
	8	0.90 (0.87, 1.13)		-1.5	0.99 (0.86, 1.14)		-0.1	0.98 (0.86, 1.14)		-0.2
	9	0.88 (0.88, 1.12)		-2.0	0.96 (0.87, 1.13)		-0.6	0.98 (0.86, 1.14)		-0.3
RE	10	0.96 (0.87, 1.13)		-0.5	1.01 (0.87, 1.13)		0.2	1.01 (0.87, 1.13)		0.1
	11	1.01 (0.84, 1.16)		0.2	1.07 (0.85, 1.15)		0.9	1.11 (0.85, 1.15)		1.4
	12	0.99 (0.86, 1.14)		-0.1	1.05 (0.86, 1.14)		0.7	1.06 (0.86, 1.14)		0.8
	13	0.86 (0.87, 1.13)		-2.3	0.96 (0.86, 1.14)		-0.6	0.97 (0.86, 1.14)		-0.4
	14	0.90 (0.87, 1.13)		-1.5	0.96 (0.87, 1.13)		-0.6	0.99 (0.86, 1.14)		-0.1

Discussion and Conclusion

Results indicated an evidence that a three-dimensional model is more appropriate than a one-dimensional model. The unidimensional and multidimensional models ignore the violation of the local independence assumption. Thus, the item bundles model is the best fit for these data because this model is concerned with the violation of item local independence in cases in which students obtain several scores from a common open-ended question or task, and it does so by means of formulations that meet the independence requirement between the bundles rather than between individual items. Most importantly, researchers that the MD model is highly problematic concerning the high correlation between dimensions because it obtained several scores from a single student written response on multiple dimensions. Furthermore, results have shown that ignoring local dependence will, in general, overestimate the test information and reliability and thus underestimate the standard error of ability estimates. The resulting parameters must be interpreted with respect to the item bundle, rather than in terms of individual items (Wang, Su, and Qiu, 2014). Nevertheless, in this case, one aspect, a contrasting assumption, is that the correlations are very similar for both models. Moreover, the MDB model shows a fairly higher correlation matrix than the MD model. These results indicate that the assessment design can use the simple multidimensional model for representing a complicated model, such as those described by Wilson and Adams (1995) and Arnesona (2015), in which the saturated bundle model is not a feasible strategy to use for assessing polytomous items.

In conclusion, the results of the two multidimensional models have very similar values in terms of the reliabilities (EAP) and correlation matrix, especially the weighted fit statistics. Regarding its use in the real-world situation, the MD model is a more adequate explanation than the explicit MDB models. At an interpretative level, the MD provides richer information to the classroom teacher about the MPS of students than the UD model. However, the correlations between the ST and RE competencies are closely related. The ST construct levels capture students' ability to choose and use strategies for representing the algorithm and notation that reflects familiar or unfamiliar problems, whereas the RE construct levels focuses on the quality of students' demonstration of logical reasoning with strong explanations that include both clear text and proper mathematical notation. The scoring of these dimensions is not clear and explicit in some open-ended tasks. In some situations, using logical reasoning is the best strategy of all for meeting higher-level expectations. Students can demonstrate the ability to move from concrete to abstract representation. Future research is necessary to examine and compare the fit of the model after reducing the number of dimensions assessed by combining the ST and RE. Moreover, this study did not investigate the amount and types of items in the common open-ended questions with appropriation for using the item bundles model. Further analyses should demonstrated the magnitude of the bundle effect that impacts the parameter estimates and test precision.

References

- Adams, R. J., Wilson, M., & Wang, W. (1997). The multidimensional random coefficients multinomial logit model. *Applied Psychological Measurement*, 21, 1-23.
- Akaike, H. (1981). Likelihood of a model and information criteria. *Journal of Econometrics*, 16, 3-14.
- Allen, D. & Wilson, M. (2006). Introducing multidimensional item response modeling in health behavior and health education research. *Health Education Research*, 21, 174-184.
- Amesona, A. (2015). *An example investigation of multidimensional testlet models*. Unpublished manuscript, University of California at Berkeley, California, USA.
- Arieli-Attail, M. & Cayton-Hodges, G. (2014). Expanding the CBAL™ mathematics assessments to elementary grades: The development of a competency model and a rational number learning progression. *Educational Testing Service No. RR-14-08*, Retrieved from <http://search.ets.org/researcher>.
- Black, P., Wilson, M., & Yao, S-Y. (2011). Road maps for learning: A guide to the navigation of learning progressions. *Measurement: Interdisciplinary Research and Perspectives*, 9(2-3), 71-122.
- Briggs, D. C. & Wilson, M. (2003). An introduction to multidimensional measurement using Rasch models. *Journal of Applied Measurement*, 4(1), 87-100.
- Draney, K., Yamada, H., & Xie, Y. (2000). *Cross-dimensional item bundling*. Unpublished manuscript, University of California at Berkeley, California, USA.
- Hickendorff, M. (2013). The language factor in elementary mathematics assessments: Computational skills and applied problem solving in a multidimensional IRT framework. *Applied Measurement in Education*, 26(4), 253-278.
- Jones, I., Swan, M., & Pollitt, A. (2014). Assessing mathematical problem solving using comparative judgment. *International Journal of Science and Mathematics Education*, 13(1), 151-177. doi: 10.1007/s10763-013-9497-6
- Masters, G. N. (1982). A Rasch model for partial credit scoring. *Psychometrika*, 47, 149-174.
- Ministry of Education. (2008). *Basic education core curriculum B.E. 2551 (A.D. 2008)*. Bangkok, Thailand: Kurusapa Ladprao.
- National Council of Teachers of Mathematics (NCTM). (2000). *Principles and standards*. Reston, VA: NCTM.
- Rasch, G. (1960). *Probabilistic models for some intelligence and attainment tests*. Chicago, IL: University of Chicago Press.
- Stylianou, D. A. (2013). An examination of connections in mathematical processes in students' problem solving: Connections between representing and justifying. *Journal of Education and Learning*, 2(2), 23-35. doi: 10.5539/jel.v2n2p23
- Wang, W. C., Su, C. M., & Qiu, X. L. (2014). Item response models for local dependence among multiple ratings. *Journal of Educational Measurement*, 51(3), 260-280.
- Webb, N. L. (1998). Thoughts on assessment in the mathematics classroom. In G. W. Bright & J. N. Joyner (Eds.), *Classroom assessment in mathematics: Views from a National Science Foundation working conference* (pp. 101-114). Lanham, MD: University Press of America.
- Wilson, M. (2005). *Constructing measures: An item response modeling approach*. Mahwah, NJ: Lawrence Erlbaum Assoc.
- Wilson, M. & Adams, R.J. (1995). Rasch models for item bundles. *Psychometrika*, 60, 181-198.
- Wilson, M. & Sloane, K. (2000). From principles to practice: An embedded assessment system. *Applied Measurement in Education*, 13(2), 181-208.
- Wu, M. L., Adams, R. J., Wilson, M. R., Haldane, S. A. (2007). *ACERConQuest Version 2: Generalized item response modeling software*. Camberwell: Australian Council for Educational Research.
- Youngchim, P., Pasiphol, S., & Sujiva, S. (2015). Development of a mathematical problem solving diagnostic method: An application of Bayesian Network and multidimensional item response theory. *Procedia-Social and Behavioral Science Journal*, 191, 742-747.

Acknowledgements

The researchers would like to thank the Thailand Research Fund (TRF Advanced Research Scholar) and Khon Kaen University (Grant No. RSA6080074) for providing finance support of the project, the Thai Visiting Scholarship of Khon Kaen University in 2016 for conducting the research at the University of California-Berkeley, USA, and the Research Affairs, Faculty of Education, Khon Kaen University for providing the supports to conduct this research. Special thanks to Center for Research in Mathematics Education (CRME), Faculty of Education, Khon Kaen University for its financial support to make the research a success.

Modern Dünyada İnançsızlığa Psikolojik Bir Yaklaşım

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Özet

Bu araştırmada ateistlerin neden inanmamayı tercih ettiği problemine cevap aranmaktadır. Nitel bir desene sahip olan bu çalışmada literatür taraması yapılmıştır. Veriler deskriptif analiz tekniği ile çözümlenmiş, anlayıcı geleneğe bağlı olarak yorumlanmıştır. Elde edilen sonuçlara göre ateistlerin Tanrıyı reddetmesinde *psikolojik*, *sosyokültürel*, *ekonomik* ve *bilimsel* nedenler merkezi öneme sahiptir. Bu bağlamda “bağımsızlık ve özgürlük tutkusu”, “Tanrı’nın kötü bir varlık olarak algılanması”, “teodise problemi”, “anlam arayışı”, “rasyonel düşünce”, “bilim ve teknolojiadaki gelişmeler”, “liberal ekonomi”, “modernitenin dolaylı etkileri” ve “dünyevileşme” faktörlerinin ön plana çıktığını görmekteyiz.

Anahtar Kelimeler: *Ateizm, inançsızlık, kötülük problemi, sekülerleşme*

Giriş

İnanç gibi inançsızlık da tarihin ilk dönemlerinden beri mevcuttur. Gerçi inançlıların bir topluluk haline geldiği inançsızların ise sosyal bir yapı oluşturamadığı, daha ziyade ferdi bir görünüm arz ettiği sıklıkla iddia edilmektedir (Bergson, 1986). Kanaatimizce geleneksel toplumlar da daha bireysel bir tutum halinde tezahür eden ateizm modern ve postmodern sosyal yapılarda örgütlenmeye ve grup oluşturmaya başlamıştır. Günümüzde hem Türkiye’de hem de Avrupa ve ABD’de ateist dernekleri kurulduğunu görmekteyiz. Bu derneklere üye olanların sayısı da her geçen gün artmaktadır.

Bu araştırmada “ateistler neden inançsızlığı tercih etmektedirler?” sorusuna cevap aranmaktadır. Betimleyici bir özellik arz eden bu çalışma nitel bir desene sahiptir. Literatür taraması ile elde edilen bulgular hermenötik çözümlemeyle tahlil edilmiştir. Amacımız ateistlerin psikolojik özelliklerini incelemek, ateizmin arka planlarını anlamak ve literatüre katkı sağlamaktır.

Ateizme Yaklaşımlar

Ateizm, “Tanrı fikrine ve inancına sahip olmama”, “Tanrı’nın varlığını reddetme” ve “Tanrı’yı yaşama dâhil etmeme” yahut “yaşamdan uzak tutma” şeklinde tanımlanabilir (Topaloğlu, 2001). Evrenin ve var oluşun Tanrı’yla açıklanmasının yanlış, hatta anlamsız olduğunu iddia eden (Öğcem, 2013) bu düşünce tarzı dinî bakımdan mutlak inançsızlığı temel almaktadır. Ateizm temelde bir bilinçlilik hali olduğu söylenmektedir. Bunu kanıksanmış yanlışların sorgulanarak terk edilmesinin bilinci olarak ele almak da mümkündür (Bakış, 2008). Bu açıklamaya dikkat edilecek olursa dinî iman ve inancın şuurlu bir biçimde tenkidi ve reddedilmesi söz konusudur. Bununla birlikte şu hususu özellikle belirtmek gerekir ki ateistler ateizmi sadece Tanrı’nın inkâr edilmesi olarak değerlendirmemektedir. Onlara göre dinî inancın reddini içeren ateizm insanın varoluşsal problemlerine cevap sunan, bireyin özgürlük mücadelesine başlatan ve kişinin kendini yakalayabilmesine fırsat veren mücadeleci bir tutumdur. Bu nedenle ateizmin etki ve sonuçları itibarıyla insan hürriyetini savunan bir yaklaşım olduğu iddia edilmiştir. Ateistlerin Hristiyanlık ve İslam başta olmak üzere kurumsal dine ve teizme kesin bir itiraz ile ortaya çıkmasını bu kapsamda değerlendirmek mümkündür (Girardi, 2005). Bununla birlikte inancın olmadığı yerde inançsızlıktan bahsedilemeyeceğini söylemek durumundayız. Dolayısıyla teistik inanca bir tepki olarak ortaya çıkan ateistik düşüncenin, kendini tanımlarken büyük ölçüde Tanrı inancı ve ilahi dinlerin neligi ve nasılığı üzerinden yürüdüğüne altını çizmek gerekir (Topaloğlu, 2001). Ayrıca ateistlerin sadece Tanrı’yı reddetmekle kalmadığı, bununla birlikte onların “vahiy”, “peygamberlik”, “kutsal kitap”, “mucize” ve “ahiret inancı” gibi dini kabulleri de reddettiği görülmektedir. Dahası ateistlerin sadece teistik inançları değil pagan inanışları, mitik ve antropomorfik Tanrıları, her türlü metafizik anlayışı, Budizm ve Hinduizmin transandantal Tanrı tasavvurlarını, hatta panteizm ve deizm gibi inanışları da dışladığını görmek mümkündür (Topaloğlu, 1996; Gülfil; 2018).

Kuşkusuz kavram ve olgu olarak ateizm tarihsel süreçte yeni anlam ve tanımlar kazanmıştır. Bundan dolayı klasik ateizmle modern ateizmin farklı ele alınmaktadır. Modern ateizmde Tanrı lüzumsuz ve boş bir kavrama dönüştürülmüştür (Hyman, 2010).

Bugün yapılan araştırmalar ateizmin şekil, yöntem, gerekçe ve amaç bakımından birbirinden farklılaştığını ortaya koymaktadır. Tanrı tanımazlığın tek çeşit olmadığı “mutlak”, “teorik”, “pratik”, “ideolojik-materyalist” ve “ilgisizlerin ateizmi” olmak üzere beş çeşide ayrıldığı görülmektedir. *Mutlak ateizm*, *pozitif* ve *negatif*, *pratik ateizm* ise, *pasif* ve *aktif* olmak üzere kendi içerisinde iki türe ayrılmaktadır (Ergezen, 2004; Sevinç, 2016; Topaloğlu, 2001; Gülfil, 2018)

Ateist Kime Denir?

Ateist kime olduğunu ve onun hangi özellikleri taşıdığını cevaplamak oldukça zordur. Zira ister iç grup ister dış grup üzerinden tanımlansın *ateist* şeklinde kavramlaştırılan kişiler birbirinden oldukça farklı bir karakter arz etmektedir.

Kuşkusuz ateist kelimesi, özünde Tanrı’yı reddeden kişi anlamında kullanılmaktadır. Bu haliyle oldukça açık ve kesin bir tanımlama söz konusudur. Ancak az ya da çok yahut flu bir tarzda Tanrı inancına sahip olduğu halde kendisini ateist olarak niteleyen kişiler mevcuttur. Bu durumda “ateist kime denir?” sorusu oldukça çetrefilli bir konum kazanmaktadır (Topaloğlu, 2001).

Ateist sözcüğü tarihsel süreç içerisinde değerlendirildiğinde, onun her dönemin düşünsel, felsefi, siyasi ve ideolojik görünümüne uygun olarak yeni bir ruha büründüğü söylenebilir (Hyman, 2010). Örneğin antik çağda, ateist kelimesi yalnızca inançsızlığı dile getirmeye cesaret eden marjinal kişiler olarak ifade edilirken (Girardi, 2005), 1540-1630 yıllarında, Tanrı dünyaya görüşünün belirli ana öğretilerini sorgulayan ya da inkâr eden metafizik inanç koşullanmalarını reddeden; tüm ruhani varlıkları ve olayları kabullenmeyen kişi olarak tanımlanmıştır. 1630 yıllarından günümüze kadar uzanan değişim süreci içerisinde ateistler, kilisenin kâfirleri kurallara karşı çıkan kimseler olarak ifade edilmektedir. Fakat çok geçmeden anlaşmazlık Tanrının varlığı konusunda ortaya çıkmıştır. Daha sonra ateistlerin; sefiherler, âlimler ve şüphecilerden meydana gelen gruplar haline geldiği görülmektedir (Hyman, 2010; Gülfil, 2018).

19. yüzyıla gelindiğinde Marx “ateist” kelimesini, özünün toplumda emek aracılığıyla şekilleneceğine inanan kişi olarak tanımlamıştır (Özkan, 2009). Feuerbach’ın antropolojik ateizmine göre ateist, kendi varlığını idrak edip benliğini kabul eden; Tanrının sıfatlarının aslında kendi sıfatları olduğunun farkına varan ve özüne yabancılaşmayan kişidir (Akdemir, 2003). Bugün ise, ateistlerin kendilerini tanımlama konusunda ateist kelimesini saygın bir terim haline getirme çabası içine girdiklerini görmekteyiz. Örneğin Jacob Holyoake kendini tanımlarken ateist yerine “sekülerist” kavramını tercih etmektedir (Hyman, 2010; Gülfil, 2018). Görüleceği üzere ateist sözcüğü dinde, sanatta, bilimde ve felsefede tanrı tanımaz şeklinde ortak bir alanda kullanılsa da, konuyu biraz değince her bilim dalında ona farklı anlamlar yüklediğini görmekteyiz.

Ateistlerin Tanrı’yi Reddetme Gerekçeleri

Ateistlerin Tanrı’yi reddetmelerinin arkasında psikolojik, sosyolojik, sosyal psikolojik, ekonomik ve bilimsel gerekçeler olabilir. Bunlarla birlikte özellikle zamanın ruhu ve yeni insan tipini hasseten anmak gerekir.

İlgili literatür incelendiğinde görülecektir ki özellikle günümüz ateistlerin Tanrı’yi reddetmesinin arkasında sekiz farklı neden mevcuttur:

- Bağımsızlık ve özgürlük arzusu:** Bağımsızlık ve özgürlük duygusu inançsızlığı tercih etmede en güçlü psikolojik güdü olarak karşımıza çıkmaktadır. Bu duyguyu besleyen farklı psikolojik faktörden bahsedilebilir “Kendine yeterlilik”, “güç elde etme arzusu”, “aşırı bireyleşme”, “egozim”, “hazcılık” ve “narsizm” bağımsızlık ve özgürlük arzusunu sürekli beslemektedir (Bauman, 1998; Vergote, 1966; 1983; Hökelekli, 2005; Ashford, 2009; Özkan, 2009; Gülfil, 2018)
- Tanrı kavramına yüklenen olumsuz anlamlar:** Ateistler Tanrı denince olumsuz bir varlık tasavvur etmektedirler. Bu noktada olumsuz da olsa ateistlerin zihninde bir tanrı şeması olduğunu söylemek mümkündür. Onlarda olumsuz Tanrı şemasının oluşumunda dramatik ve travmatik tecrübeler, kötülük problemi ve sosyoekonomik şartlardan kaynaklanan duygusal faktörler merkezi öneme sahiptir. Bu anlamda ateistlerin Tanrı’yi algılama biçimlerinin *korku yönelimli* ve *kaçınmacı* bir karakter arz ettiği söylenebilir (Erdoğan, 2015; Erdoğan- Korkmaz, 2014; Hayta, 2006; Gülfil, 2018)
- Dramatik tecrübelerden beslenen kötülük problemi:** Kötülük (teodise) problemi Tanrı’yi inkârda başat faktör olarak karşımıza çıkmaktadır. Ateistler, fizikî ve ahlakî kötülüklerin yanı sıra yaşadıkları dramatik tecrübeleri, sosyoekonomik sıkıntıları, bu kapsamda eşitsizliği, adaletsizliği ve ezilmişliği öne sürerek “*iyi bir yaratıcı olsaydı, tüm bunlar yaşanmazdı*” ifadesiyle eleştirmektedir (Vergote, 1966; 1983; Manafov, 2006; Hökelekli,

2005; Sevinç, 2016; Gülfil; 2018). Bu durum bilişsel açıdan anlama ihtiyacı, duyuşsal açıdan ise yoksunluk hissi ile açıklanabilir

- d) *Anlam arayışı*: Her insan hayatına bir anlam yükleme çabası içindedir. Bu anlamda “niçin varız?”, “niçin bu dünyada bu hayatı yaşıyoruz?” gibi sorulara cevap bulmak ister (Yapıcı, 2003; Bahadır, 2002; Sevinç, 2016). Bazı ateistlerin yaşama “*güçlü olmak*”, “*para kazanmak*”, “*başarılı olmak*”, “*insanlığa katkı sağlayabilmek*”, “*toplumsal ve ideolojik idealler uğruna mücadele etmek*” gibi amaçlarla anlam aradığı, bazılarının ise “*yaşamdan zevk (haz) alabilme*” ve “*mutlu olmayı*” öncelendiği tespit edilmiştir (Gülfil; 2018).
- e) *Rasyonellik peşinde olmak*: Akılcı-mantıkçı bir anlayışla ve bilimin nedensellik ilkesine dayanarak akıl yürüten ateistlere göre hakikatin kaynağı insan ve insan aklıdır (Karaçoşkun, 2013; Bell, 1978; Wilson, 1976; Vergote, 1966; 1983; Gülfil, 2018). Tanrı’nın varlığı ve dinî hükümleri rasyonel zeminde tartışan ateistler bir Tanrı ve dinî inanca bağlanmayı irrasyonel ve saçma olarak kabul etmektedir.
- f) *Bilim ve teknolojiye sınırsız güven duymak*: Ateistler için deney ve gözleme dayanan bilimsel bilgi mutlak hakikati temsil eder. Bu nedenle onlar evreni kontrol altına alan bilim ve teknolojinin güven duyulacak tek gerçeklik olduğunu kabul etmektedir (Kahraman, 2015; Köker 1990; Sevinç; Gülfil, 2018) Bu anlamda ateistler modern bilimi adeta din, bilim adamlarını da o bilim dininin peygamberleri gibi algılamaktadırlar. Bu durumun temel nedeni bilim ve teknolojiadaki gelişmelerle evrenin, insanın ve hayatın sırlarının çözülmeye başladığı düşüncesidir. Bu da bir yandan belirsizlik ve çaresizlik duygularından kurtulmaya, diğer yandan güvenlik ve korunma duygularını tatmin etmeye yöneliktir.
- g) *Ekonomik faktörler*: Ateist eğilimlerde hem ekonomik sıkıntıların (teodise problemi bağlamında) hem de maddi refahın “(liberal ekonomik gelişmeler bağlamında) etkili olduğu saptanmıştır. İster duygusal isterse pragmatik olsun ateistlerin Tanrıyı reddetmesinde hem yoksulu ezen hem de tüketimin hazzını yaşatan kapitalist dünya görüşü etkilidir (Lenin 1994; Topaloğlu, 2001, Gülfil, 2018).
- h) *Modernite ve sekülerizmin dolaylı sonuçları*: Günümüz ateizminin, seküler dünyada muhtemel bir seçenek ve kültürel bir olgu haline geldiği ileri sürülmektedir. Ateist düşüncelerin gelişmesine zemin hazırlayan modernite ve sekülerleşme süreci ateizmi akla yatkın, çağın kültürel ve felsefi epistemolojisine uygun bir tarzda yeniden şekillendirmiştir (Casanova, 2014; Yapıcı, 2017; Gülfil, 2018). Rasyonelleşme, bireyselleşme, özerkleşme, bu dünyaya ait olma gibi özellikleri kuşanan ateistler, sırf dünyevi yaşamla özdeşleşen yeni ateist bir kimlik edinmişlerdir.

Sonuç

Türkiye’deki ateistler farklı nedenlerle ateizmi benimsemiştir. Kişilik ve kimlik özellikleri, sosyalleşme süreçleri, eğitim ve gelir düzeyleri, dine yönelik bilgilerinin kalitesi ve dünya görüşleri bu hususta etkilidir. Dini dogmatik bulan ateistler akıl ve bilim konusunda dogmatik bir tutum sergilemektedirler. Özgürlük, kendi kendine yetme, hazzcılık ve teodise problemi inançsızlığı tercihte merkezi role sahiptir.

Kaynakça

- Ashford, N. (2009). *Özgür Toplumun İlkeleri* (Çev. C. Madenci). İstanbul: Liberte Yayınları.
- Bahadır, A. (2002). *İnsanın Anlam Arayışı ve Din: Legoterapik Bir Araştırma*. İstanbul: İnsan Yayınları.
- Bakış, M. L. (2008). *Felsefi Bir Problem Olarak Ateizm*. Yayınlanmamış Yüksek Lisans Tezi, Yüzüncü Yıl Üniversitesi Sosyal Bilimler Enstitüsü, Van.
- Bauman, Z. (1998). *Postmodern Etik* (Çev. A. Türker). İstanbul: Ayrıntı Yayınları.
- Bell, D. (1978). The return of the sacred: The argument about the future of religion. *Journal of Religion And Science* 13 (3), 187-208.
- Bergson, H. (1986). *Ahlâk ile Dinin İki Kaynağı* (Çeviren: Mehmet Karasan), İstanbul: Milli Eğitim Basımevi.
- Casanova, J. (2014). Sekülerleşmeyi Yeniden Düşünmek: Evrensel Bir Karşılaştırma. (Çev. S. Yılmaz). *Tarih Kültür ve Sanat Araştırmaları Dergisi* 3 (2), 220-236.
- Erdoğan, E. (2015). Tanrı algısı, dini yönelim biçimleri ve öznel dindarlığın psikolojik dayanıklılıkla ilişkisi: Üniversite örnekleme. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 12 (29), 223-246.
- Erdoğruca-Korkmaz, N. (2014). İnanç ve inançsızlığın psikolojisi. *Kelam Araştırmaları* 12 (1), 275-294.
- Ergezen, E. (2004). *Günümüz Ateistlerinde Hayatı Anlamlandırma*. Yayınlanmamış Yüksek Lisans Tezi, Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- Girardi, J. (2005). Çağdaş ateizmin problemi (Çev. M. Korlaelçi) *Ankara Üniversitesi İlahiyat Fakültesi Dergisi* 41 (1), 365-398.
- Gülfil, D. (2018). *Psikolojik Açıdan Ateizm: Nitel Bir Araştırma*. Yayınlanmamış Doktora Tezi. Çukurova

- Üniversitesi Sosyal Bilimler Enstitüsü, Adana.
- Hayta, A. (2006). Anneden Allah'a: Bağlanma Teorisi ve İslâm'da Allah Tasavvuru. *Değerler Eğitimi Dergisi* 4 (12), 29-63.
- Hyman, G. (2010). *Ateizmin Kısa Tarihi* (Çev. D. Şendil). İstanbul: Kırmızı Kedi Yayıncılık.
- Kahraman, Y. (2015). Modern bilim ve din. *Milel ve Nihal İnanç, Kültür Ve Mitoloji Araştırmaları Dergisi*, 12 (2), 149-170.
- Karaçoşkun, M. D. (2013). *Din Psikolojisi*. Ankara: Grafiker Yayınları.
- Köker, L. (1990). *Modernleşme, Kemalizm ve Demokrasi*. İstanbul: İletişim Yayınları.
- Lenin, V. İ. (1994). *Sosyalizm ve Din* (Çev. Ö. Ünalın). Ankara: Bilim ve Sosyalizm Yayınları.
- Manafov, R. (2006). *John Hick'in Din Felsefesinde Kötülük Problemi ve Günümüz Açısından Teodise*. Yayınlanmamış Doktora Tezi, İstanbul Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Öğcem, E. (2013). *Ateizmden Deizme Antony Flew*. Yayınlanmamış Doktora Tezi, Marmara Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.
- Özkan, M. Ş. (2009). *Ateizmin Temeli Olarak Özgürlük: J. P. Sartre'ın Yaklaşım*. Yayınlanmamış Yüksek Lisans Tezi, Marmara Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Sevinç, K. (2016). *Psikososyal Açıdan İnançsızlığın Oluşum ve Gelişimi*. Yayınlanmamış Doktora Tezi, Marmara Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Topaloğlu, A. (1996). *Çağdaş İngiliz Felsefesinde Ateizm Problemi*. Doktora Tezi, Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü, İzmir.
- Topaloğlu, A. (2001). *Tanrıtanımazlığın Felsefi Boyutları: Teizm ya da Ateizm*. İstanbul: Kaknüs Yayınları.
- Vergote, A. (1966). *Psychologie Religieuse*. Bruxelles: Charles Dessart.
- Vergote, A. (1983). *Religion Foi Incroyance*. Bruxelles: Mardaga.
- Wilson, B. (1976). *Contemporary Transformations of Religion*. Oxford: Oxford University Press.
- Yapıcı, A. (2003). Fiziksel ve sosyal hadiselerle sebep atfetmede dinin rolü. *Çukurova Üniversitesi İlahiyat Fakültesi Dergisi* 3 (1), 127-165.
- Yapıcı, A. (2017). Postmodern dönemde din, kimlik ve anlam problemi. A. Tüzer (Ed.) *Dinin Kaderi: Çağdaş Sorunların Kısacasında Din* içinde (ss. 117-174). Ankara: Elis Yayınları.

Molecular Model – Spatial Thinking Ability Test Development Study

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Abstract

Spatial thinking ability could be defined as ability to revive 3 dimensional objects in mind and mentally manipulate the objects. Spatial thinking ability covers spatial relations and spatial visualization. Performance tests designed to measure spatial ability focus on the ability to visualize the geometric object's translation around an axis in a limited time. In the spatial visualization tests, it is desired to visualize the 3D object of the object shown in 2D, or to invert this process. A remarkable part of the chemistry courses is molecular structures and the arrangement of atoms in space. It can be assumed that spatial thinking ability has effect on students' achievement in chemistry courses. For this reason, it is important to measure and improve the students' spatial thinking skills.

Purpose of this study is to construct Molecular Model – Spatial Thinking Ability Test to measure students' spatial ability. Study was conducted in Zonguldak Bülent Ecevit University Ereğli Faculty of Education with 107 prospective elementary-science teachers. Molecular Model – Spatial Thinking Test was constructed by researchers with 30 items and time limit for the test is 15 minutes. Each test item contains 6 molecules, 1 molecule in question and 5 molecules in answers. 3D molecule structure will be represented in 15 questions and students will be asked to find the correct molecule representation that has been rotated. The next 15 question is designed to students visualize the 3D object of the object shown in 2D or visualize the 2D object of the object shown in 3D.

Data analyzed by "TAP: Test analysis Program". Two items, those point biserial value less than 0,15 , were discarded from test. Analysis of item difficulty indexes gives that result; 2 items are difficult, 11 items are average, 13 items are easy and 2 items are very easy. Mean difficulty index of the test is 0,62 and mean discrimination index of the test is 0,51. Mean point biserial correlation index of the test is 0,47 and all 28 items have enough point biserial value.

Spatial ability has an impact on the success of chemistry lesson, as mentioned in the literature. For this reason, it is important to identify and develop the students' spatial abilities. Molecular Model – Spatial Thinking Ability Test could be used to measure the spatial abilities of prospective teachers who are educated in science.

Monitoring And Enhancement Of Students' Performance For Holistic Development In A Civil Engineering Technology Programme

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Abstract

Students, being the ultimate asset of any institutions of higher learning, need to have their performance carefully monitored and their potential effectively developed while enrolled in the respective academic programmes. This paper describes the established workflow and system for an undergraduate Civil Engineering Technology programme in a public university, from admission right up to the completion of study. At the input end, it highlights the intricacies of enrolment of students from different academic background requiring credit articulation. Once enrolled, the students' academic performance is continuously monitored in accordance with the stipulated learning outcomes per course every semester, which cumulatively add up to the attainment of Programme Outcomes or POs outlined in the Sydney Accord for bachelor's degree in engineering technology. Also included in the discussion is the students' workload over the 4-year programme duration, where balanced distribution of the student learning time (SLT) for the 140 credit-hour programme is presented. In addition, explanation is given on the engagement of extra-curricular activities to hone the students' soft or employability skills not covered in classes, as well as the counselling and talent management services available for the students at zero costs. Finally, arguably the most important component of the management system, i.e. maintaining enthusiasm and motivation of the students, is illustrated with efforts to keep the students' interest intact via various innovations, catering for the myriad learning aptitude, styles and preferences. All in all the holistic development of the students as "humans first and professional second" is embodied in the performance monitoring and enhancement system, with real-time track-keeping of individual student's academic and non-academic accomplishment towards graduation.

Keywords: *Learning outcomes, performance monitoring, workload, student learning time, extra-curricular activities, employability skills*

Introduction

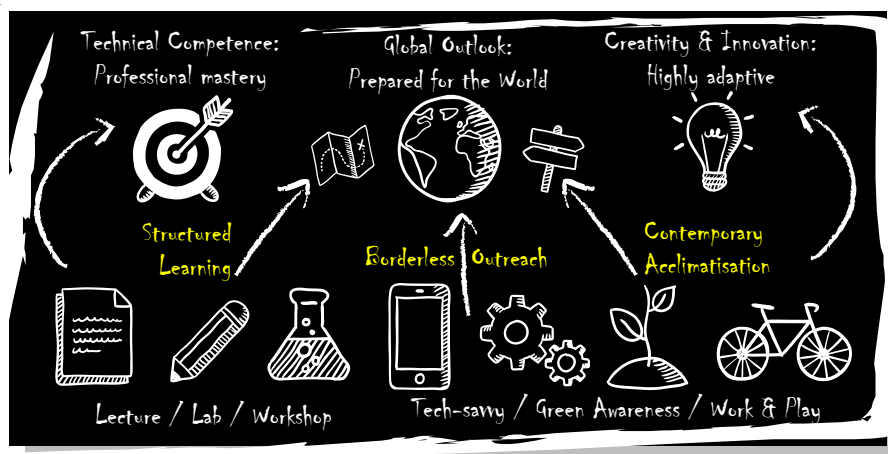


Figure 1: Holistic development to cultivate global technical professionals.

Modern day higher education demands that imparting hard, technical knowledge and skills alone is no longer adequate to provide graduates with a smooth transition to the job market. On the other hand employers have almost always raised concerns on the lack of work-readiness among fresh graduates (Pollard *et al.*, 2015), often relating to poor communication skills and unfavourable mannerisms or attitude. Also, employability concerns and teaching of the related skills are sometimes considered additional chores in the academia on top of the expansive syllabus (Powell, 2010), where the additional time and effort required is perceived to hamper actual teaching in universities (Clegg & Bradley, 2006). Gaping distance between the academia and industry could inadvertently lead to low level of understanding and awareness on the needs, issues and challenges for generic skills development among students too (Chan *et al.*, 2017). Nevertheless, from the students' perspectives, awareness of the importance of soft skills in the work or career context has not gone unheeded (Passow, 2012), with conscious effort being expanded to equip themselves for working life. On the whole, universities are expected to be a training ground to cater for the functional character-building of students, a typical form of

which is shown in [Figure 1], i.e. a balanced development of academic competencies as well as non-academic supporting skills.

Irrespective of the on-going debate and disparity in opinions, the University remains committed to provide the best higher education of an all-encompassing nature to students enrolled in the various academic programmes. This paper elaborates on the performance monitoring and enhancement system developed and implemented at the University for an undergraduate Civil Engineering Technology programme. The specific functions and features of the respective systems are summarised in [Figure 2], of which each component is examined in the following discourse.

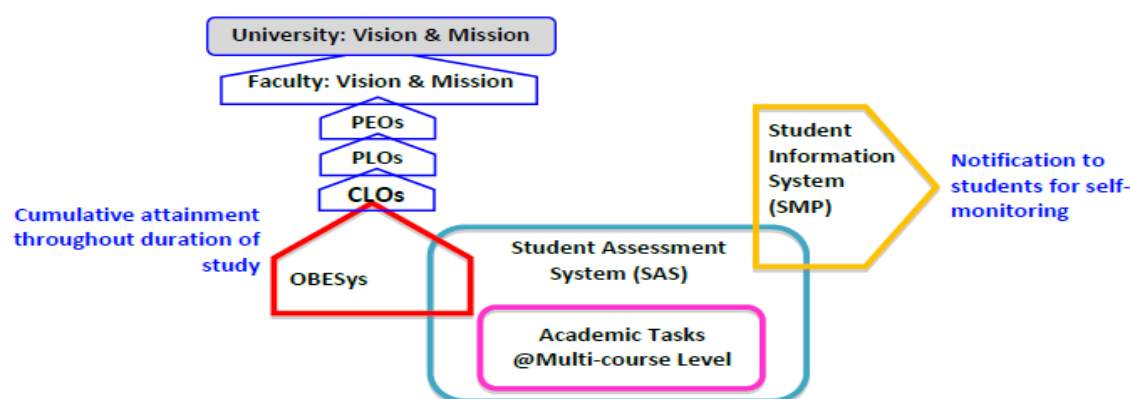


Figure 2: Integrated online systems for real-time data capturing and monitoring of students' performance.

Students' Performance: Measurement

Measurement of Students' Performance per Programme Outcomes (POs)

Students' performance in relation to Programme Outcomes (POs), or more commonly known as PLOs at the Faculty, is analysed using an integrated online system which mainly consists of:

- i) Students Assessment System (SAS)
- ii) Outcome Based Education System (OBESys)

The specific functions and features of the respective systems are summarised in [Table 1].

Essentially, SAS is linked to the Total Campus Integrated System (TCIS). TCIS is an online system which integrates necessary information of personal, teaching and learning activities of each individual staff, both academic and supporting staff. The course coordinator is responsible for input of the mark weightage for continuous or formative (quizzes, assignments, laboratories, workshops, projects and tests) and summative (final examination) assessments. With that, respective lecturers of a particular course can key in the marks as per the weightage preset by the course coordinator. Once the marks for each component have been keyed in, analysis can then be carried out on the attainment of CLOs. With the attainment level of CLOs determined, the respective related PLOs can next be ascertained.

In addition, with the linkage between SAS and SMAP (Sistem Maklumat Akademik Pelajar) on-line, overall marks of both continuous assessment and the final examination can be analysed to measure the CLOs and PLOs attainment. The integrated system allows the student to monitor their grades online too. Also, both lecturers and the Faculty's management personnel are able to monitor and evaluate the students' academic performance on a real-time basis. OBESys is linked to SAS as an instrument to capture the cumulative attainment of POs as a student progresses through the semesters. As SAS keeps tab of the fulfilment of CLOs per course, the timebased contribution of the respective CLOs to the POs can be monitored based on the predetermined CLO-PO mapping. In addition, OBESys enables the attainment of POs to be analysed per individual student or cohort, making the measurement of students' performance at both the macro and micro level simple and possible.

In the current practice, learning outcomes for each course (CLOs) are mapped to the respective programme learning outcomes. At the end of the semester, the attainment of CLOs for each course is measured through SAS. Once the programme completes a full cycle of implementation, the final POs' attainment can be readily measured. Note too that the Faculty is committed to the Key Performance Indicator (KPI) of each PLO to be 60%, where students' achieving less than 60% in the assessments will be subjected to corrective measures for future improvement.

Table 1: Summary of functions and features of the integrated online systems.

No.	System	Basic Function	Features
1.	SAS	Keeps record of Continuous Assessment and Final Examination	<ul style="list-style-type: none"> - Online system linked to TCIS - Systemized compilation of courses' assessment
2.	OBESys	Student's Outcome Based Learning Assessment	<ul style="list-style-type: none"> - Online system linked to TCIS - Analysis of CLOs' attainment - Analysis of PLOs' attainment - Continual Quality Improvement (CQI)

Students' Workload

The Programme curriculum structure has been designed to ensure that student's workload is appropriate and effective as per the student learning time (SLT), where students are not overburdened with academic activities but have adequate quality time to participate in extracurricular activities for cultivation of soft skills and character-building in general. The students' workload is calculated based on the allocated credit of each course. Each credit weighs 40 notional hours SLT per semester, which includes face-to-face and non-face-to-face learning such as lectures, tutorials, laboratory works, projects, field works, practicum or other academic-related activities.

Students who graduate on within the stipulated period would have spent a total of 8 semesters with an accumulated total credit hours of 140. This includes 12 credits for Industrial Training in the final or 8th semester of the final year of study. The distribution of credits and SLT hours per semester for an academic year is shown in [Table 2].

As indicated in [Table 2], a student is expected to spend approximately 480 - 760 hours (12 – 19 credits) SLT per semester or equivalent to 20 to 54 hours SLT per week. On the credit load for one semester, students are advised to register no more than 18 credit hours per semester. However registration of 19 to 21 credits is permissible by the Regulations only with the Dean's approval. The written approval must be attached during course registration for the semester. The academic workload for each course must be clearly specified in the Lecture Plan, including all activities and assessment for the respective course.

Table 2: SLT hour distribution for the Programme.

Year of Study	Semester I			Semester II		
	Credit	SLT Hour per Sem	SLT Hour per Week	Credit	SLT Hour per Sem	SLT Hour per Week
1	18	720	52	18	720	52
2	19	760	54	19	760	54
3	18	720	52	19	760	54
4	17	680	49	12	480	20

As part of the good practices of CQI, recommendations made for future improvement of a particular course can be retrieved from the OBESys and implemented for the current semester, hence closing the loop of translating feedbacks into useful feedforwards for the course per se. The Lecture Plan would be submitted to the Faculty before the commencement of the semester, a requirement as prescribed in the Teaching Appointment Letter for each course lecturer.

Engagement In Extra-Curricular Activities

To nurture an ideal graduate with the ability to lead a balanced professional and personal life upon graduation, academic prowess must be grounded with ethical and moral values, and complemented by good judgement and common sense. It is compulsory for UTHM students to choose any two co-curriculum courses on offer throughout their period of study, where each course carries a 2-credit hours. In addition, students are encouraged to participate in various non-academic activities organized by the sport clubs, uniform bodies and cultural societies. Students are also encouraged to take part in competitions and organized cultural visits, and to attend seminars, talks or workshops to enhance their understanding of topics beyond the Programme, to hone their soft skills as well as to enlarge their social circle and networking for beneficial ends.

There is a variety of activities organized throughout the semester to meet the different interests and preferences of the students. For instance, the UTHM Sports Unit organizes intervarsity sport events, Staff and Students Sports Carnival, Residential College Sports Carnival and other jointly organized sporting events and tournaments. The Cultural Unit, on the other hand, runs activities concerning music, singing, dancing and theatre with rich Malaysian flavours for the benefit of both local and international students. The University also continuously strives to provide a conducive environment (facilities and services) to maintain students' enthusiasm and motivation throughout the academic years. Facilities available such as state-of-the-art library, student dormitories, buses, sports facilities through the Curriculum, Sports and Culture (PKSK), University Health Center (PKU), bank services, mosque, Centre of Counselling and Student Development (PKPP), Office of Student Affairs (HEP), Centre for Graduate Studies, International Office and others.

To inculcate a sense of independence and leadership among students, the University encourages students to share ideas and propositions for activities to narrow the gap between the students' preferences and the University's often conservative ideas that mean well but may not necessarily suit the temperament of the generation. The activities are generally organized under registered societies or associations as approved by HEP. At the Faculty level, the students' activities are in general managed by the student club, i.e. Engineering Technology Club (ETeC). ETeC has organized a number activities of academic and non-academic nature. An example of a non-academic programme organized by ETeC is the outbound mobility to Perth, Australia. At the Department level, several Technical Visits have been organized to widen the students' learning sphere as well exposure to the industry. These include the visits to Kualiti Alam and the Public Works Department. In addition, Corporate Social Responsibility (CSR) programmes are periodically arranged to develop the students' social awareness, civic-mindedness and sense of volunteerism via engagements in activities related to their fields of study. The Solid Waste Management and Composting programme as well as the Residential House Fixing and Repairing activity constitute 2 of the events. University-wide students' activities are primarily under the care of the Student Development Centre (P3P), carried out as part of the Students' Development Programme (PROPEMP) for all. The activities include ETEC4U, Hike Tech and *Program JatiDiri*.

Counselling And Advisory Services

The Student Development Centre (P3P) is led by two main units at the University, namely the Careers Department and the Counselling Department, and assisted by the general administrative unit. The main goal of P3P is to assist in personality development and soft skills cultivation among students by honing and sharpening their potential. P3P essentially provides opportunities for students to identify and nurture their respective talents for academic performance and future career interests. Counselors of recognized expertise and experience play the role of facilitating and guiding students while serving as a source of inspiration for students to excel through the programmes on offer. Details of the activities can be referred to at <http://p3p.uthm.edu.my/v2/>.

The Centre is also responsible for providing face-to-face counselling and e-counselling services. The counselling sessions are professionally conducted and free of charge, with ensured confidentiality and privacy of the students (**Appendix C4-6a: PSP- 9 Counselling Session Procedure**). Apart from assistance to be mentally prepared to fare well in the current academic work, students can also request for career advices and guidance as early preparations for their future engagement, such as preparation for job interviews and aptitude tests via specially organised recruitment or career fairs and employer presentation sessions. In addition, the Centre regularly conducts counselling clinics, career galleries and exhibitions as well as counselling research studies and publications. All in all the services by P3P can be summarized as follows:

- i) Provide guidance and professional counselling to individuals or groups so that the students can handle the problems/obstacles to balanced and brilliant.
- ii) Assist students to solve the problem of academic, personal, social and career.
- iii) Equip students with information, knowledge and experience related to the physical, emotional, spiritual, intellectual and social development so that they acquire academic excellence and character.
- iv) Implement development programmes to all the students.
- v) Implement programmes of academic guidance to students.
- vi) Implement programmes to improve self to all the students.
- vii) Administer psychological tests to the students

Some of the main events organized by the Centre as listed in [Table 3] clearly illustrate the diversity of engagement available to meet the needs of students in terms of self-development and mental wellbeing. Alternatively, students can always refer to their respective Academic Advisors in person or via the PA online system at e2.uthm.edu.my/ppa/pa/online, the Head of Department or the Deputy Dean of Students' Affairs and Alumni at the Faculty for advice and assistance pertaining to academic or non-academic matters. In a nutshell,

students are given every access to assistance and guidance for their wellbeing at the University, whether on matters of academic or personal nature. This is all part of the University's aspiration to provide a vibrant, conducive and exciting learning environment to spur the students towards excellence.

Table 3: Programmes conducted by the Student Development Centre (P3P).

No	Programmes
1.	Starting School (Appendix C4-6b)
2.	Attitude Grooming
3.	Community Engagement
4.	Intermediate School
5.	Students Mobility
6.	My 3S
7.	Career Fair
8.	Graduate Employability
9.	Finishing School

Maintaining Students' Enthusiasm And Motivation

The learning experience at the University is enhanced through the implementation of a variety of channels, such as e-learning, Problem-based Learning (PBL), Full Online Classroom (FOC), Massive Open Online Courses (MOOCs), fieldwork and others. These innovations are adopted to facilitate meaningful learning for the students covering a wide spectrum of aptitude and learning styles. Indeed, the different approaches open up a diversified learning experience for the students, allowing them to identify and enhance their personal learning pace and preference for the most effective results. The diversity in delivery of lessons also train students to be adaptive and flexible in their receipt, processing and integration of newfound knowledge. Such versatility would certainly serve them well as graduates in the marketplace upon graduation.

A recent installation, the Centre for Global Online Learning UTHM (CGOL) was established with the specific aim to plan, coordinate and monitor the development and implementation of various initiatives for e-Learning at the Faculty and University level (<http://global.uthm.edu.my/uthmmooc.html>). The Centre also facilitates the implementation of Massive Open Online Courses (MOOCs) where students can access the course materials anywhere and anytime through <https://www.openlearning.com/malaysiamoocs> website. This is evident of the University's effort to keep abreast of the latest trending in tertiary education at the global arena, where physical boundaries are dissolved and co-sharing of resources are made possible with advanced internet access. Students of the digital generation surely appreciate the 'speed of things' to facilitate their learning.

Understandably the current open access to various learning resources require students to become more actively involved and personally responsible for their own learning. The seek for knowledge is no longer restricted to printed books and articles but expanded to online academic or research forums and blogs keeping real pace with the latest development of the field area. Internet access is rudimentary and the University is constantly upgrading its services to cater for the students' needs. With a fast and smooth access to the internet, students are assured of less hiccups in information searching and retrieval, giving them more time to dissect the information for in-depth learning. Such advantages and efficiency in time management inadvertently encourage students to be more driven for academic excellence.

Moreover, several funding is available for students to finance their studies. The main financial support comes from the *Perbadanan Tabung Pendidikan Nasional* (PTPTN). Apart from PTPTN, students can also apply for scholarships awarded by the Ministry of Education, Public Services Department, State Governments, other Government Agencies as well as private companies. The University also provides financial assistance to students who are facing financial difficulties by using a special fund from Student Affairs Office. Furthermore, two-way interaction between lecturers and students is keenly encouraged to improve the students' academic performance and to enrich their learning experience. Examples of these exercises include impromptu Q&A sessions in class, short sub-topical discussions and brainstorming sessions, pop quizzes conducted verbally in class, among others. Also, timely assessment of submitted work with constructive feedbacks by the lecturers is crucial for the comments to be incorporated in future work for continuous improvement of the students. This active and consistent feedback mechanism helps students to stay focused on their studies while steadily making progress in their learning of the subject matter. Maintaining such positive outlook of learning would help students to persevere as they ascend the learning curve of the Programme as a whole.

The implementation of Problem-based Learning (PBL) does not only engage students in the application of theories and principles in actual field problems, but stimulate them to think outside the box to resolve technical problems often requiring a combination of several solutions. PBL also gives students the opportunity to work in

groups, inculcating the spirit of teamwork and developing leadership, simultaneously sharpening a number of other soft skills like communication, critical thinking, information management, social awareness and responsibilities, professional ethics and moral boundaries. The close-knit group settings simulate real-life working environment, where students learn through alternating role plays as both leader and team member, sharing the workload, materials, resources and ideas for the success as one. Such deviation from the conventional individual assignments undoubtedly makes learning more fun and interesting for the students, garnering better enthusiasm and motivation in healthy competition among their peers. Last but not least, other than the activities describe in section 4.5, other extra-curricular activities known to improve students' motivation and enthusiasm include the industrial talks and seminars organized at Faculty and Programme levels, UTHM Starting School Program and Dean's List Award Ceremony.

Conclusions

The Faculty and University aspire to groom and develop graduate engineering technologists who are all-rounders, equipped with sound technical competencies and essential employability skills of the 21st century. Aligned with the maxim of "humans first and professional second", the continuous students' performance monitoring and enhancement system ensures a structured process of character-building throughout a student's 4-year course of study, intricately weaving professional mastery with non-academic but necessary skills to thrive upon graduation, in life and their respective careers.

Acknowledgements

Appreciation is due to the Faculty's **AA Team**, both academic and supporting staff, who literally worked round the clock in preparation of the accreditation documents. Kudos!

References

- Chan, C.K.Y., Zhao, Y. & Luk, L.Y.Y. (2017). A validated and reliable instrument investigating engineering students' perceptions of competency in generic skills. *Journal of Engineering Education*, vol. 106, no. 2, (pp.299-325).
- Clegg, S. & Bradley, S. (2006). Models of personal development planning: Practice a process. *British Educational Research Journal*, vol. 32, no. 1, (pp.57-76).
- Passow, H.J. (2012). Which ABET competencies do engineering graduates find most important in their work? *Journal of Engineering Education*, vol. 101, no. 1, (pp.95-118).
- Pollard, E., Hirsh, W., Williams, M., Buzzeo, J., Marvell, R., Tassinari, A., Bertram, C., Fletcher, L., Artess, J., Redman, J. & Ball, C. (2015). Understanding employers' graduate recruitment and selection practices. *Institute for Employment Studies (IES)*, UK.
- Powell, J. (2010). Useful or just another fad? Staff perceptions of personal development planning. *Journal of Learning Development in Higher Education, Special Ed., Research PDP Practice*, (pp.1-15).

Moolc Design And Development Process For An Agglutinative Language: "Türkçe Öğreniyorum" Case

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Abstract

Massive Open Online Courses (MOOCs) provides individuals with flexible, affordable, self-paced learning opportunity with fast-track completion option. "Türkçe Öğreniyorum (Learn Turkish)" is an example of a well-prepared language MOOC for the teaching of Turkish at A1 level. Although MOOCs have a decade of history and expanding literature, designing efficient language MOOCs is a relatively new era and has limited research. In this study, design and development know-how of "Türkçe Öğreniyorum (Learn Turkish)" will be shared to contribute filling the gap in the field of designing and developing MOOLC for an agglutinative language.

Keywords: MOOLC, MOOC, agglutinative language, Turkish, language, language learning, design, development, know-how

1. Introduction

In the last decades, various distance and open learning programs and online educational delivery models have been developed to address access, affordability, and personalized learning in higher education (Hill, 2012). Nowadays with the advent of Massive Open Online Courses (MOOCs), new online educational models have emerged that promise to offer flexibility, affordable access and fast-track completion for free or at a low cost for whoever is interested in learning (Yuan & Powell, 2013). In fact, MOOCs support the idea of distributed intelligence and lifelong learning, open learning, open educational resources and represent a new generation of online education that encourages the development and delivery of courses that are massive, open, participatory (Perifanou, 2016). In the last decade, MOOCs have diversified in the context of different design approaches, goals and types of interaction. The concept of MOOLC is also one of these MOOCs types. MOOLC is basically defined as MOOCs with customized designs for language learning.

Language MOOCs as an evolving and expanding area with new developments likely to offer a greater variety of courses and more innovative social learning pedagogies (Perifanou, 2014). Currently, practitioners, language teachers, instructional designers are exploring how to design efficient language courses that have the characteristics of open access and massiveness. On this basis, design and development know-how of "Türkçe Öğreniyorum (Learn Turkish)" MOOLC is presented in this study as an effort of experience sharing.

2. "Türkçe Öğreniyorum (I learn Turkish)" MOOLC

There is an increasing demand for learning Turkish as a foreign language over the last decade (Bayraktar, 2005; Büyükkız & Hazırcı, 2013; Yahşi Cevher & Güngör, 2015). Teaching Turkish as a foreign language abroad is coordinated by Yunus Emre Institute (YEI). According to YEI's annual report, 12.000 students were enrolled in courses offered by YEI to learn Turkish, and the number of students who took elective Turkish language courses in schools reached 8.000 (Yunus Emre Institute, 2016). The number of foreign students in Turkish higher education institutions is 125030 in the 2017-2018 academic year (The Council of Higher Education, 2018), and the number of those in primary and secondary education is 232714 (İBGİGM Migration Report, 2016: 43). According to Migration Authority, the number of foreigners in Turkey who has with a residential permit is 718297 as of August 2018. However, current digital learning materials are very limited in terms of both quality and quantity, and far from fulfilling this demand. There is a large gap especially in providing self-paced materials. There is two traditional distance education programs, and a comprehensive, well-structured, non-profit MOOLC. Distance education programs are provided by Anadolu University and Yunus Emre Institute, where the MOOLC is provided by Yasar University under the name of "Türkçe Öğreniyorum (I learn Turkish)".

The objective of "Türkçe Öğreniyorum" Project is to develop a worldwide distance learning platform, which is sensitive to individual differences and can differentiate the content according to the needs of the learner. The primary goal of "Türkçe Öğreniyorum" is to provide continuous access to qualified self-paced learning materials

for the Turkish language. It was developed under "the Differentiated Distance Education of Turkish as a Foreign Language" project, supported by TÜBİTAK with the project code of 115K270. It is limited by level A1, which is referenced in the Common European Framework of Reference for Languages

In "Türkçe Öğreniyorum", there are 53 chapters, each chapter bearing 5-minute lecture videos, 2-minute real-life drama videos, reading-listening-writing-pronunciation activities, approximately 40 games, one A1 level dictionary containing 1.500 vocabulary, approximately 6000 questions in total, a dictionary of rules, one forum and a virtual meeting application. Approximately 40.000 words of text in Turkish translated into English, Arabic, Russian and French language to offer support to learners. "Türkçe Öğreniyorum" runs on Sakai LMS, which is integrated with Kaltura Video Platform and Google Analytics. Learning analytics data is gathered from Diagnostics tool, Motivational Beliefs and Self-Regulated Learning Strategies Questionnaire (MLSQ), Logs of exercises, LMS Statistics, and Google Analytics. Diagnostics tool covers demographic information of learners, their primary and secondary languages, prior knowledge of Turkish, and home country. The aim of this tool is to collect data about learner profile in terms of the region they live in and the language they speak. MLSQ is used to detect cognitive and affective readiness of the learner in terms of intrinsic value, test anxiety, cognitive strategy use, and self-regulation (Pintrich & DeGroot, 1990). Logs of exercises record activity events of the learner (number of tries, given responses etc). Sakai CLE collects site usage statistics regarding learner visits, tool activity, and resource activity. Google analytics provides a rich source of data such as learner preferences (demographics, interest, age, geo, etc.), time spent on modules, page statistics (page view, page exits, behavior flow, etc.), preferred technology (device, browser, operating system, screen resolution, screen colors, etc.), video events (video view duration, numbers of play, pause and skip attempts, etc.).

Project team contains 2 instructional designers, 4 subject matter experts, 1 graphic designer, 1 video developer, 1 multimedia developer, 1 photographer, 1 system administrator, 1 software developer, 4 translators, 7 actors, 6 voice actors, 3 cameramen, 2 production specialists, 2 post-production specialists, 1 cinema director, 1 scriptwriter, 1 assessment and evaluation specialist and 2 consultants.

ADDIE [Analysis, Design, Development, Implementation, Evaluation; (Morrison et al., 2010)] was used as an instructional systems design model.

3. Analysis Phase

The main objective of the project is to provide flexible learning opportunities and continuous access to qualified self-paced learning materials. The central concern of the project is to differentiate the content according to the needs of the learner. Therefore, our focus in this phase was on diagnosing the learner profile and the explore most common linguistic errors they made to examine who struggles in which topics. A registration form -which contains gender, age, nationality, residency, mother language, the number of foreign languages that learner knows, education level, employment status, internet usage habits, reasons of learning Turkish, prior knowledge of Turkish - created to define learner demographics. In addition, one focus group discussion conducted, and 177 A1 level writing exam papers were analyzed. Focus group discussion conducted with 8 international students from China, Pakistan, Malaysia, Nigeria, India, Serbia and Bosnia who participated voluntarily. Learners were asked to share their experiences of learning Turkish, reasons of learning Turkish, the differences and similarities between their own cultures and Turkish culture, commonly used methods for learning Turkish, and what features a language MOOC should have. A1 level writing exam papers of 177 learners were analyzed to diagnose learners' needs. Linguistic error analysis techniques were used for error analysis. According to results, there was a relationship between error frequency and learner group (Arabic-Farsi, Turkic, Balkan and Other). The errors density varied as a function of the learner group. Therefore, it was decided that differentiation for teaching Turkish as a foreign language should be made according to learner group on the topics which they have high errors density.

4. Design Phase

In the design phase, the design of interfaces, content structure, lessons, assessment and evaluation processes, support and communication tools were performed.

4.1. Design of interfaces

This phase covers the interface design of the web page and Learning Management System (LMS). Graphic designers and researchers worked together in this step to design the web page, Figure 1, and customize Sakai CLE LMS's user interface, Figure 2.

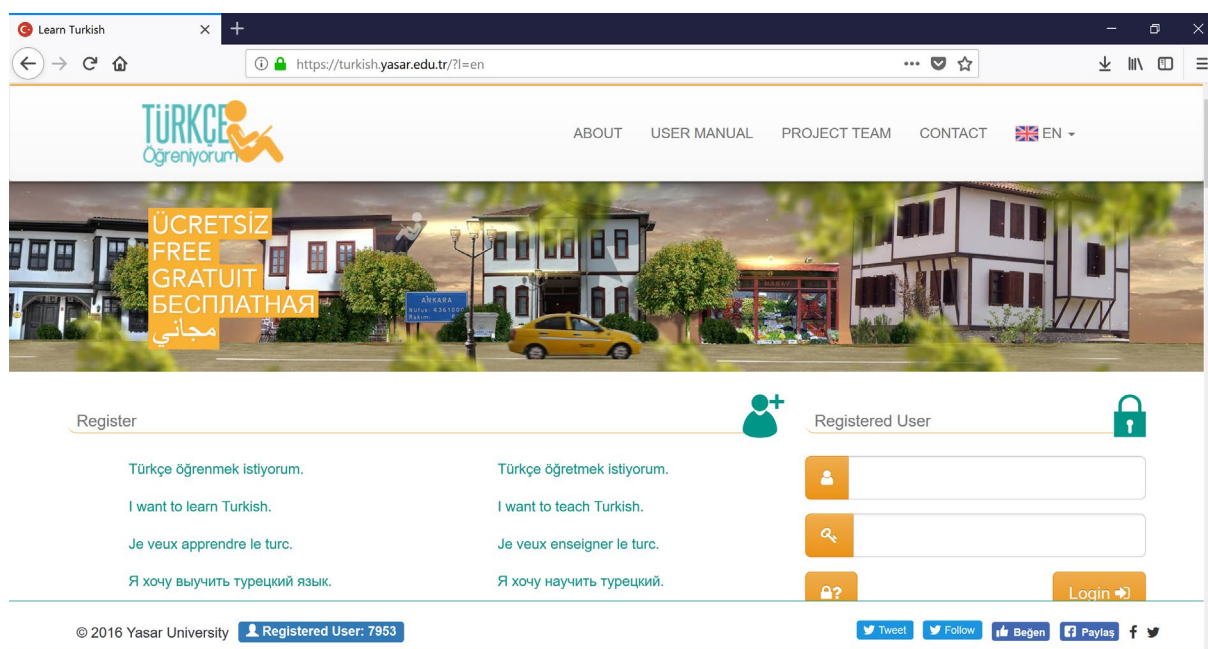


Figure 1: Web site Interface of "Türkçe Öğreniyorum"

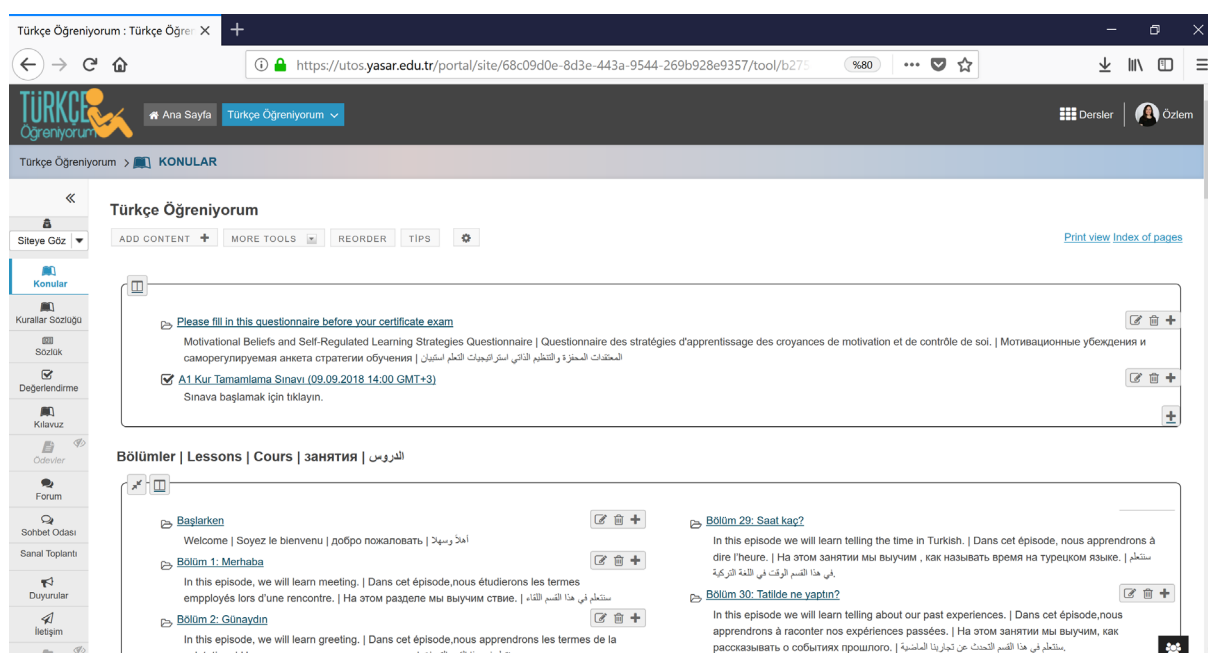


Figure 2: Customized Sakai LMS user interface of "Türkçe Öğreniyorum"

In the design process, green and orange colors were chosen for web interface and logo since green color has a strong association as a refreshing and peaceful color and orange is the color of joy, creativity, sense of general wellness and emotional energy, and warmth.

4.2. Designing structure of content

Structure of content of "Türkçe Öğreniyorum" was based on five theoretical approaches. First one is the theory of transactional distance, which establishes a relationship between dialog, structure, and learner autonomy (Moore, 2007). Second one is theory of self-regulatory learning, which is critical especially in distance education because of the absence of the very active role of the instructor and the requirement for high-autonomy (Hsu et al., 2009), goal setting, self-monitoring, self-evaluation, use of task strategies time planning and management (Dabbagh & Kitsantas, 2005). The third one is the Theory of Multimedia Learning (ToML). Forth one is Tomlinson's (2001) approach for differentiation of instruction. The final one is Notional-Functional Approach (Ellis, 2005; Halliday,

1986; Hymes, 1971) as second language teaching theory as shown in Figure 3. Based on this theoretical framework, "Türkçe Öğreniyorum" system consists of 53 lessons/modules. In addition, it comprises Dictionary, Dictionary of Rules, User Guide, Forum, Virtual Meeting and Certificate Exam Tool.

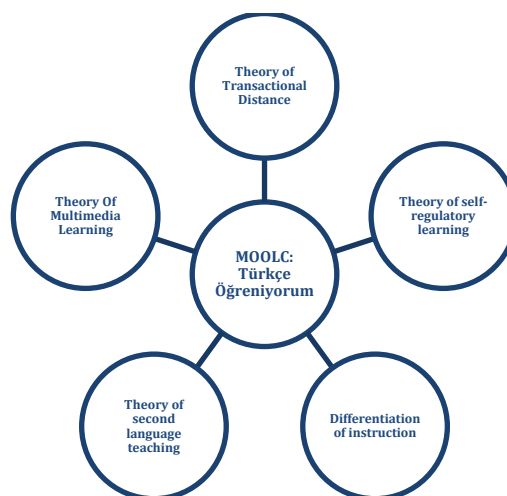


Figure 3: Theoretical background of “Türkçe Öğreniyorum” MOOLC

In this stage, the learning environment, constraints, the delivery options, and the timeline for the project were also considered. After a systematic process of specifying learning objectives, detailed storyboards and prototypes were done. The user-interface, content and learning materials determined based on the design phase was produced at the development phase.

Learning materials are designed and developed for target groups of learners. Course difficulty is pitched to the group's educational level, and examples or exercises are selected from the learner's environment. Materials obtained through collaboration with other institutions. Although the basic content of shared teaching and learning materials stays the same, the examples, arguments or explanations is adapted to differentiate depending on the learner group. All shared resources are reviewed to determine what changes are needed and supervise adapting the resources to the needs of learner groups.

3.2. Designing Lessons

Each lesson contains approximately 5 minutes of lecture video with relevant grammatical information, drama videos designed in the context of 1-2 minutes of daily dialogue, activities involving exercises and games to reinforce the learned subject, a book chapter end test that allows the learner to self-evaluation components, Figure 4.

Türkçe Öğreniyorum Ana Sayfa Türkçe Öğreniyorum Dersler Yasın

Türkçe Öğreniyorum > **KONULAR** > Bölüm 4: Alfabe


Bölüm 4: Alfabe [Yazdırma Görünümü](#) [İçindekiler](#)

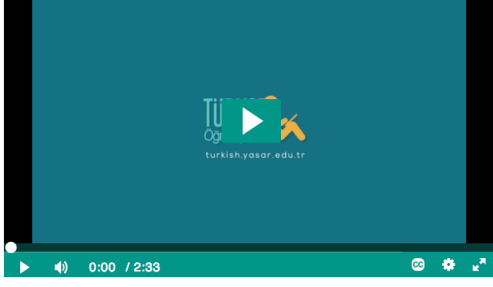
Kurallar Sözlüğü
Sözlük
Değerlendirme
Kılavuz
Forum
Sohbet Odası
Sanal Toplantı
Duyurular
İletişim

TR EN RU FR AR

Bu bölümde Türkçedeki harfleri öğreneceğiz.

[Kitap](#) | [Book](#) | [книга](#) | [livre](#) | [كتاب](#)
Kitap bölümü 4: Alfabe

 0:00 / 5:53

 0:00 / 2:33

Dinle ve Seç

Dinle ve Görseli Seç

Boşluğa Yaz

Görseli Yaz

[Konusu](#) | [Speak](#) | [Говорить](#) | [Parler](#) | [نقش](#)
Telaffuz çalışması

[Sırala](#) | [Put in Order](#) | [Сортировка](#) | [Range](#) | [الترتيب](#)
Diyalog sıralama

[Bul](#) | [Find](#) | [Найти](#) | [Trouve](#) | [البحث](#)
Kelime bulmacası

[Oyna](#) | [Play](#) | [Играть](#) | [Joue](#) | [اللعاب](#)
Bölüm oyunu

☒ [Kendini Değerlendir](#) | [Assess Yourself](#) | [оценивать себя](#) | [évaluez vous](#) | [تقيم نفسك](#)
Bu sınavda 10 soru vardır. Bu sınavda süre kısıtlaması yoktur. Bu sınavı yeniden yapabilirsiniz.

GERİ İLERİ

Figure 4: Course structure

For each section, the learning objectives are determined firstly. In line with the objectives, raw content was written by subject experts for lecture video. After that, the instructional designer created a scenario based on that raw content. Each scene was designed carefully by the instructional designer. Tables, illustrations, photographs, off-voice narrations, dialogs were defined in separate excel files. Learning activities of “*Dinle ve görseli seç*” (*Listen and choose the image*), “*Görseli yaz*” (*Write the image*), “*Dinle ve seç*” (*Listen and choose*), “*Boşluğa yaz*” (*Fill*

in the blanks) were designed similarly based on that raw content. The differentiated content was also produced based on this raw content. Some examples of files used in the design and production process were shared in Figure 5.

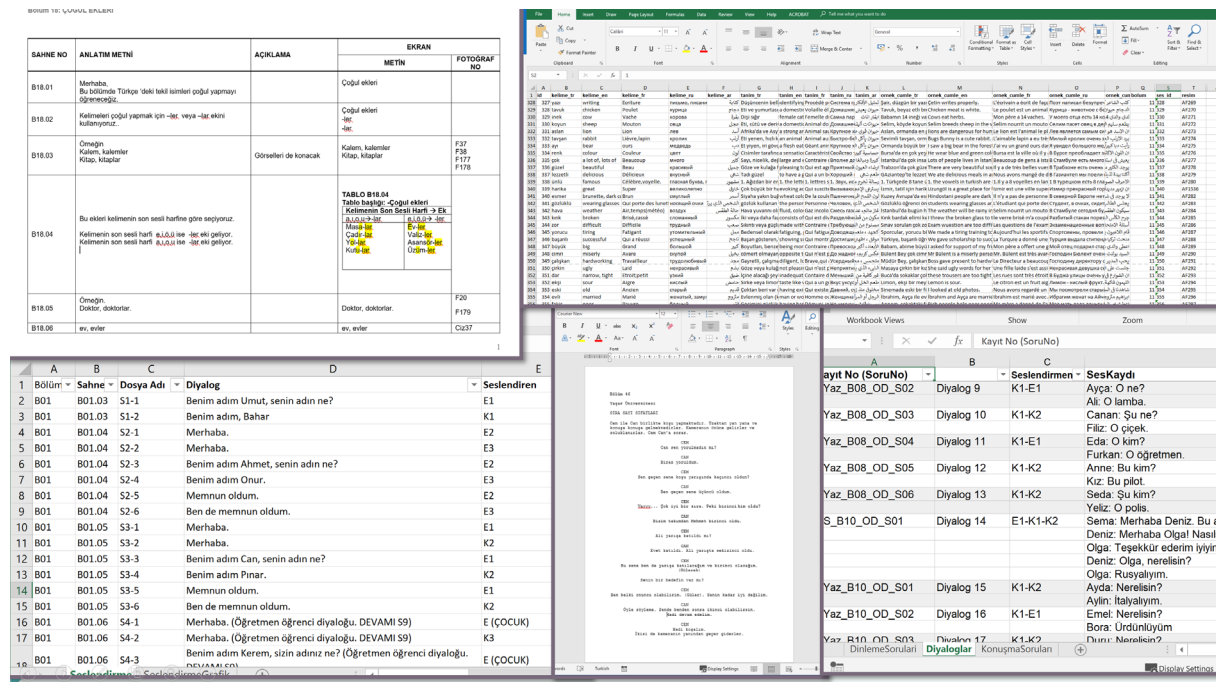


Figure 5: Some examples of excel file used in design and production process

Scenarios of drama videos are written by screenwriters, and they were controlled by the instructional designer and content experts. A book, which contains text of videos and vocabulary of the module, was also designed. Furthermore, a "User Guide" which includes short tutorials for learners about the use of the tools in the system was designed. In designing user guide, instructional designers defined the titles of the subjects and designed screens, screen texts and created video subtitles. A similar process has been done for the introduction video where basic information about the system is presented.

4.3. Designing the Assessment and Evaluation Processes

Self-assessment is tools should be provided in MOOC environments since it critical especially in MOOCs because of the absence of the role of the instructor and the requirement for high-autonomy. Learners in MOOCs are responsible for their own learning by arranging the time, pace and strategies. Therefore, self-assessment tests and feedback for each activity were placed in modules. The learner can take self-assessment tests multiple times, there is no time limitation in the test as well. Also, the *System Statistics* tool allow learners to track their learning process.

In this phase, questions and feedbacks were created by content experts for each module. After that, instructional designers edited the questions and eliminated the ones which were not compatible with LMS requirements.

4.4. Designing the Support Tools

Problems, which may encounter in the system and require support to learners, are determined as non-functioning /malfunctioning content such as broken link, "how-to" problems such as how to log in, a technical problem such as sound problems. Hence, the support content was divided into categories as shown in Figure 6.

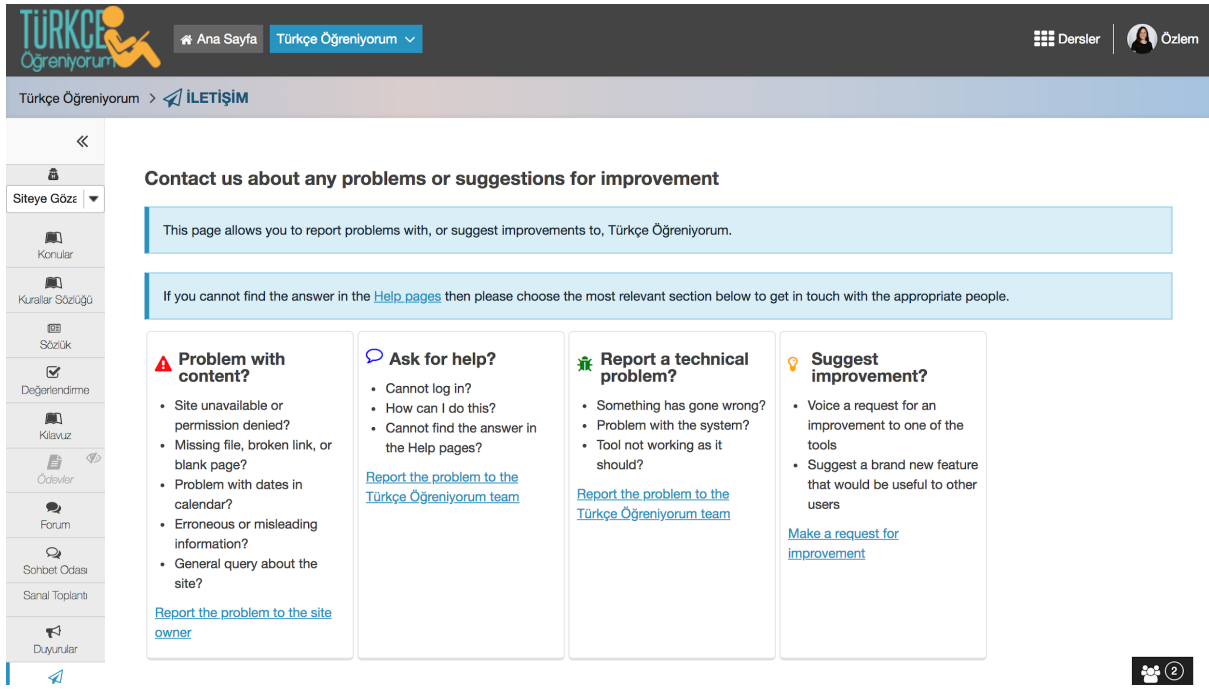


Figure 6: Support Tool

5. Development and Production Phase

In the production phase, the web page was developed, LMS was set up, video, analytics, and other services were integrated into LMS. After that, the content was developed and uploaded to the LMS platform. A customized web page created for registration of the user. The registration form was integrated to the web page. It collects demographic information of learners in four steps. At the final step, e-mail verification is used for approval of account information. This web page has multilanguage support.

Open source Sakai CLE was chosen as Learning Management System since it provides a wide variety of tools for activities and learner statistics. Kaltura MediaSpace was customized to serve as a repository for media collections. It is an open, flexible, and collaborative video platform and services for organizations. Kaltura offers the broadest set of video management and creation tools integrated with LMS. With a single video portal Kaltura MediaSpace, all our video/audio content is centralized and delivered in high quality to any device. We enriched our videos to make more engaging and discoverable experience by adding captions. It also provides localization configuration to adopt online content for regional specificity. Kaltura Built-In Analytics was used for user-level (which is the most viewed video or which videos were 100% play-through, which users watched the video and for how long/many times and their watching behaviors) and system reports (information per the OS, browser, or platform used). Kaltura and Google Analytics integration was made to track how users are engaging with content in different geographies and across different platforms (desktop, mobile etc.), operating systems and browsers.

Free web analytics tool Google Analytics offered by Google was used to track users and analyze their events in the learning environment. It provides a wide variety of information about the activity that takes place on LMS and MediaSpace of "Türkçe Öğreniyorum" Learning Environment. Google Analytics show data through metrics, which measure behavior, and dimensions. It helped us to describe who learners are and analyze their behaviors in the Learning Environment. In addition to analytics tool, MLSQ (Motivated Strategies for Learning Questionnaire) was integrated into the platform as a beginning module to measure the types of learning strategies and academic motivation used by learners.

Afterward, the production of the lecture and drama videos were conducted for 53 episodes in total. In the production of lecture videos, the following operations were carried out:

- Green screenshots
- Off-voice recordings for dialogues
- Photo shoots and procuring photos which could not be shot from stocks
- Drawing of illustrations or procuring them from stocks
- Designing of tables by the graphic designer in accordance with the screens
- Video editing
- Post-production.
- Uploading subtitles in Turkish, French, English, Arabic and Russian

Each section has drama videos that contain sample cases from everyday life. During the production of these videos, the following processes have been carried out:

- Venue selection
- Training of casts
- Making video shots
- Video editing
- Post-production.
- Uploading subtitles in Turkish



Figure 7: Behind the scenes images of video shootings.

Production of the lecture and drama videos were followed by the production of games, book, activities, dictionary, the dictionary of rules was conducted for 53 episodes in total. Photo shootings, illustrations, and sound recordings were performed in the same way for the activities (Dinle ve görseli seç, görseli yaz, dinle ve seç, boşluğa yaz), dictionary and dictionary of rules. Dictionary and dictionary of rules were translated into English, Arabic, Russian end, French. The books, which includes basic concepts, keywords, dialogues, and glossary in the videos, were prepared by the graphic designer. Next, User Guide and Introduction videos were prepared by screen recording method. Subtitles were also used for these videos. Finally, all the produced content was uploaded to the LMS, and usability tests were conducted.

6. Implementation phase

Following the design and development process, "Türkçe Öğreniyorum" MOOLC was launched and opened to the public use via <https://turkish.yasar.edu.tr/>. The official enouncement was made Yaşar University to universities, the ministry of education, the ministry of foreign affairs, embassies, social media was used for dissemination of the system as well.

7. Evaluation

In order to evaluate the system, user profile and learning behaviors are still being monitored by the means of Google Analytics, Analytics tool of Sakai LMS, MLSQ tool, registration form, and Analytics tool of Kaltura platform.

Conclusion

Learning in the 21st century is characterized by the tendency of time and space independence. The information and communication technologies play a central role in increasing the autonomy of individuals and facilitating fulfillment of learners' demands to take more of their differences and needs into consideration. The diversity of technologies and tools used for learning also makes it easier for individuals to address different learning needs and

preferences such as MOOCs. In this study, design, develop and implementation phases of "Türkçe Öğreniyorum" MOOLC was presented as an effort of know-how sharing. ADDIE was used as the instructional systems design model. In the analysis phase, our focus was on diagnosing a learning profile and the explore most common linguistic errors learners made to examine who struggles in which topics. In the design phase, the design of interfaces, content structure, lessons, assessment and evaluation processes, support and communication tools were performed. In the production phase, the web page was developed, LMS was set up, video, analytics, and other services were integrated into LMS. After that, the content was developed and uploaded to the LMS platform. In implementation phase "Türkçe Öğreniyorum" MOOLC was launched and opened to the public use. Learning analytics will be used in the evaluation phase.

References

- Bayraktar, N. (2005). Yabancılar Türkçe Öğretiminin Tarihsel Gelişimi. Retrieved from <http://www.turkceogretimi.com>.
- Büyükkiz, K., & Hazırcı, S. (2013). Yabancı Dil Olarak Türkçenin Öğretiminde Sözcük Öğretimi Üzerine Bir Değerlendirme. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 10(21), 145–155.
- Dabbagh, N., & Kitsantas, A. (2005). Using web-based pedagogical tools as scaffolds for self-regulated learning. *Instructional Science*, 33(5-6), 513-540.
- Ellis, R. (2005). *Instructed second language acquisition: A literature review*. Wellington, Australia: Research Division, Ministry of Education.
- Halliday, M. (1986). *An introduction to functional grammar*. London: Arnold.
- Hill, P. (2012). Four Barriers That MOOCs Must Overcome To Build a Sustainable Model. Retrieved from <http://mfeldstein.com/four-barriers-that-moocs-must-overcome-to-become-sustainable-model/>
- Hsu, Y. C., Ching, Y. H., Mathews, J. P., & Carr-Chellman, A. (2009). Undergraduate students' self-regulated learning experience in web-based learning environments. *Quarterly Review of Distance Education*, 10(2), 109-121.
- Hymes, D. (1971). *On communicative competence*. Philadelphia, PA: University of Pennsylvania Press.
- İBĞİGM: İçişleri Bakanlığı Göç İdaresi Genel Müdürlüğü. (2016). Migration Report. Retrieved from http://www.goc.gov.tr/files/files/2016_goc_raporu.pdf
- Moore, M. G. (2007). The theory of transactional distance. In M. G. Moore (Ed), *Handbook of Distance Education* (pp. 89-105). Mahwah, NJ - Lawrence Erlbaum Associates.
- Morrison, G. R., Ross, S. M., Kemp, J. E., & Kalman, H. (2010). *Designing effective instruction*. John Wiley & Sons.
- Perifanou, M. A. (2014). PLEs & MOOCs in Language Learning Context: A challenging connection. In *Proceedings of the PLE Conference*. Retrieved from <http://pleconf.org/2014/files/2014/06/paper-34.pdf>
- Perifanou, M. (2016). Designing strategies for an efficient language MOOC. *CALL communities and culture-short papers from EUROCALL*, 380-385.
- Pintrich, P. R., & DeGroot, E. (1990). Quantitative and qualitative perspectives on student motivational beliefs and self-regulated learning. In *Annual Meeting of the American Educational Research Association, Boston, MA* (Vol. 128).
- The Council of Higher Education. (2018). Higher Education Statistics. Retrieved from <https://istatistik.yok.gov.tr/>
- Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd ed.). Alexandria, VA: ASCD.
- Yahşi Cevher, Ö., & Güngör, C. (2015). Yabancı Dil Olarak Türkçe Öğretiminde Akademik Türkçenin Öğrenimine İlişkin Uygulamalı Bir Araştırma: Türk Dili Öğretimi Uygulama ve Araştırma Merkezi Örneği. *International Journal of Languages' Education and Teaching*, 2267–2274.
- Yuan, L. & Powell, St. (2013). MOOCs and Open Education: Implications for Higher Education. A White paper, CETIS. Retrieved from <http://publications.cetis.ac.uk/2013/667>
- Yunus Emre Institute. (2016). YEE 2016 Faaliyet Raporu. Yunus Emre Enstitüsü. Retrieved from https://www.yee.org.tr/sites/default/files/yayin/2016_faaliyet_raporu_05.02.2018-db.pdf

Moral Attitudes Of High School Students

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Abstract

The paper is focused on finding the stage of moral development of contemporary high school students. The focus of the presented paper is to analyse the way of thinking about moral dilemmas by adolescents. The sample consisted of Slovak adolescents ($N = 250$) with average age of 16.5 years. Their task was to solve the dilemmas presented by us. The resulting findings pointed to the degree of moral reasoning, which is based on respecting the social rules. It also showed that dealing with moral dilemmas ties to the internal values of the adolescents. We also found relatively high competence of moral reasoning (per Piaget) by the participating adolescents.

Motivation And Rewards For Special Education Staff: A Focus Group Study On Greek Employees

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Abstract

The Aim Of This Study Was To Examine The Rewards For Special Education Staff And Its Importance For Their Motivation. For The Purpose Of This Study, A Focus Group Of Special Education Employees Was Set Up To Determine Their Perceptions, Feelings And Thoughts About Motivation And Rewards In The Work Environment. The Conceptual Research Framework Of Rewards Was Based On Total Rewards Model Of Towers Perrin, Which Embrace Everything That People Value In The Employment Relationship. Through The Focus Group, The Rewards That Were Provided In Their Work Environment And Were Important For Them And Their Motivation Were Identified, While Those Few That Were Not Included Were Determined. The Total Rewards Framework Proved To Be Appropriate And Useful In Understanding The Perspectives Of Special Education Staff On Rewards. The Findings Support The Notion That The Aspects Of Conceptual Research Framework That Concern The Work Environment Are The Rewards, Which Are The Most Important For Their Motivation, Followed By Those That Concern Benefits, Learning And Development. From The Focus Group We Draw Also Conclusions For The Factors That Affect Employee Motivation And The Rewards That Were Applied. The Significance Of Devotion To The Area Of Special Education And The Conscious Choice Of The Profession Were Highlighted By All The Participants. At The Same Time, The Focus Group Participants Completed The Motivation Work Scale (MAWS) Which Is Based On The Framework Of Self-Determination Theory (SDT). According To The Results, Intrinsic Motivation Has Scored High, Whereas External Motivation Proved To Be Less Important For The Participants. In National Level There Has Not Been Any Similar Study In The Field Of Special Education. The Usefulness Of The Results Lies In The Fact That The Holistic Study Of The Rewards Provided And Its Importance For Motivation Can Provide Feedback On Human Resource Management Decision Making Centers, Trade Union Representation, Employers And The Organization Of Curricula And Lifelong Learning. The Study Can, Also, Provide A Perspective For Future Research Through Total Reward Model Long-Term Exploitation.

Keywords: *Rewards, Motivation, Total Rewards, Special Education Staff, Motivation At Work Scale (MAWS), Greece*

Introduction

Employee Motivation Is One Of The Most Important Issues Of Management As It Is Linked To Human Behavior And Job Performance. Motivation Is Also One Of The Most Frequently Studied Subjects In Organizational Behavior. According To Baron (1991, P. 1) Motivation Is “An Internal Process That Activates, Guides And Maintains Behavior (Especially Goal- Directed Behavior)”. It Is Actually The Process That Explains The Intensity, The Direction And The Persistence Of An Individual's Effort Towards A Particular Goal (Robbins & Judge, 2007).

Furthermore, Rewards Have A Central Place In The Theoretical Models Of Human Resources Management (Storey, 1995). They Can Be Regarded As The Fundamental Expression Of The Employment Relationship (Armstrong, 2009). As Rewards Are Considered “The Benefits That Arise From Performing A Task, Rendering A Service Or Discharging A Responsibility” (Pitts, 1995, P. 13). The Reward System Of An Organization, As Henderson (2000, P. 17) Refers, “Includes Anything That An Employee May Value And Desire And That The Employer Is Able Or Willing To Offer In Exchange For Employer Contribution”. Rewards Are Commonly Categorized As Intrinsic And As Extrinsic (Deci, 1971).

Total Reward Is The Combination Of Financial And Non-Financial Rewards Available To Employees (Armstrong, 2009). It Emphasizes On All The Aspects Of Work Experience Value For Employees, And Not On Some Of Them Such As Pay And Benefits. It Aims To Mix The Financial And Non-Financial Elements Of The Reward Into A Single Set. This Approach Recognizes The Need For Financial Rewards But Also Emphasizes The Importance Of Providing Rewards Stemming From The Job They Are Doing, From The Work Environment, From How They Are Managed And The Opportunity To Develop Their Skills, And Their Careers (Armstrong & Cummins, 2011). As Defined By Manas And Graham (2003), Total Reward “Includes All Types Of Rewards – Indirect As Well As Direct, And Intrinsic As Well Extrinsic”. Each Aspect Of Reward, Namely Base Pay, Contingent Pay, Employee Benefits And Non-Financial Rewards, Which Include Intrinsic Rewards From The Work Itself, Are Linked Together And Treated As An Integrated And Coherent Whole. Total Rewards Combine The Impact Of The Two Major Categories Of Rewards: A) Transactional Rewards: Tangible Rewards Which Arise From Transactions Between The Employer And Employees Concerning Pay And Benefits, And B) Relational Rewards: Intangible Rewards Concerned With Learning And Development And The Work Environment (Armstrong, 2009). An Equally Wide Definition Of Total Rewards Is Offered By Prenzno And Griffith (2000) Who States That Total Rewards Are All The Available Tools That May Be Used To Attract, Retain, Motivate And Satisfy Employees. The Benefits Of Total Reward Approach Are:

- *Greater Impact:* The Combined Effect Of The Different Types Of Rewards Will Make A Deeper And Longer-Lasting Impact On The Motivation And Commitment Of People
- *Enhancing The Employment Relationship:* An Employment Relationship Based On Total Rewards Approach Makes The Maximum Use Of Relational As Well As Transactional Rewards And Will Appeal More To Individuals
- *Flexibility To Meet Individual Needs:* Through Total Rewards The Organization Can Better Meet The Special Individual Needs
- *Talent Management:* The Organization Can Become “An Employer’s Choice” And “A Great Place To Work” Thus Attracting And Retaining The Talented People It Needs (Armstrong, 2009).

Kerr (1997) Refers To The Following Features Of Ideal Rewards: A) Promote Both Efficiency And Equity, B) Meet Not Only Economic And Non-Economic Needs, C) Are Available, D) Everyone Has The Right To Participate In Them, E) Are Communicated To All Employees, F) Are Reversible. The Main Impact Of Satisfactory Rewards Is To Increase Incentives For Employees. Rewards And Incentives Play A Key Role In The Level Of Satisfaction That Employees Derive From Their Work. People Do Not Work Just For The Money. They Are Interested In An Organization That Has A Strong Vision, They Want Their Personal Development And To Give Value To The Organization. A Combination Of Basic Salary, Additional Benefits, Recognition Is Necessary For An Integrated Benefit Package (Zingheim & Schuster, 2000). A Compensation Plan Model For Direct Support Professionals Working With Individuals With Developmental Disabilities Integrates An Assortment Of Factors – Compensation, Benefits, Recognition And Incentives (Kuznia, 2008). Studies Have Also Shown That Teachers Appreciate Intrinsic Rewards, Such As Student Achievement And Positive Relationships With Them (Ashiedu & Scott-Ladd, 2012; Dilworth, 1991; Plihal, 1982; Taylor, Mcnane-Funk, Jardine, Lehman, & Fok-Chan, 2014).

A Number Of Surveys Have Been Carried Out About The Positive Role Of Rewards On Motivation (Deci, 1971; Milne, 2007; Nyakundi, 2012). In Parallel, Many Studies Were Conducted Concerning Employee Preferences In Terms Of Rewards Provided By The Organizations They Work And How These Rewards Can Positively Affect Their Motivation. The Most Important And Most Desirable Rewards According To The Literature Are: Good Salary (Ali & Ahmed, 2009; Dilworth, 1991; Harpaz, 1990; Kim, 2005, 2005; Wiley, 1997), Job Security (Jurkiewicz, Massey, & Brown, 1998; Kim, 2005; Wiley, 1997), Career Development (Ali & Ahmed, 2009; Allen, Shore, & Griffith, 2003; Kim, 2005; Nyakundi, 2012), Autonomy And Initiative (Reeve & Deci, 1996; Richer & Vallerand, 1995; Zuckerman, Porac, Lathin, & Deci, 1978), Good Relationships With Colleagues (Gkorezis & Petridou, 2012; Harpaz, 1990; Kim, 2005), Good Relationship With Supervisor (Evans, 1970), Interesting And With Variety Work (Ali & Ahmed, 2009), Recognition And Reward (Ali & Ahmed, 2009; Gkorezis & Petridou, 2012; Wiley, 1997).

Although, Rewards As A Mean Of Enhancing Motivation Has Been Also The Subject Of Research And Annotation In Education (Ali & Ahmed, 2009; Ashiedu & Scott-Ladd, 2012; Dilworth, 1991; Nyakundi, 2012; Plihal, 1982; Taylor Et Al., 2014), Not Many Studies Were Found Regarding Special Education. Additionally, A Need For A More Holistic Approach, Such As The One “Total Reward” Approach Offers, Exists.

The Study

For The Purpose Of This Study, A Focus Group Of Special Education Employees Was Set Up To Determine Their Perceptions, Feelings And Thoughts About Motivation And Rewards In The Work Environment.

The Conceptual Research Framework (Figure 1), That Was Used For The Focus Group And Concerned Rewards For Special Education Staff, Was Based On Towers Perrin Model Of Total Reward (Armstrong & Brown, 2009, P. 25).

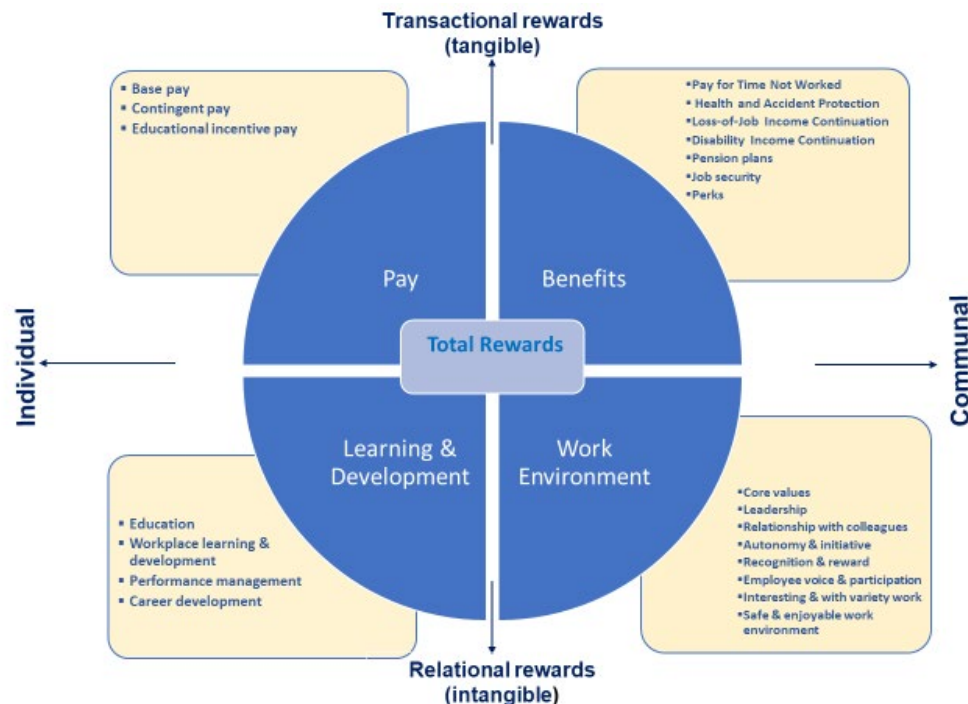


Figure 1: Conceptual Research Framework

The Conceptual Research Framework Embraced Everything That People Value In The Employment Relationship. The Upper Two Quadrants- Pay And Benefits- Represent Transactional Rewards. These Are Financial In Nature And Are Essential To Recruit And Retain Staff But Can Be Easily Copied By Competitors. By Contrast, The Relational (Non-Financial) Rewards At The Two Lower Quadrants Are Essential To Enhancing The Value Of The Upper Two Quadrants, Can't Be Easily Copied And Can Create An Advantage In Relation With The Human Capital And Its Management.

Aims

The Aims Of This Research Were To Determine The Views Of Special Education Employees On:

1. The Rewards That Applied
2. The Importance Of Rewards For Their Motivation

Focus Group

Since The Purpose Of This Research Was To Seek Insight Into The Perceptions, Feelings And Thoughts Of Special Education Staff The Data Required Was Essentially Qualitative. The Two Principal Means Of Collecting Qualitative Data In The Social Sciences Are Participant Observation, Which Typically Occurs In Groups, And Open-Ended Interviews, Which Typically Occur With Individuals (Morgan, 1997). Nevertheless, The Last Years Have Produced A Steady Increase In Social Scientists' Use Of Focus Groups, And There Is A Widespread Consensus That Focus Groups Are A Valuable Technique For Collecting Qualitative Data (Morgan, 1997). Focus Groups With Employees Have Been Helpful In Understanding The Perspectives Of Staff And Also In Identifying Or Testing Potential Policies Or Solutions Strategies (Krueger & Casey, 2000). Central To This Methodology Is To Gather Data On The Topic And Participants' Perceptions And Understanding (Kitzinger, 1994). Focus Groups Provide Also Access To Forms Of Data

That Are Not Obtained Easily With Individual Interviews Or Participant Observation (Morgan, 1997). The Intent Of The Focus Group Is To Promote Self-Disclosure Among The Participants. It Presents A More Natural Environment Than That Of An Individual Interview Because Participants Are Influencing And Influenced By Others- Just As They Are In Life (Krueger & Casey, 2000). The Comparative Advantage Of The Focus Group As An Interview Technique Lies In The Ability To Observe Interaction On A Topic And The Focus Group's Main Advantage In Comparison To Participant Observation Is The Opportunity To Observe A Large Amount Of Interaction On A Topic In A Limited Period Of Time (Morgan, 1997). The Focus Group Also Offers The Option To Not Respond, Which Is Not Available In Other Qualitative Methods. As Fern (1982) Mentions, A Concrete Demonstration Of The Strength That Focus Groups Offer Is That A Two Eight-Person Focus Groups Would Produce As Many Ideas As 10 Individual Interviews.

Participants

A Random Sampling Technique Was Used In The Recruitment Of The Participants. The Candidate Participants Were Special Education Employees With Experience In Public Primary And Secondary Education And Worked In Mainstream And Special Schools Of The Geographical Area Of Thessaloniki. Prior To The Focus Group, 15 Candidate Participants Were Individually Interviewed By Telephone With Regard To Some Demographics And Their Work Experience. Telephone Screening Interviews With Potential Participants Were Conducted A Month In Advance And A Very Short Questionnaire Was Used To See If The Candidate Participants Fit The Recruitment Strategy And If They Were Interested In Participating. The Telephone Screening Interviews And The Final Group Composition Of Participants Ensured That They Had Something To Say About The Research Topic And They Felt Comfortable Saying It To Each Other. The Focus Group Was Composed Of Eight People Who Did Not Know Each Other (Krueger & Casey, 2000; Morgan, 1997). Participants Were Similar To Each Other In A Way That Was Important To The Researchers And Served Focus Groups' Aims. The Focus Group Was Characterized By Homogeneity In The Sense That All Participants Were Public Sector Employees Who Work With Children With Special Needs. Besides, The Focus Group Was Characterized With Sufficient Variation Among Participants Concerning Mainly The Specialization, The Structures And The Work Experience, And The Employment Relationship. From The Seven Participants That Finally Took Part In The Focus Group, Six Were Females And One Was Male. There Were Three Participants That Belonged To The Age Group Of 41-50, Three That Belonged To The 30-40 Age Group And One That Was Under The 30 Years Old. All Of Them Had Special Education Studies, Whereas One Of Them Had Also A Two Years Reeducation In Special Education And Two Had Additionally A Master's Degree And A Phd. The Focus Group Consisted Of Four Special Education Teachers, Two Special Teaching Staff And One Kindergarten Teacher. With Regards To Teaching Experience, One Of The Participants Had Two Years In Special Education, For Five Of Them The Work Experience Varied Between 8 And 16 Years, While One Had 21 Years In Education, 8 Of Which Were In Special Education And 13 In General Education. With Respect To Their Current Position, Five Were In Primary Education, One Was In Secondary Education And One In Hospital School. Finally, Three Participants Had A Permanent Employment Relationship And Four A Temporary.

Instruments And Procedures

A Written Plan Was Developed And Included The Focus Group Purpose, A Background Information On Rewards And Motivation, The Conceptual Framework, A Plan Of Action, The Participants Information, The Research Team And A Questioning Route. A Brief Written Plan Was Send To The Participants Before The Focus Group Meeting And The Importance Of The Study And Their Participation Were Highlighted. Doing Something Like This Before Coming To The Focus Group Helps The Participants Prepare For The Group Discussion (Krueger & Casey, 2000). The Meeting Was Organized, Regarding The Day, The Time And The Location, So As To Be Convenient For The Participants And The Research Team. The Invitations Were Personalized, So As Each Participant To Feel That They Were Personally Needed And Wanted At The Interview And Their Participation Would Be Of Value In The Study. A Pilot Application Of The Questioning Route Preceded. An Introduction Opened The Meeting Which Included A Welcome, An Overview Of The Topic And The Ground Rules. The "Funnel" As A Compromise Approach Was Used, Which Is A Compromise Between Structured And Less Structured Approach (Morgan, 1997). The Focus Group Begun With A Less Structured Approach That Emphasized Free Discussion And Then Moved Toward A More Structured Discussion Of Specific Questions. The Questioning Route Was Arranged In Natural, Logical Sequence. More Specifically, Questions Moved From Broad And General To More Specific And Of Greater Importance To The Study And Were Categorized As Opening, Introductory, Transition, Key And Ending Questions. Clear, Simple, Easy To Say, And Open - Ended Questions Were Mainly Used For The Questioning Route. Questions That Engage Participants Were Also Used Such As Rating Items And Listing Things (Krueger & Casey, 2000), Whilst "Think-Back" Questions Were Preferred To Encourage Participants To Share Personal Experiences. The "Funnel"

Compromise Made It Possible To Hear The Participants' Own Perspectives In The Early Part Of The Discussion As Well As Their Responses To The Researcher Specific Interests In The Later Part Of The Discussion (Morgan, 1997).

The Focus Group Lasted About Two Hours As It Was Planned (Krueger & Casey, 2000). It Was Recorded In Three Ways: By A Tape Recorder, A Camera And With Written Notes. The Principal Mean Of Capturing Observations In A Focus Group Is Through Audio Taping (Morgan, 1997). Although Videotaping Is Very Little Recommended For Social Science Research (Krueger & Casey, 2000; Morgan, 1997), It Was Used To Ensure That Everything Was Recorded, To Determine Who Is Speaking And To Whom, And To Capture Facial And Nonverbal Details. During The Meeting, The Research Team's Involvement Was Moderate. The Goal Was To Create A Comfortable And Permissive Environment That Encouraged Participants To Share Perceptions And Points Of View And Interact With One Another, Without Pressuring Participants To Reach Consensus. The Interviewer Was Careful Not To Make Judgements About The Responses And To Control Body Language That Might Communicate Approval Or Disapproval. The Interviewer Also Tried To Give The Appearance Of Active Listening.

At The End Of The Focus Group, The Participants Were Asked To Complete The Motivation At Work Scale (MAWS). Particularly Were Asked To Indicate For Each Of The 12 Statements Of MAWS To What Degree They Presently Correspond To The Reasons They Are Doing This Specific Job, In A Scale From 1 (Not At All) To 7 (Exactly). The MAWS Was Developed With The Multidimensional Conceptualization Of Motivation Postulated In Self-Determination Theory (SDT). SDT Allows The Assessment Of Level And Type Of Motivation And Proposes Two Overarching Types Of Motivation: Intrinsic And Extrinsic. It Is A Dominant Theory Of Motivation In Social And Education Psychology Which Has Yielded Hundreds Of Empirical Publications Since The Early 80's (Gagné Et Al., 2010). Central To SDT Is The Distinction Between Autonomous Motivation And Controlled Motivation. Autonomous Motivation And Controlled Motivation Are Both Intentional And Together They Stand In Contrast To Amotivation, Which Involves A Lack Of Intention And Motivation (Gagné & Deci, 2005; Ryan & Deci, 2000). According To MAWS, Motivation Is Consistently Organized Into Four Types: Intrinsic Motivation, Identified Regulation, Introjected Regulation And External Regulation. As (Gagné Et Al., 2010) Mention:

Intrinsic Motivation Is Defined As Doing Something For Its Own Sake Because It Is Interesting And Enjoyable. *External Regulation* Refers To Doing An Activity To Obtain Rewards Or Avoid Punishments. *Introjected Regulation* Refers To The Regulation Of Behavior Through Self-Worth Contingencies Such As Ego-Involvement And Guilt. *Identified Regulation* Refers To Doing An Activity Because One Identifies With Its Value Or Meaning, And Accepts It As One's Own, Which Means That Is Autonomously Regulated. (P. 629)

Findings

The Meeting Of Focus Group Was Followed By The Video And Recording Transcription And The Data Analysis. Regarding Data Analysis, Two Stems Were Followed:

- *Qualitative Data Retrieval Of Focus Group*: It Included The Thematic / Topic Coding Of Data, The Indexing Of Qualitative Data Codes In Categories And The Cross Referral Of The Different Categories Of Qualitative Data
- *Focus Group Data Analysis*: It Included The Data Reduction, The Data Display And The Conclusions (Drawing And Verification) Which Took Place Before, During And After The Collection Of Qualitative Data (Miles & Huberman, 1994).

The Findings From The Focus Group With Special Education Staff Can Be Summarized Under Seven Major Headings Which Are:

- a. Motivation At Work
- b. The Importance Of Rewards At Work
- c. Rewards For Special Education Staff
- d. Rewards Not Included In The Conceptual Framework
- e. Important Rewards For Motivation
- f. Focus Group Clue
- g. Motivation At Work Scale (MAWS)

a. Motivation At Work

Motives For Profession Choice

Regarding Motivation At Work The First Question Had To Do With What Had Motivated Them To Choose The Specific Profession. In The Majority Of The Comments (6 Out Of 7 Participants), The Emphasis Was On The Conscious Choice Of Special Education, A Choice That They Did Not Regret, And Illustrated With Examples Such As The Following:

“Special Education Was A Very Romantic Choice. I Did Not Regret It”
“I Entered Special Education Which Always Had Some Appeal For Me...After 11 Years In General Education”
“It Was My First Choice...After A Visit To An Institution With People With Disabilities”
“I Entered Special Education Very Consciously. It Was My First Choice ...I Vividly Wanted It”
“My Big Love Was The Learning Difficulties, The Dyslexia ... So It Was A One-Way Street For Me, The Special Education And The Area Of Learning Difficulties”
“It Was Something I Really Liked. I Felt Like Contributing And I Could Change Things Through This Process”

A Participant Admitted That They Did Not Know The Area Of People With Disabilities, And Although This Was Chosen By Chance, It Was A Challenge And They Were Satisfied With This Choice.

Ease Or Difficulty To Motivate And Be Motivated: Factors That Affect It

As Far As Concerns The Ease Or Difficulty To Motivate And Be Motivated In Public Special Education, Although The Difficulty Was Emphasized, Some Ways To Succeed It Were Mentioned. These Had To Do With Passion, Good Mood, Core Values, Relationship With Colleagues And Recognition. The Following Examples Illuminate The Participants Point Of View:

“It Is Not So Easy To Motivate In Public Sector”

“It's Not Easy At All. But It Can Be Done ... And It's Done. Besides Me, It Needs Passion And Good Mood. In Public Schools You Don't Have All The Resources That You Need...There Are Many Shortcomings, Especially For Us Who Work As Integration Class Teachers And Each Year We Are In A Different School And Many Times We Should Prepare Everything From The Beginning”

“I Think Even Money Is Not An Incentive In Special Education. It's A Choice That Either You Want It Or Not. For Me A Motivation Was The Climate That Existed, It Was The Colleagues. I Was Fortunate To Work With Amazing People ... People Who Were Altruistic ...This Fulfills Me”

“In Public Sector Anyone That Does Not Want To Be Motivated, Can't Be Motivated In Any Way. Especially In Special Education, If You Didn't Choose It Because You Want It And You Chose It For Any Other Reason, You've Better Don't Go. If You Want, You Can Find Things That Motivate You”

“No Matter How Strange It Sounds...The Appreciation And Recognition That I Have Received From Parents And Children Was So Big”

“I Think There Is An Important Part... That You Can Actually Find Some People Around You To Work Together, Who Seem To Have Mood And Try...And Love It Anyway ... And They Are Motivated By Some Values. If There Was Collectivity, Which I Think Does Not Exist, This Would Have Made Me Work Better And With More Motivation. If There Were Collective Processes, Communication And Feedback...”

From The Focus Group We Draw Also Conclusions For The Factors That Affect Employee Motivation. These Factors Had Mainly To Do With Intrinsic Motivation And Work Environment. The Conscious Choice Of Special Education, The Passion And The Good Mood For The Job Itself, The Devotion To Special Education And The Personal Values Were The Incentives Mentioned That Intrinsically Motivate Them. The Significance Of Devotion To The Area Of Special Education And The Conscious Choice Of The Profession Were Highlighted By All The Participants. Factors That Had To Do With The Work Environment And Are Highlighted As Important For Their Motivation Were The Recognition From Parents And Children, The Relationship With Coworkers, The Organizational Climate, The

Collectivity, The Communication And The Feedback, And The Available Resources To Do Their Work In The Best Way.

b. The Importance Of Rewards At Work

Recognition Of Contribution -Rewards

With Regard To Their Feelings To Be Recognized And Rewarded For Their Contribution At Work, Participants Expressed Themselves Without Hesitation. Most Of The Participants Expressed Their Satisfaction For Their Work Recognition. Examples Are Given Below:

"I Think An Employee In Special Education Has So Many Reasons To Feel Lucky And That He/She Is Really Rewarded. So Even The Financial Rewards Count And The Fact That A Little Step That A Child Did, Will Raise You To The Heavens"

"I Believe That In Special Schools, Your Contribution Is Recognized. It Is Acknowledged But This Happens Slowly Because It's The Kind Of Work...That You Have To Do With A Specific Social Group Of Children. I Believe That The Greatest...The Most Important Reward, At Least For Me, Is The Slightest Student's Progress You See Because The Financial Rewards Do Not Exist. It Is Even When The Child Sits Down And Catches A Bottle To Pick It Up...This Can Change Your Whole Day. And Then You Say To Yourself: So, I Did Well That I've Chosen Special Education ...I Do Not Mind That There Are No Plasticines"

"I Want To Say That In Hospital Schools The Satisfaction Is Enormous. For The Financial Rewards Apply The Same As In Other Structures Of Special Education. But...In A Hospital School Satisfaction Is Immediate. Playing Even A Jigsaw Puzzle With A Child, The Smile, The Joy, That They Have Escaped From The Healing, That They Feel Like Being In A School Environment, That They Have Forgotten Their Illness. And, Also, The Joy Of The Parents Themselves"

Moreover, It Was Highlighted The Possibility For The Special Education Employees To Experience Some Difficult Situations And Problems (For Example Problems With Parents And Colleagues) That Can Disappoint Them And Make Them Feel That Their Contribution Is Not Recognized. An Example Follows:

"I Believe In Special Education You Feel Very Often...That You Are Not Rewarded. There Are Days That Something Went Wrong...Something With The Parents Mainly, Something With A Colleague, A Problem In The School...And Then You Say: It Is Not Worth It. We Feel That We Don't Get Back, That The Results Are Coming Very Slowly. When You Feel Rewarded ... You Do It Better"

c. Rewards For Special Education Staff

Through The Focus Group, The Rewards That Were Provided In Their Work Environment Were Identified.

Pay

With Respect To **Pay** Rewards, Apart From **Base Pay**, **Contingent Pay**, Which Is Connected With Required Qualifications, Years Of Work Experience, Studies And Children, Was Mentioned As A Reward Provided For Both Categories Of Employees, Permanent And Temporary. The Allowances Were Included In This Reward As Well. Respecting **Educational Incentive Pay**, This Is A Reward That Could Be Provided Only To Permanent Public Employees And Not To The Temporary. An Example Follows:

"There Is A Difference Between Permanent And Temporary Employees. There Is Not Any Educational Incentive Pay That Your Employer, Your Organization Pays For You...With Regards To Temporary Employees"

One Of The Participants Highlighted A Personal Experience:

"My Employee, Public Sector I Mean, Paid 2 Years For My Training, My Studies. And This Was Very Important For My Career Development. I Don't Know If I Could Have Done This By My Own"

Benefits

Among The Benefits Mentioned And Discussed During The Focus Group There Was The **Pay For Time Not Worked**. This Includes The Holidays, The Vacations, The Paternity/Maternity Leave, The Marriage Leave, The Regular Leave, The Personal Leave, The Funeral Leave, The Time Off To Vote, The Blood Donation, And The Sabbatical Leave, All Of Which Are Benefits Provided To All The Participants For Time Not Worked. With Reference To The Sick Leave And The Family Illness Leave, The Temporary Employees That Participated Agreed That There Is Not An Equal Treatment Between Them And The Permanent Staff And They Don't Actually Enjoy This Privilege. An Illustration Is Given Below:

"There's A Major Sticking Point For The Temporary Employees. If We Get Sick We'll Lose Half Of The Day Wage... And If We Take The Day As A Regular Leave We'll Lose A Whole Day Wage From The Unpaid Leave Allowance We Get In The End Of Each School Period...In The Summer. Which Means That We Can't Get Sick"

In Relation To The Lunch And Rest Periods, Most Participants Agree That They Have Some Free Time During A Work Day. A Representative Example Is The Following:

"The Break Is The Same For The Whole School, And If You Are Not On Duty, It Is Actually Your Free Time To Eat, To Go To The Restrooms Etc., Regardless That Anybody Can Ask For Your Help During The Break"

Somewhat In Contrast, It Was Strongly Mentioned That The Special Assistant Personnel Can't Actually Have A Break And Enjoy This Benefit. An Example Follows:

"The Special Assistant Personnel Can't Have A Break For Lunch And Rest As We Have To Be All The Time With The Child We Assist...Also During Its Break For Food. You Can't Even Go To The Restrooms...Unless You Have A Good Colleague- Teacher Who Wants To Help You And Take Care Of The Child For 5 Minutes"

Other Benefits That Are Provided Are The Following:

Health And Accident Protection: It Includes Medical, Hospital And Surgical Insurance-For Self And Dependents- Resulting From An Accident Or Illness, Prescription Drugs, Daily Maternity Allowance, One-Off Childbirth Allowance, Etc.

Loss-Of-Job Continuation: It Includes Unemployment Insurance, Severance Pay, Etc.

Disability Income Continuation: It Includes Short-Term Disability, Sickness And Accident (S & A), Long-Term Disability (LTD), Etc.

Perks: They Include I) **Flexible Perks** Such As Unpaid Leave, Half-Day Occupation, Ii) **Other Perks** Such As Parking, Transportation To And From Work-Commuting Assistance, Free Entrance To Museums And Archaeological Places, Tickets To Entertainment Events

Among The Benefits Recognized By All The Participants Were Also The **Pension Programs. Job Security**, As A Benefit, Mentioned, As It Was Expected, Only By The Permanent Employees.

Learning & Development

Regarding **Education**, Most Of The Permanent Employees Recognized The Training Opportunities They Have To Acquire New Knowledge And Develop Skills, Whereas The Employee Of The Hospital School Highlighted That No Education Is Provided Regarding Hospital Schools:

"There Is No Education For Hospital Schools"

Among The Participants With Temporary Employment Relationship There Was A General Agreement That Not Enough Training Opportunities Exist For Them And In Some Cases This Only Happens After The Employees' Personal Initiative. The Development Of Work And Personal Skills And Knowledge With The Help Of The Boss And Colleagues (**Workplace Learning & Development**) Was Acknowledged By All The Participants As A Reward. With Reference To The **Performance Management** Some Participants Emphasized The Need For Specific Performance Goals And Expected Results, And Others The Significant Factor Of Constructive Feedback. It Is Worth Noting That In Many Cases The Available Resources (Time, Knowledge, Skills, Human Resources, Physical And Technical Means) Are Not Enough For The Best Performance Management. In Relation To **Career Development**, It Was Acknowledged That There Are Career Prospects And Opportunities For Career Development In Public Special Education But These Are For Few Available Positions And Not For The Temporary Staff.

Work Environment

What The Findings Suggest Is That The Rewards Which Are Related To The Work Environment Vary According To The School, Where The Special Education Staff Will Be Assigned To Each Year. There Was A Consensus Among Participants That There Is A Differentiation From School To School, From Year To Year. Among The Rewards Mentioned In Relation With The Work Environment Were The Following:

Core Values: They Include The Employment In An Organization With A Distinct And Good Profile And The Identification With The Organization's Values

Leadership: It Includes A Supportive And A Flexible Leadership That Inspires Trust And Faith To Others With The Power And Enthusiasm Of A Vision, A Leadership That Gives A Sense Of Purpose And Pride, A Leadership That Manages Through Goals And Offers Constructive Feedback On The Results Of The Work. Some Examples Are Given Below:

“The Director Plays A Very Important Role...The Director Should Also Be A Leader. It Is So Difficult For Someone To Be A Good Director And Inspire The Whole Staff”

“The Person Always Plays A Role. There Are Directors Who Have No Ears To Hear, There Are Others Who Have”

Relationship With Colleagues: It Includes A Good Cooperation With Colleagues, A Constructive Social Relationship With Colleagues, An Environment Where Trust, Friendship, Teamwork, Loyalty Exist With Respect To An Environment Where Trust, Friendship, Teamwork, Loyalty Exist, The Majority Of The Participants Referred That It Can't Be Found Totally. One Of Them Distinctively Mentioned:

“It Does Not Exist In All Levels. I Believe That This Could Have Been A Very Important Incentive”

Autonomy And Initiative: It Includes The Flexible Work Scheduling, The Freedom Of Movement In The Workplace, The Adequate Control Of The Job, The Sense Of Responsibility Of Work Results

Recognition And Reward: It Includes The Recognition And The Reward Of The Employee As A Useful And Valuable Contributor, The Recognition Of Good Performance And Offer

Employee Voice And Participation: It Includes The Provision Of Opportunities For Participation In Decision-Making Processes, The Employee Voice On How To Perform The Work

Two Significant Factors Mentioned That May Affect The Employees' Voice In The Organization. These Were The Work Experience And The Employment Relationship (Temporary And Permanent). An Example Can Be Found In The Following Statement Of A Participant With Temporary Employment Relationship:

“I Want To Emphasize Something That I Feel Very Strongly. When You Are One Year In This School And One Year In Another You Can't Have Voice. Now That I Am 5 Years In The Current School, I've Started To Speak And To Be Heard. In The First Year I Did Not Speak For Myself, In The Second Year I Was Speaking Just A Little Bit More ...In 5 Years I Can Speak And I Feel Confident. But They Do Not Easily Give Voice To A Temporary Employee”

Interesting And With Variety Work: It Includes An Interesting And Important Work, A Work With Variety And Many Challenges, A Work That Requires Sufficient Attention And Effort, A Meaningful Work

Safe And Enjoyable Work Environment: It Includes A Safe And A Pleasant Work Environment That Minimizes Work-Related Stress And Pressure. A Good Example Is Given Below:

“I'm In A Kindergarten And It's Really Very Pleasant. I Have A Lot Of Fun”

Somewhat In Contrast, The Employee Of The Hospital School Questioned The Existence Of An Enjoyable Work Environment As A Reward:

“The Hospital Environment Is Not Pleasant, Not At All Pleasant, It Is Arduous”

d. Rewards Not Included In The Conceptual Framework

Through The Focus Group, Two Rewards That Were Not Included In The Conceptual Framework Were Determined. Both Of Them Were Related To The Work Environment And Are Described Below.

Psychological And Emotional Rewards: These Are Rewards With Respect To The Relationship With Children And Parents And Include The Contact With The Child (For Example A Smile, A Hug), The Child Development, The Moral Satisfaction For The Provided Help To Children And Parents

Collectivity: It Includes Frequent And Diffused Collective Processes Of Pedagogical Practices And Pedagogical Policy

The Importance Of These Rewards Was Highlighted By The Majority Of The Participants.

e. Important Rewards For Motivation

Through The Focus Group, The Rewards That Were Important For Them And Their Motivation Were Identified. The Findings Support The Notion That The Aspects Of Conceptual Research Framework That Concern The Work Environment Are The Rewards Which Are The Most Important For Their Motivation, Followed By Those That Concern Learning And Development And Benefits (Table 1).

Table 1: Rewards In Order Of Priority

Total Reward Aspects	Rewards In Order Of Priority	Illustrations
Work Environment	Psychological And Emotional Rewards	<i>"Relationship With Children And Parents"</i> (4 Participants) <i>"Child Development"</i> (4 Participants) <i>"Moral Satisfaction"</i> (4 Participants) <i>"A Smile, A Hug"</i> (3 Participants)
	Safe And Enjoyable Work Environment	<i>"Pleasant Work Environment"</i> (1 Participant) <i>"Enjoyable Environment-Pleasant"</i> (1 Participant)
	Relationship With Colleagues	<i>"Collaboration With Active And Hearty Colleagues"</i> (2 Participants)
	Collectivity	<i>"Frequent And Diffused Collective Processes Of Pedagogical Practices And Pedagogical Policy"</i> (1 Participant)
	Recognition And Reward	<i>"Employee's Work Recognition"</i> (1 Participant)
Learning & Development	Performance Management	<i>"Available Resources"</i> (2 Participants)
	Education	<i>"Educational Opportunities"</i> (1 Participant)
	Workplace Learning And Development	<i>"Workplace Learning And Development: Training Policies For Hospital Schools"</i> (1 Participant)
Benefits	Job Security	<i>"Stable Work Environment"</i> (2 Participants) <i>"Permanent Employment Relationship"</i> (1 Participant) <i>"Job Security"</i> (1 Participant)
	Pay For Time Not Worked	<i>"Work Benefits (Pay For Time Not Worked, For Example Sick Leave)"</i> (1 Participant)
Pay	Base Pay	<i>"Salary"</i> (1 Participant)

	Contingent Pay	<i>"Maybe An Allowance For The Summer, When We Do Not Work" (1 Participant)</i>
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Regarding Work Environment The Most Important Rewards For Participants Motivation Had To Do With The Psychological And Emotional Rewards, The Safe And Enjoyable Work Environment, The Relationship With Colleagues, The Collectivity, The Recognition And Reward. With Respect To Learning And Development The Most Important Rewards For Their Motivation Were Related To The Performance Management, The Education And The Workplace Learning And Development. As Far As Concerns The Benefits, They Had To Do With The Job Security And The Perks. The Less Important Rewards Were Those Connected To Pay, Such As The Base Pay And The Contingent Pay.

f. Focus Group Clues

The Focus Group Finished By Asking Each Participant To Reflect On What They Considered To Be The Most Important Issue That Had Emerged From The Discussion. These Clues Can Be Summarized, According To The Frequency That Were Mentioned By The Participants, As Follows: The Very Positive Experience Of Participating In The Focus Group, The Passion, The Devotion And The Conscious Choice Of Special Education, The Difficulties Of Working In Special Education, The Consistency Of Views And Values For Special Education Staff.

g. Motivation At Work Scale (MAWS)

The Descriptive Statistics (Minimum, Maximum, Mean And Standard Deviation) For Each Subscale Of MAWS Can Be Found In Table 2. According To The Results, Intrinsic Motivation And Identified Regulation Have Scored High, Whereas Introjected And External Regulation Proved To Be Less Important For The Participants, Regarding The Reasons They Are Doing The Specific Job. Specifically, Intrinsic Motivation Of The Participants Proved To Be Almost Very Strong (Mean 5.9), The Identified Regulation Was Between Strong And Very Strong (Mean 5.3), Whereas Identified And External Regulation Were Found To Be Between Low And Moderate (Mean 3.42 And 3.47 Respectively). Regarding The Total Descriptive Statistics Of The 12 Statements Of MAWS For All The Participants, The Mean Was 4.55 (Between Moderate And Strong), With Minimum And Maximum 3.5 And 5.25 Respectively, While The Standard Deviation Was .60.

Table 2: Descriptive Statistics For Each Subscale Of MAWS

	N	Minimum	Maximum	Mean	Std. Deviation
Intrinsic Motivation	7	5.33	6.67	5.9048	.49868
Identified Regulation	7	3.67	6.33	5.3810	.84828
Introjected Regulation	7	2.00	5.00	3.4286	1.18187
External Regulation	7	2.33	4.00	3.4762	.71640

Below Are Presented The Participants Answers In The Four Subscales Of MAWS: Intrinsic Motivation, Identified Regulation, Introjected Regulation And External Regulation. The Answers To The 12 Statements (3 For Each Subscale) Ranged From 1 (Not At All) To 7 (Exactly) Concerning The Degree That The Statements Presently Correspond To The Reasons They Are Doing This Specific Job.

Intrinsic Motivation

The First Three Statements Of The MAWS Concerned Intrinsic Motivation:

<i>Intrinsic 1</i>	Because I Enjoy This Work Very Much
<i>Intrinsic 2</i>	Because I Have Fun Doing My Job
<i>Intrinsic 3</i>	For The Moments Of Pleasure That This Job Brings Me

The Answers Varied From Strongly (5) To Exactly (7). The Majority Of The Participants Chose Very Strongly (5) For These Statements, Followed By Strong (5) And Exactly (7). The First Statement (*Intrinsic 1*) Has Scored Higher (Mean 6.28) Than The Other 2 Statements Of The Subscale.

Identified Regulation

The Statements From 4 To 6 Concerned Identified Regulation:

<i>Identified 1</i>	I Choose This Job Because It Allows Me To Reach My Life Goals
<i>Identified 2</i>	Because This Job Fulfills My Career Plans
<i>Identified 3</i>	Because This Job Fits My Personal Values

The Answers In This Subscale Varied From Very Little (2) To Exactly (7). The Majority Of The Participants Answered Very Strongly (6), Followed By Strongly (5). The Participant That Answered Very Little (2) And Little (3) In The Statements 4 (*Identified 1*) And 5 (*Identified 2*) Respectively, Belonged To The Special Teaching Staff Who, According The Results, Does Not Have Many Opportunities For Education And Development. The Sixth Statement (*Identified 3*) Has Scored Higher (Mean 6.14) Than The Other 2 Statements Of The Subscale.

Introjected Regulation

The Statements From 7 To 9 Concerned Introjected Regulation:

<i>Introjected 1</i>	Because I Have To Be The Best In My Job, I Have To Be A "Winner"
<i>Introjected 2</i>	Because My Work Is My Life And I Don't Want To Fail
<i>Introjected 3</i>	Because My Reputation Depends On It

In This Subscale A Greater Dispersion Is Found In The Degree That The Statements Presently Correspond To The Reasons They Are Doing This Specific Job. The Answers Varied From Not At All (1) To Very Strongly (6), Whereas No Exactly (7) Answer Was Given. The Majority Of The Participants Answered Moderately (4) In The Statements Of This Subscale. The Eighth Statement (*Introjected 2*) Has Scored Higher (Mean 4) Than The Other 2 Statements Of The Subscale.

External Regulation

The Statements From 10 To 12 Concerned External Regulation:

<i>External 1</i>	Because This Job Affords Me A Certain Standard Of Living
<i>External 2</i>	Because It Allows Me To Make A Lot Of Money
<i>External 3</i>	I Do This Job For The Paycheck

In This Subscale Likewise, A Great Dispersion Is Found In The Degree That The Statements Presently Correspond To The Reasons They Are Doing This Specific Job. The Answers Varied From Not At All (1) To Strongly (5), Whereas No Very Strongly (6) And No Exactly (7) Answer Were Given. The Majority Of The Participants Answered Moderately (4) In The Statements Of This Subscale. The Tenth Statement (*External 1*) Has Scored Higher (Mean 4.43) Than The Other 2 Statements Of The Subscale.

MAWS Results Correlation With Focus Group Results

According To The Participants Statements It Is Not Very Easy To Be Motivated In Public Special Education, Which Is Strengthened By An Almost Moderate Mean (4,55) In MAWS Total Results For Their Motivation. Participants Are Mainly Intrinsically Motivated By Their Passion, Their Good Mood And Their Devotion To Special Education And The Choice Of The Profession Came Consciously. According To The MAWS Results, Intrinsic Motivation, Which Has To Do With A Likeable And Entertaining Job With Moments Of Joy, Was Strong For All The Participants (Mean: 5,9). Financial Incentives Were Not Included To The Factors That Can Affect Their Motivation, Something That Is

Confirmed By The Low Mean Score (3,47) In The Subscale Of External Regulation Which Had To Do With Money And Standard Of Living.

Comparing What Motivated Them To Choose The Specific Profession And What Now Motivates Them To Do The Job They Are Doing Significant, Similarities Can Also Be Found. These Similarities Can Be Identified Between The Participants' Answers About The Motives Of Profession Choice (The Passion, The Good Mood And The Devotion To Special Education) And Their Answers For The Intrinsic Motivation Subscale. Besides, A likeness Can Be Identified Between Their Answers For The Identified Regulation Subscale And Other Motives Mentioned Such As The Conscious Choice Of The Profession, The Career Plans And The Personal Values. This Is Reinforced By The Fact That For All The Participants The Subscales Of Intrinsic Motivation And Identified Regulation Have Scored High. The Latter Can Be Also Compared To The Motives For Profession Choice.

From The Comparison Of MAWS Results With The Important Rewards For Motivation, It Can Be Inferred That The Most Important Rewards For Their Motivation Had Mainly To Do With Their Intrinsic Motivation And Secondly With Identified Regulation. It Is Worth Noting That The Few Rewards That Were Related With External Regulation (Pay) Were Mentioned By The Participants With Temporary Employment Relationship.

Conclusions

This Research Offers An Important Window On The Special Education Staff' Perspectives On Rewards And Motivation At Work Environment. In National Level There Has Not Been Any Similar Study In The Field Of Special Education. The Total Rewards Framework Proved To Be Appropriate And Useful In Understanding The Perspectives Of Special Education Staff On Rewards. Nevertheless, It Is Proposed That A Revised Version Of The Conceptual Framework, That Would Include The Two Rewards That Emerged From The Focus Group Meeting (Psychological And Emotional Rewards, And Collectivity), Should Be Used In Future Studies For Special Education Staff Rewards. Furthermore, The Findings Of This Study Advanced Our Knowledge Of Rewards Provided And Highlighted The Rewards That Can Mainly Affect Their Motivation. In Line With The Results, The Relational Rewards That Concerned Work Environment And Learning And Development Were The Most Important For The Motivation For Both Permanent And Temporary Special Education Employees. The School Environment And The Working Conditions Were Also Very Important Rewards For Other Teachers Of Public Sector In Australia (Ashiedu & Scott-Ladd, 2012). A Dynamic Work Environment That Fosters Creativity Was Highly Valued As An Important Reward In Another Study (Taylor Et Al., 2014). Moreover, The Reward System And The Training Highly Affect Teachers' Motivation In Public Secondary Schools, While The School Environment Should Be Conducive For Them To Ensure Their Motivation, By Providing Them With Adequate Teaching And Learning Resources (Nyakundi, 2012).

Without Exception, All The Participants Were Primary Intrinsically Motivated, And Psychological And Emotional Rewards, Such As Their Relationship With Children And Parents, The Child Development And The Moral Satisfaction For The Help They Provide To Children And Parents, Seem To Be For The Majority Of Them Of Great Importance. Findings Of Two Previous Studies Indicated That Intrinsic Rewards Were Key Factors In Contributing To Teacher Retention And Longevity Within The Profession (Ashiedu & Scott-Ladd, 2012; Taylor Et Al., 2014). In One Of The Previous Mentioned Studies (Ashiedu & Scott-Ladd, 2012) Most Public Sector Teachers, That Participated, Cited Intrinsic Motivators As The Reasons For Joining The Teaching Profession. Moreover, According To Plihal (1982), The Enjoyment Of Elementary School Teachers' Interaction With Students And The Feeling Of Being Instrumental In Students Accomplishments Were The Two Major Types Of Intrinsic Rewards. Intrinsic Rewards, Such As The Fulfillment Of Having Successfully Contributed To Child's Development, Were Also More Important Than The Extrinsic Rewards In Another Study For Teachers (Dilworth, 1991). Additionally, As Stated By Taylor Et Al. (2014) Teachers Had An Innate Desire To Help Children In Their Overall Development And Impact Their Lives In A Positive Way, And They Valued Building Relationships And Making A Difference In The Lives Of Their Students As The Main Rewards Of Teaching.

Financial Incentives Were Not Included To The Factors That Could Affect Their Motivation And Were Not Among The Most Important Rewards For Their Motivation, Whereas A Low Mean Score Was Found In The Subscale Of External Regulation In MAWS, Which Had To Do With Money And Standard Of Living. As Reported By Pinto (2011) There Is No Direct Connection Between Pay And Motivation And As Stated By Dilworth (1991) Teachers Don't Take So Much Satisfaction From The Extrinsic Rewards Such As Compensation And Position.

Finally, The Results Shed Light On The Rewards That The Temporary Staff Can't Actually Enjoy. These Were Not Only Relational Rewards Such As Education, Workplace Learning And Development, And Employee Voice And Participation, But Transactional As Well, Such As Benefits (Sick Leave) And Job Security. Job Security Was The One That Can Be Logically Justified Given The Permanent Nature Of Their Employment Relationship.

The Usefulness Of The Results Lies In The Fact That The Holistic Study Of The Rewards Provided And Their Importance For Motivation Can Give Feedback On Human Resource Management Decision Making Centers, Trade Union Representation, Employers And The Organization Of Curricula And Lifelong Learning. The Study Can, Also, Provide A Perspective For Future Research Through Total Reward Model Long-Term Exploitation.

The Focus Group Composition Proved To Be Satisfactory To Capture The Perceptions, Feelings And Thoughts Of Special Education Staff About Motivation And Rewards In The Work Environment And Satisfied The Study Aims. The Constraint On The Variety Of Specialties Participation Of Special Teaching Staff Could Be Considered As A Limitation Of This Study.

References

- Ali, R., & Ahmed, M. S. (2009). The Impact Of Reward And Recognition Programs On Employee's Motivation And Satisfaction: An Empirical Study. *International Review Of Business Research Papers*, 5(4), 270–279.
- Allen, D. G., Shore, L. M., & Griffeth, R. W. (2003). The Role Of Perceived Organizational Support And Supportive Human Resource Practices In The Turnover Process. *Journal Of Management*, 29(1), 99–118.
- Armstrong, M. (2009). *Armstrong's Handbook Of Human Resource Management Practice* (11th Ed). London: Kogan Page.
- Armstrong, M., & Brown, D. (2009). *Strategic Reward: Implementing More Effective Reward Management*. London: Kogan Page.
- Armstrong, M., & Cummins, A. (2011). *The Reward Management Toolkit: A Step-By-Step Guide To Designing And Delivering Pay And Benefits*. London: Kogan Page.
- Ashiedu, J. A., & Scott-Ladd, B. D. (2012). Understanding Teacher Attraction And Retention Drivers: Addressing Teacher Shortages. *Australian Journal Of Teacher Education (Online)*, 37(11), 23.
- Baron, R. A. (1991). Motivation In Work Settings: Reflections On The Core Of Organizational Research. *Motivation And Emotion*, 15(1), 1–8. <https://doi.org/10.1007/BF00991472>
- Deci, E. L. (1971). Effects Of Externally Mediated Rewards On Intrinsic Motivation. *Journal Of Personality And Social Psychology*, 18(1), 105–115.
- Dilworth, M. E. (1991). *Motivation, Rewards, And Incentives. Trends And Issues Paper No. 3*. ERIC Clearinghouse On Teacher Education, Washington, DC. Retrieved From <https://eric.ed.gov/?id=ED330692>
- Evans, M. G. (1970). The Effects Of Supervisory Behavior On The Path-Goal Relationship. *Organizational Behavior And Human Performance*, 5(3), 277–298. [https://doi.org/10.1016/0030-5073\(70\)90021-8](https://doi.org/10.1016/0030-5073(70)90021-8)
- Fern, E. F. (1982). The Use Of Focus Groups For Idea Generation: The Effects Of Group Size, Acquaintanceship, And Moderator On Response Quantity And Quality. *Journal Of Marketing Research*, 19(1), 1–13. <https://doi.org/10.2307/3151525>
- Gagné, M., & Deci, E. L. (2005). Self-Determination Theory And Work Motivation. *Journal Of Organizational Behavior*, 26(4), 331–362. <https://doi.org/10.1002/job.322>
- Gagné, M., Forest, J., Gilbert, M.-H., Aubé, C., Morin, E., & Malorni, A. (2010). The Motivation At Work Scale: Validation Evidence In Two Languages. *Educational And Psychological Measurement*, 70(4), 628–646. <https://doi.org/10.1177/0013164409355698>

- Gkorezis, P., & Petridou, E. (2012). The Effect Of Extrinsic Rewards On Public And Private Sector Employees' Psychological Empowerment: A Comparative Approach. *The International Journal Of Human Resource Management*, 23(17), 3596–3612. <https://doi.org/10.1080/09585192.2011.639025>
- Harpaz, I. (1990). The Importance Of Work Goals: An International Perspective. *Journal Of International Business Studies*, 21(1), 75–93.
- Henderson, R. I. (2000). *Compensation Management In A Knowledge-Based World* (8th Ed). Upper Saddle River, NJ: Prentice Hall.
- Jurkiewicz, C. L., Massey, T. K., & Brown, R. G. (1998). Motivation In Public And Private Organizations: A Comparative Study. *Public Productivity & Management Review*, 21(3), 230–250. <https://doi.org/10.2307/3380856>
- Kim, S. (2005). Gender Differences In The Job Satisfaction Of Public Employees: A Study Of Seoul Metropolitan Government, Korea. *Sex Roles*, 52(9–10), 667–681. <https://doi.org/10.1007/S11199-005-3734-6>
- Kitzinger, J. (1994). The Methodology Of Focus Groups: The Importance Of Interaction Between Research Participants. *Sociology Of Health & Illness*, 16(1), 103–121. <https://doi.org/10.1111/1467-9566.Ep11347023>
- Krueger, R. A., & Casey, M. A. (2000). *Focus Groups: A Practical Guide For Applied Research* (3rd Ed). Thousand Oaks, Calif: Sage Publications.
- Kuznia, A. (2008). *Designing A Variable Compensation Plan For Direct Support Professionals In The Field Of Developmental Disabilities* (Phd Thesis). The College Of St. Scholastica.
- Manas, T. M., & Graham, M. D. (2003). *Creating A Total Rewards Strategy A Toolkit For Designing Business-Based Plans*. New York: American Management Association.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis*. Thousand Oaks: Sage.
- Milne, P. (2007). Motivation, Incentives And Organisational Culture. *Journal Of Knowledge Management*, 11(6), 28–38. <https://doi.org/10.1108/13673270710832145>
- Morgan, D. L. (1997). *Focus Groups As Qualitative Research*. Thousand Oaks, Calif.: Sage Publ.
- Nyakundi, T. K. (2012). *Factors Affecting Teacher Motivation In Public Secondary Schools. In Thika West District, Kiambu County* (Phd Thesis).
- Pinto, E. P. (2011). The Influence Of Wage On Motivation And Satisfaction. *The International Business & Economics Research Journal; Littleton*, 10(9), 81–91.
- Pitts, C. (1995). *Motivating Your Organization: Achieving Business Success Through Reward And Recognition*. London; New York: Mcgraw-Hill Book Co.
- Plihal, J. (1982). Types Of Intrinsic Rewards Of Teaching And Their Relation To Teacher Characteristics And Variables In The Work Setting. Presented At The Annual Meeting Of The American Educational Research Association, New York.
- Prenzno, N., & Griffith, D. (2000). *Total Rewards: From Strategy To Implementation*. Scottsdale, AZ: Worldatwork.
- Reeve, J., & Deci, E. L. (1996). Elements Of The Competitive Situation That Affect Intrinsic Motivation. *Personality And Social Psychology Bulletin*, 22(1), 24–33.
- Richer, S. F., & Vallerand, R. J. (1995). Supervisors' Interactional Styles And Subordinates' Intrinsic And Extrinsic Motivation. *The Journal Of Social Psychology*, 135(6), 707–722.
- Robbins, S. P., & Judge, T. (2007). *Organizational Behavior* (12th Ed). Upper Saddle River, N.J: Pearson/Prentice Hall.

- Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory And The Facilitation Of Intrinsic Motivation, Social Development, And Well-Being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Storey, J. (Ed.). (1995). *Human Resource Management: A Critical Text*. London: Routledge.
- Taylor, C., Mcnaney-Funk, C., Jardine, D., Lehman, G., & Fok-Chan, E. (2014). *Teacher Rewards: Going Beyond The Stickers--Moving Beyond Extrinsic Motivation*. Retrieved From <https://eric.ed.gov/?id=ED546455>
- Wiley, C. (1997). What Motivates Employees According To Over 40 Years Of Motivation Surveys. *International Journal Of Manpower*, 18(3), 263–280. <https://doi.org/10.1108/01437729710169373>
- Zingheim, P. K., & Schuster, J. R. (2000). Total Rewards For New And Old Economy Companies. *Compensation & Benefits Review*, 32(6), 20–23. <https://doi.org/10.1177/08863680022098091>
- Zuckerman, M., Porac, J., Lathin, D., & Deci, E. L. (1978). On The Importance Of Self-Determination For Intrinsically-Motivated Behavior. *Personality And Social Psychology Bulletin*, 4(3), 443–446.

Motivational Self-Talk And Mental Toughness Relationship In Athletes: Mediator Role Of Friend Support

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Abstract

The purpose of this study is to examine the mediating role of friend support in relation to motivational self-talk and mental toughness in athletes. The study group consisted of a total of 200 athletes (agemean: 21,08 + 1,44), 113 women (Agemean: 20,47 + 1,61) and 87 men (Agemean: 21,86 + 3,96). The subscales of friendship support, mental toughness scale, subscale of multidimensional social support scale and self-talk Scale's motivational self-talk subscale were used for the collection of research data. Pearson correlation analysis was used first to determine the relationships between the variables, PROCESS macro regression analysis was used to determine the influence of friend support between motivational self-talk and mental toughness in the analysis process of the data. Analyzes were performed at 95% confidence interval and the Sobel z test was used to test whether the mediation was meaningful. SPSS 22.00 package program was used for the analysis of the research. According to research findings, motivational self-talk levels of athletes were found to be positively linear with both friendship support and mental toughness levels. In addition, according to the findings of friendship support, which is the basic hypothesis of the research, about the mediator role of friend support in relation to motivational self-talk and mental toughness, it has been found that the positive effect of motivational self-talk on mental toughness increases with the support of friends. As a result, it can be concluded that the athletic mental toughness is positively correlated with the motivational self-talk levels, friend support can be used to increase motivational self-talk effect in terms of mental toughness performance.

Keywords: *Motivational Self Talk, Mental Toughness, friend support, Athlete*

Introduction

Mental toughness seems to be one of the most significant psychological constructs related to good sports performance, and therefore in recent research, it has become a focus of attention (Bull et al., 2005, Connaughton et al., 2008, Gucciardi et al., 2009, Jones et al., 2007). Although initial research on mental toughness suffers from some natural weaknesses, recent researches are trying to articulate the conceptual concept of mental toughness (Crust, 2008, Jones et al., 2007). Even though some conceptual differences remain unclear, there seems to be a general idea that mental toughness is a multidimensional structure (Gucciardi et al., 2009, Sheard, 2009). Among the basic qualities that characterize mental toughness are many situations, such as dealing with pressure and troubles, getting rid of failures, insisting or being persistent, being insensitive or having an unwavering grasp on self-control (Crust, 2008).

To date, most of the research on mental toughness has been qualitative and aims to clarify some of the early conceptual uncertainties. While qualitative studies lead to a better understanding of what is mental toughness, most of the reported related variables have not yet been supported by the quantitative methods. Moreover, it can be said that the primary focus given to qualitative research is causing that the development of reliable and valid measures of mental toughness is not given enough importance (Sheard, 2009). In the studies on the level of mental toughness, the variables such as high-intensity exercise (Clough et al., 2002), pain tolerance / physical endurance (Crust & Clough, 2005), sports injury rehabilitation (Levy, Polman, Clough, Marchant and Earle, 2006), optimism and coping (Nicholls, Polman, Levy and Backhouse, 2008), Self-talk (Bayköse et al., 2017), and life satisfaction (Şahin et al., 2017) are discussed.

When it is thought that the theoretical foundations of the concept of mental toughness are based on psychological toughness bases (Kobasa, Maddi, and Kahn, 1982), it has been suggested that there are other factors affecting

psychological toughness in the environment and society in which the individual lives. The presence of an adult providing support and social support outside the home is a protective factor for children and adolescents at high risk (Werner and Smith, 1982; 1992; Benard, 1991; Grizenko and Pawliuk, 1994; Gordon and Song, 1994; Gilligan, 2000; Smokowski, Reynolds and Bezruczko, 2000). In this direction, it can be predicted that friend support is related to mental toughness.

In a similar way to this information and findings, it is thought in our research findings that friend support is also one of the protective or supportive factors in the increase of motivational self-talk which is a positive psychological skill about mental toughness.

In this context, our research hypothesis is defined as follows; H1: Friendship support plays a determining role between the motivational self-talk and the mental toughness in the sportsmen.

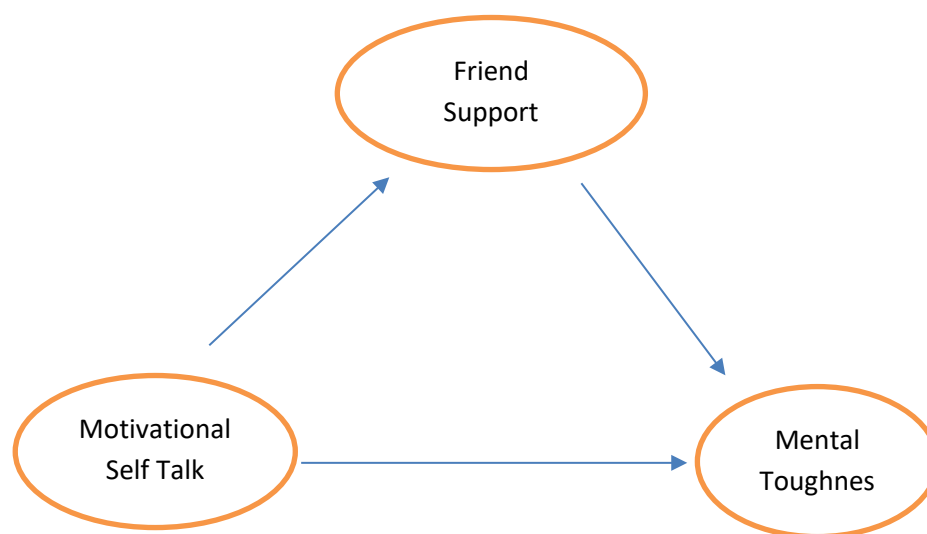
The research methodology of the research hypothesis, which has been established within the main objective of the research, is explained in detail below.

Method

Research Model

This study is a survey of relational screening types designed to examine the intermediary role of perceived friend support levels between motivational self-talk and mental toughness. Karasar (2009) defined relational screening search models as “research models aimed at determining the presence and degree of change between two or more variables”. This model examines the mediating role of friend support levels in the relation between athletes' motivational self-talk and mental toughness levels. Within the scope of the research, hypothesis models are given below;

Figure 1: *Research Model*



Research group

The research group consists of a total of 200 (Age mean: 21,08 + 1,44) athletes in active sports life, 113 women (Age mean: 20,47 + 1,61), and 87 men (Age mean: 21,86 + 3,96).

Data collection tools

For the collection of research data, the subscale of friendship support of the Multidimensional Scale of Social Support, the Mental Toughness Scale, and the Self-Talk Scale's motivational self-talk subscale was used. In addition, personal information about the athletes was obtained through the personal information form created by the researchers.

Multidimensional Scale of Social Support

Multidimensional Scale of Perceived Social Support (MSPSS) is a recognized social support measure developed by Zimet, Dahlem, Zimet et al., (1988) in the United States and the adaptation, validity and reliability studies in

our country are carried out by Eker and Arkar (1995), Çakır and Palabıyık (1997), Eker, Arkar and Yıldız (2001). MSPSS is a user-friendly, 12-item measure that evaluates the adequacy of social support from three different sources (family, friends and a private person) in a subjective way. It includes three groups of sources of social support, each consisting of four items. Suggested subscale structure includes support from "family", "friend" and "special person". Factor analysis supports the three-factor structure (Kazarian and McCabe, 1991; Zimet et al., 1988; Eker and Arkar, 1995). Internal consistency and test-retest correlations of the scale and subscales are adequate. Three groups forming the sample of the Eker et al's study (2001) consists of a group of 150 people of psychiatry, surgical patients, and regular people. The reliability (Cronbach's Alpha) of the entire sample, MSPSS, was calculated as $\alpha = .89$. In the same study, the internal consistencies of the MSPSS and its subscales were found to be acceptable. Each item on the scale uses a 7-point scale ranging between Absolutely no = 1, Absolutely yes = 7. In the study, subscale scores were obtained by summing the scores of the four items in each subscale, and the total score of the scale was obtained by summing all subscale scores. The high score obtained indicates that perceived social support level is high.

Sports Mental Toughness Questionnaire (SMTQ)

In this study, the Sports Mental Toughness Questionnaire developed by Sheard et al. (2009) was used for research purpose. The adaptation of the Sports Mental Toughness Questionnaire to Turkish culture was conducted by Altıntaş and Koruç (2016). The Sports Mental Toughness Questionnaire is a measure of three subscales (Confidence, Control, and Constancy) consisting of a total of 14 items. Total scale score was used in the study. The scale has a 4-point evaluation system. The lowest score that can be earned from the scale is 14, while the highest score is 56.

Self-Talk Questionnaire (STQ)

In this study, Self-Talk Questionnaire developed by Zervas et al. (2007) was used for research purpose. The adaptation of the Self-Talk Questionnaire to Turkish culture was carried out by Engür (2011). The Self-Talk Questionnaire is a measure of two sub-scales (Motivational and Cognitive) consisting of a total of 11 items. Only the motivational self-talk subscale was used in the study. There is a total of 7 items on the motivational self-talk subscale. The scale has a 5-point evaluation system. The lowest score that can be taken from the scale is 7 while the highest score is 35.

Personal information form

In the personal information form created by the researcher, questions were selected to obtain information on the age and gender of the athletes participating in the survey.

Data Analysis

In the data analysis, Pearson correlation analysis was used first to determine the interrelationships of the variables with each other, and PROCESS macro regression analysis was used to determine the influence of friend support on motivational self-talk and mental toughness.

Findings

Table 1: The relationship between friend support, motivational self-talk, and mental toughness

		Motivational Self Talk	Mental Toughnes	Friend Support
Motivational Self Talk	Pearson Correlation	1		
	p			
	n	200		
Mental Toughness	Pearson Correlation	,577**	1	
	p	,000		
	n	200	200	
Friend Support	Pearson Correlation	,219**	,276**	1
	p	,004	,001	
	n	200	200	200

** . Correlation is significant at the 0.01 level (2-tailed).

When Table 1 was examined, it was found that the relationship between friend support and motivational self-talk ($r: .219$) was significant ($p < 0.05$), that the relationship between friend support and mental toughness ($r: .276$) was significant, and that the relationship between mental toughness and motivational self-talk ($r: .577$) was significant ($p < 0.05$).

Research Model

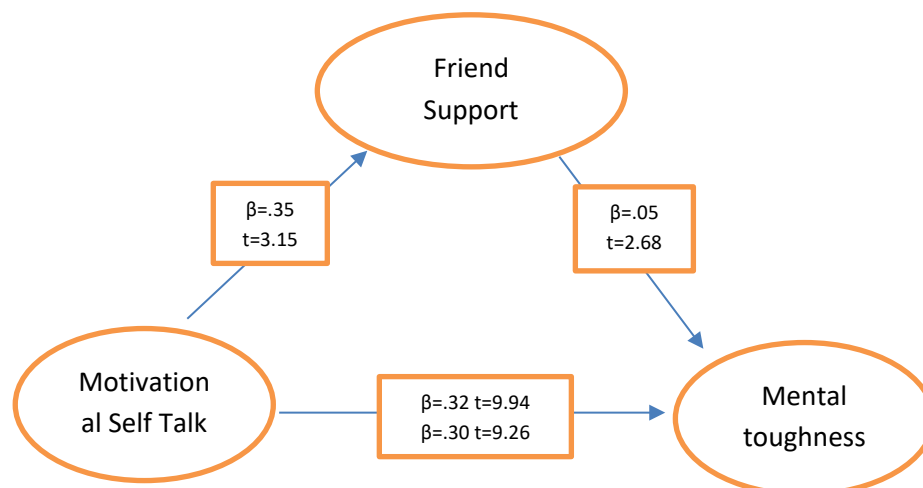


Figure 2: The Mediating Role of the Athletes' Perceived Levels of Friend Support in the Relationship Between Motivational Self-talk and Mental Toughness

Determining that there is a meaningful and positive relationship between motivational self-talk and mental toughness enables the testing of the predicted intermediary relationship. PROCESS macro regression analysis was conducted to test whether friend support played a mediating role between motivational self-talk and mental toughness. In the first step of PROCESS macro regression analysis, only the predictive effect of motivational self-talk on friend support was examined, and it is observed that motivational self-talk ($\beta=.35$, $t= 3.15$, $p<.05$) reveals 5% of the total variance for friend support ($R=.22$, $R^2=.05$, $F(1,877) = 9.93$, $p<.05$).

To determine whether friend support plays a mediating role between the motivational self-talk and mental toughness, the predictive influence of motivational self-talk on mental toughness has been investigated in the second stage of PROCESS macro-regression analysis. When findings were examined, it is seen that self-talk ($\beta = .12$, $t = 2.94$, $p < .05$) explains 35% of the level of mental toughness ($R=.60$, $R^2=.35$, $F(0.155) = 9.27$, $p<.05$).

In the third step of the PROCESS macro-regression analysis, to determine whether friend support plays a mediating role between motivational self-talk and mental toughness, friend support added in the PROCESS macro-regression analysis and it was found to contribute 5.4% to the explanation of mental toughness. In this respect, it was found that the friend support explained 36% of the total variance in the determination of mental toughness through friend support ($R = .60$, $R^2 = .36$, $F(0.155) = 54.616$, $p < .05$). In the third stage of the analysis, the predictive effect of self-talk on mental endurance decreased ($\beta = .30$, $t = 9.26$, $p < .05$). Therefore, it can be said that friend support ($\beta = .22$, $t = -6.73$, $p < .05$) is fully mediator in this relationship. The results obtained from the Sobel z test ($Z = 1.99$, $p < .05$) to determine whether the mediating role of friend support show that this mediating relationship is statistically significant.

Table 3: Findings regarding the direct and indirect effect of friend support on mental toughness

Direct Effect			Effect	S. E	LLCI	ULCI	t	p
Motivational Self Talk	Mental Toughness		.303	.0327	.2386	.3676	9.268	.000
Indirect Effect			Effect	S. E	LLCI	ULCI	t	p
Motivational Self Talk	Friend Support	Mental Toughness	.0192	.0085	.0064	.0414	9.95	.000
Total Effect			.322	.0324	.2584	.3862		
Normal Theory Test for indirect effect								
Effect: .0192		s.e: .0097		z: 1.9878		p: .0468		

Table 5 shows that the total effect of motivational self-talk on the mental endurance (direct effect + indirect effect) is positive ($\beta: 0.303 + 0.0192 = 0.322$) and statistically significant ($p = 0,000$). The Z score (1.9878) for this model is larger than 1.96 and meaningful, so it can be said that the mediator effect exists. Moving from this finding, the hypothesis H1 (friend support has an intermediary role in the influence of motivational self-talk on mental toughness) has been accepted.

Conclusions

This study was a survey of relational screening types designed to examine the intermediary role of perceived friend support levels between motivational self-talk and mental toughness. A total of 200 athletes participated voluntarily in the survey, 113 men and 87 men, who were active in their sports lives. After the research, it was determined that the relationship between friendship support and motivational self-talk was meaningful, the relationship between friend support and mental toughness was meaningful. It was also determined that the relationship between mental toughness and motivational self-talk is significant. When this type of information is examined in the literature, the research findings made by Bayköse et al. (2017a) on the sample of athletes trained in sports sciences show similar results to our research findings.

Based on our research findings, it has been determined that motivational self-talk has a positive effect on total mental toughness and it is statistically significant. According to the results obtained, it can be said that the friend support has a mediator role. Moving from this finding, it has been determined that friend support has an intermediary effect on the influence of motivational self-talk on mental toughness. In these findings, social support has become a major issue in the literature of coping (Andersen & Williams, 1999; Hardy, Richman and Rosenfeld, 1991; Petrie, 1992, 1993a; Smith et al., 1990). Malecki and Demaray (2003) state that overall perceived support or exceptional supportive behaviors or social environment can guard individuals from adverse consequences. In this context, it can be said that this information supports our research results. In other words, it is supported by the findings that friendship support between mental toughness and motivational self-talk is a positive factor. Because of the basic characteristics that characterize spiritual toughness, we have noted that there are many situations, such as dealing with pressure and troubles, getting rid of failures, insisting or being persistent, being insensitive or having an unwavering grasp on self-control (Crust, 2008).

As a result, it can be said that the mental toughness of athletes is positively correlated with the motivational self-talk levels, and the friend support can be used to increase the motivational self-talk effect for the mental toughness performance.

Author Note

This study is the improved version of the oral communication presented at the International Conference on New Horizons in Education, which took place between 18-20 July 2018.

References

- Andersen, M. B., & Williams, J. M. (1999). Athletic injury, psychosocial factors and perceptual changes during stress. *Journal of Sports Sciences*, 17, 735–741.
- Hardy, C. J., Richman, J. M., & Rosenfeld, L. B. (1991). The role of social support in the life of stress/injury relationship. *The Sport Psychologist*, 5, 128–139.
- Petrie, T. A. (1992). Psychosocial antecedents of athletic injury: The effects of life stress and social support on female collegiate gymnasts. *Behavioral Medicine*, 18, 127–138.
- Petrie, T. (1993a). The moderating effects of social support and playing status on the life stress- injury relationship. *Journal of Applied Sport Psychology*, 5, 1–16. doi:10.1080/10413209308411301
- Smith, R. E., Smoll, F. L., & Ptacek, J. T. (1990). Conjunctive moderator variables in vulnerability and resiliency research: Life stress, social support, coping skills, and adolescent sport injuries. *Journal of Personality and Social Psychology*, 58, 360–370.
- Malecki, C. K., & Demaray, M. K. (2003). What type of support do they need? Investigating student adjustment as related to emotional, informational, appraisal, and instrumental support. *School Psychology Quarterly*, 18, 231–252.
- Bull, S., Shambrook, C., James, W., & Brooks, J. (2005). Towards an understanding of mental toughness in elite English cricketers. *Journal of Applied Sport Psychology*, 17, 209–227.
- Clough, P. J., Earle, K., & Sewell, D. (2002). Mental toughness: The concept and its measurement. In I. Cockerill (Ed.), *Solutions in sport psychology* (pp. 32–43). London: Thomson Publishing
- Connaughton, D., Wadey, R., Hanton, S., & Jones, G. (2008). The development and maintenance of mental toughness: Perceptions of elite performers. *Journal of Sport Sciences*, 26(1), 83–95.
- Crust, L. (2008). A review and conceptual re-examination of mental toughness: Implications for future researchers. *Personality and Individual Differences*, 45(7), 576–583.

- Crust, L., & Clough, P. J. (2005). Relationship between mental toughness and physical endurance. *Perceptual and Motor Skills*, 100, 192–194
- Gucciardi, D., Gordon, S., & Dimmock, J. (2009). Evaluation of a mental toughness training programme for youth-aged Australian footballer:1. A quantitative analysis. *Journal of Applied Sport Psychology*, 21, 307–323.
- Jones, G., Hanton, S., & Connaughton, D. (2007). A framework of mental toughness in the world's best performers. *The Sport Psychologist*, 21, 243–264.
- Kobasa, S. C., Maddi, S. R., & Kahn, S. (1982). Hardiness and health: A prospective study. *Journal of Personality and Social Psychology*, 42, 168–177
- Sheard, M. (2009). *Mental toughness: The mindset behind sporting achievement*. London, UK: Routledge
- Levy, A. R., Polman, R. C., Clough, P. J., Marchant, D. C., & Earle, K. (2006). Mental toughness as a determinant of beliefs, pain, and adherence in sport injury rehabilitation. *Journal of Sport Rehabilitation*, 15(3), 245–254.
- Nicholls, A. R., Polman, R. C., Levy, A. R., & Backhouse, S. H. (2008). Mental toughness, optimism, pessimism, and coping among athletes. *Personality and individual differences*, 44(5), 1182–1192.
- Werner, E. E. ve Smith, R. S. (1982). *Vulnerable but invincible: A longitudinal study of resilient children and youth*. New York: McGraw-Hill.
- Werner, E. E. ve Smith, R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Ithaca, NY: Cornell University Press
- Benard, B. (1991). *Fostering resiliency in kids: Protective factors in the family, school, and community*. Portland, OR: Northwest Regional Educational Laboratory.
- Gilligan, R. (2000). Adversity, resilience and young people: The protective value of positive school and spare time experiences. *Child and Society*, 14(1), 37–47.
- Gordon, E. W. ve Song, L. D. (1994). Variations in the experience of resilience. (Ed: M. C. Wang ve E. W. Gordon) *Educational Resilience in Inner-City America: Challenges and Prospects*. New Jersey: Lawrence Erlbaum Associates, Publishers.
- Grizenko, N. ve Pawliuk, N. (1994). Risk and protective factors for disruptive behavior disorders in children. *American Journal of Orthopsychiatry*, 64, 534–544.
- Smokowski, P. R., Reynolds, A. J. ve Bezruczko, N. (2000). Resilience and protective factors in adolescence: An autobiographical perspective from disadvantaged youth. *Journal of Social Psychology*, 37,4, 425–448.
- Bayköse, N., Civar Yavuz, S., Özer, Ö., & Şahin, A. (2017). The role of self-talk and self-efficacy levels of athletes studying at faculties of sport sciences on predicting mental toughness. *Turkish Online Journal of Educational Technology*, (December Special Issue), 591–595.
- Şahin, A., Bayköse, N., & Civar Yavuz, S. (2017). The role of motivational self-talk and life satisfaction on determining the flow experience of undergraduate athletes. *Turkish Online Journal of Educational Technology*, (December Special Issue), 867–871.
- Engür, M. (2011). *Performans Başarısızlığı Değerlendirme Envanteri ve Kendinle Konuşma Anketinin Türk Sporcu Popülasyonu'na Uyarlanması ve Uygulanması*. Yayınlanmamış Doktora Tezi, Ege Üniversitesi, İzmir.
- Zervas, Y., Stavrou N. ve Psychountaki M. (2007). Development and Validation of The Self-Talk Questionnaire (S-Tq) For Sports. *Journal of Applied Sport Psychology*, 19, 142–159.
- Sheard M. (2013). *Mental Toughness: The Mindset Behind Sporting Achievement*. Second Edition, Hove, East Sussex: Routledge
- Altıntaş, A., & Koruç, P. B. (2016). Sporda Zihinsel Dayanıklılık Envanteri'nin Psikometrik Özelliklerinin İncelenmesi (SZDE). *Spor Bilimleri Dergisi*, 27(4), 163–171.
- Çakır, Y. & Palabıyık, R. (1997). Gençlerde Sosyal Destek, Çok Boyutlu Algılanan Sosyal Destek Ölçeğinin Güvenilirlik ve Geçerlilik Çalışması. *Kriz Dergisi*, 5(1), 15–24.
- Kazarian, S.S. & McCabe, S.B. (1991) Dimensions of social support in the MSPSS: Factorial structure, reliability, and theoretical implications. *J Community Psychol*, 19, 150–160.
- Zimet, G.D., Dahlem, N.W., Zimet, S.G. & et all. (1988). The Multidimensional Scale of Perceived Social Support. *J Pers Assess*, 52, 30–41.
- Eker, D. & Arkar, H. (1995). Çok Boyutlu Algılanan Sosyal Destek Ölçeğinin Faktör Yapısı, Geçerlilik ve Güvenirliği. *Türk Psikologlar Dergisi*, 10(34), 45–55.
- Eker, D. Arkar, H. Yaldız, H. (2001). Çok Boyutlu Algılanan Sosyal Destek Ölçeği'nin Gözden Geçirilmiş Formunun Faktör Yapısı, Geçerlik ve Güvenirliği, *Türk Psikiyatri Dergisi*, 12(1):17–25.

Multicultural Education Management Model Of An International School In A Thai Private School

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Abstract

This research aims to study components of Multicultural Education management in a Thai private international school, and the development of a Multicultural Education management model at Mataneedol School. This study involved research and development and was split into 3 phases. Phase 1; studied document synthesis and in-depth interviews by seven qualified experts designated for each specific group. Instruments used structured interviews and content analytics. Phase 2; developed a model using best practices from three outstanding schools and Multi-Attribute Consensus Reaching (MACR) by a group of ten experts who selected specific instruments, using best practices study, critical assessment, and content analytics. Phase 3; studied and evaluated the model by putting it into practice at Mataneedol School beginning in the 2nd semester of the academic year 2017. Actioned research using participatory observation, interviews, meeting notes, teachers lesson plans, student appraisal work, and quality of Multicultural Education management 'assessment by using synthesis and quantitative data content, with consideration to process and results dimension, improve data and present Multicultural Education at Mataneedol School, researchers found the following: Multicultural Education management model of an international Thai private school consisted of 7 elements. (1) Vision and commitment to the education of everyone (2) Development of a global curriculum (3) Learning activities focused on the construction of knowledge (4) Creation of a climate conducive to learning, social structure, and culture within the school (5) Teaching based on social justice (6) Prevention of prejudice against the rights and equality of everyone (7) Enhancement of multicultural, collaboration, and student achievement. The relationship between components in the Multicultural Educational management model at Mataneedol School under the schemes enterprise, environment, relationship, and challenge was divided into 7 elements which included 34 practical indicators. The overall quality of Multicultural Education at Mataneedol School is in the ranges of "Most" ($\mu = 4.58$, $\sigma = 0.56$). The overall administrative quality of Multicultural Education of Mataneedol School is in ranges of "Most" ($\mu = 4.57$, $\sigma = 0.58$).

Keywords: *Multicultural Education Management Model, International School, Thai Private School, Mataneedol School*

Introduction

Educational management in schools with students from different ethnic and cultural backgrounds. Most of them cannot meet the needs and the style of learning which varies by race, religion, and culture, resulting in unsuccessful students who suffer in school, both emotionally and socially. This can lead to a lack of suitable life skills and academic achievement. (Jenks, Lee & Kanplo, 2001) Therefore, it is essential that educational institutions and teachers consider an appropriate educational management model in line with the cultural diversity of the learners it serves. It is paramount that students are educated in an environment where democracy, equality, freedom, and justice, prevail and where students feel confident to develop positive ideas. Students should be encouraged to show respect for and acceptance of multicultural differences. (Grant & Ladson – Billings, 1997) All educational establishments should adopt and promote an atmosphere of mutual respect and fairness among its multicultural students. (Banks, 2001)

Education in schools with children from different cultures is called "Multicultural Education", which means that school administrators, teachers, and parents create school and classroom environments which are conducive to learning and aware that racial or ethnic backgrounds, languages, religions, traditions, and lifestyles all affect a student's ability to learn. We must learn to accept cultural differences, without showing prejudice or discrimination. (Yongyaun, et al., 2010) Learning the culture of others in terms of beliefs, values, behaviors, and traditions is an important starting point for peace and harmony among human beings. Educators are of vital importance in preparing the new generation to be ready to live and learn in a multicultural community of different cultures. (Wan, 2006)

Multicultural education in Thailand is required in order that we can comprehensively manage and develop models of multicultural education which are clearly understood in our schools. Administrators and teachers in the education system of the educational reform era, are expected to have the potential to become a significant force within Thai society. Researchers study the components of multicultural education based on the concept of educators, synthesized the elements that can be used as a Multicultural Education management model within the

Thai private school system consisted of 7 elements. **(1) Vision and commitment to education of everyone** (Banks, 1994; Grant & Sleeter, 2003; Ameny-Dixon, 2004; Rios, 2012) **(2) Development of global curriculum** (Banks, 1994, 2001, 2002, 2008, 2016; Grant & Sleeter, 2003; Ameny-Dixon, 2004; Gates, 2006; Rios, 2012; Ford, 2014; Yongyaun, et al., 2010) **(3) Learning activities focused on construction of knowledge** (Banks, 2001, 2002, 2008, 2016; Gates, 2006; Yongyaun, et al., 2010) **(4) Creation of a climate conducive to learning, social structure, and culture within schools** (Banks, 1994, 2001, 2002, 2008, 2016; Grant & Sleeter, 2003; Gates, 2006; Yongyaun, et al., 2010) **(5) Teaching based on social justice** (Banks, 1994, 2001, 2002, 2008, 2016; Grant & Sleeter, 2003; Ameny-Dixon, 2004; Gates, 2006) **(6) Prevention of prejudice against rights and equality of everyone** (Banks, 1994, 2001, 2002, 2008, 2016; Ameny-Dixon, 2004; Gates, 2006; Ford, 2014) **(7) Enhancement of multicultural, collaboration, and student achievement.** (Banks, 1994; Grant & Sleeter, 2003; Ameny-Dixon, 2004; Rios, 2012)

Therefore, the development of a Multicultural Education management model within an international school in the Thai private school system can improve the overall success of student achievement. This is due to the dimension of the viewpoints of school administrators as a guideline for education that is consistent with the development problems within the country, encourage the Multicultural Education management model in context in schools to bring their schools up to the world-class standard, and distributed to schools with a similar context, has applied to develop the students to be good citizens of the future.

The Study

This research aims to show the components of a Multicultural Education management model of an international school in the Thai private school system and the development model of Multicultural Education management at Mataneedol School.

This study included research and development, and was split into 3 phases:

1) Phase 1 was a study of the components of Multicultural Education at international schools in the Thai private school system by incorporating document research and expert interviews. It consists of two steps:

1.1) Synthesis of elements of Multicultural Education by synthesizing the literature and related research. The researcher studied the components of multicultural education based on the concepts of Banks (1994, 2001, 2002, 2008, 2016); Grant & Sleeter (2003); Ameny-Dixon (2004); Gates (2006); Rios (2012); Ford (2014); Yongyaun, et al. (2010), synthesized the elements that can be used as Multicultural Education management model within Thai private schools consisted of 7 elements. (1) Vision and commitment to the education of everyone (2) Development of a global curriculum (3) Learning activities focused on the construction of knowledge (4) Creation of a climate conducive to learning, social structure, and culture within the school (5) Teaching based on social justice (6) Prevention of prejudice against the rights and equality of everyone (7) Enhancement of multicultural, collaboration, and student achievement.

1.2) Feasibility study Multicultural Education management at an international school in the Thai private school system by utilizing in-depth interviews with 7 specific experts and purposive sampling. Instruments used in the research were semi-structured Interviews, using content analysis.

2) Phase 2 was the development of a Multicultural Education management model of an international school in Thai private school system. A study using best practices of organizations which performed well on the subject, and Multi-Attribute Consensus Reaching (MACR), consisting of two steps:

2.1) Study of promotion factors and obstacles, then draft a Multicultural Education management model of an international school in the Thai private school system. By using best practices from a sample of schools in multicultural education was selected to be successful of three specific outstanding schools. Instruments used in this study were interviews, observation, and study document forms used content analysis.

2.2) Development of Multicultural Education management model of an international school in the Thai private school system by using Multi-Attribute Consensus Reaching, selected expert group based on the concept of Kanchanavasi (2003), 10 selected experts were divided into 5 academics and 5 practitioners. Instruments used in this study was an assessment of the importance of Multicultural Education of an international school in the Thai private school system, data were analyzed by using basic statistics such as frequency, percentage, and mean.

3) Phase 3 was an evaluation of the Multicultural Education management model at Mataneedol School, by putting the model into practice at the school, to evaluate the feasibility of using Multicultural Education management model, consists of two steps:

3.1) Examine suitability and feasibility of the Multicultural Education management model at Mataneedol School, using action research methods and putting the model into practice in the first semester of the

Mataneedol school year, by purposive sampling. Operation in the second semester of the academic year 2017, was divided into two loop cycles with 8 steps, 4 steps per cycle.

3.2) Evaluation of Multicultural Education management model at Mataneedol School, used participatory observation, interviews, meeting notes, Teacher lesson plans, examination of student tasks, and evaluation of the quality manuals and the Multicultural Education management model at Mataneedol School. Then synthesize information, improve the Multicultural Education management model at Mataneedol School again, with consideration of process and output dimensions. Data were analyzed using content analysis and basic statistics such as frequency, percentage, and mean.

Findings

1) The Multicultural Education management model of an international school in Thai private school system consisted of 7 elements with 30 indicators; (1) Vision and commitment to the education of everyone, consisted of 4 indicators (2) Development of global curriculum, included 5 indicators (3) Learning activities focused on knowledge construction, included 3 indicators (4) Creation of a climate conducive to learning, social structure, and culture within school, had 5 indicators (5) Teaching based on social justice included 4 indicators (6) Prevention of prejudice against rights and equality of everyone, had 4 indicators (7) Enhancement of multicultural, collaboration, and student achievement, had 5 indicators.

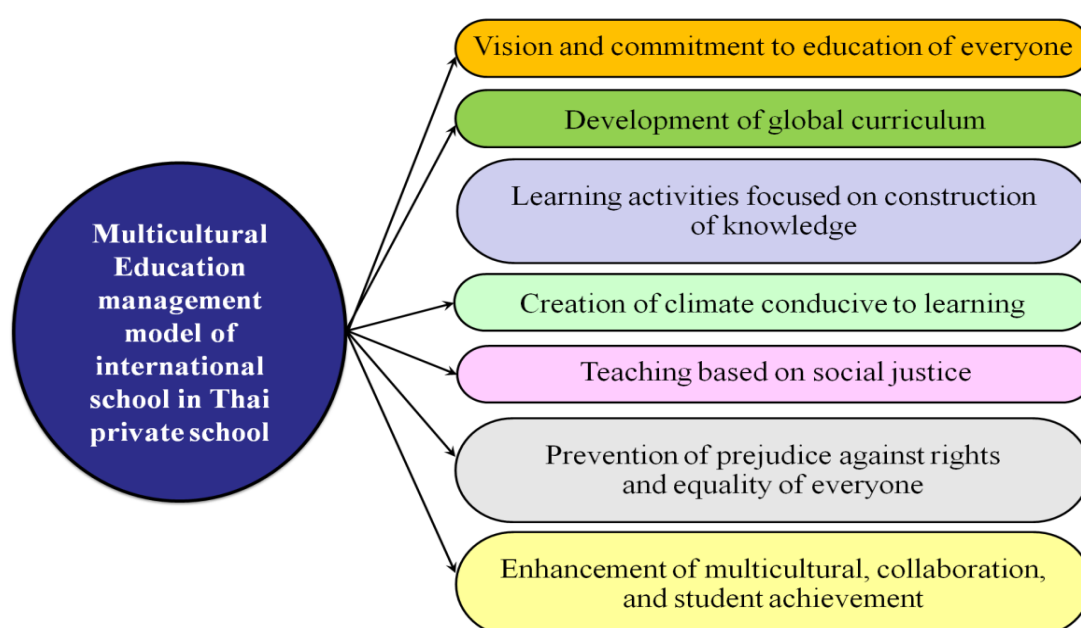


Figure 1: The graphic shows the Multicultural Education management model Of an international school in the Thai private school system.

2) The Multicultural Education management model of an international school in Thai private school system; in each issue had an average score ranging from 88.00 to 98.00 and there was a range of scores between the two experts' groups, i.e. the academic group and the practice group from 0.00 to 16.00. Show that all aspects of Multicultural Education management model was "most important" and had a range different "less".

3) The relationship between components in Multicultural Educational management model at Mataneedol School under schemes enterprise, environment, relationship, and challenge was divided into 7 elements with 34 practical indicators; (1) Vision and commitment to education of everyone, includes 4 indicators (2) Development of global curriculum, includes 5 indicators (3) Learning activities focused on knowledge construction, includes 3 indicators (4) Creation of a climate conducive to learning, social structure, and culture within school, includes 6 indicators (5) Teaching based on social justice, includes 5 indicators (6) Prevention of prejudice against the rights and equality of everyone, includes 5 indicators and (7) The enhancement of multicultural, collaboration, and student achievement, includes 6 indicators.



Figure2: The graphic shows the Multicultural Educational management model at Mataneedol School under schemes enterprise, environment, relationship, and challenge.

The overall quality of Multicultural Education at Mataneedol School are in ranges of “Most” ($\mu = 4.58$, $\sigma = 0.56$). The overall administrative quality of Multicultural Education of Mataneedol School is in ranges of “Most” ($\mu = 4.57$, $\sigma = 0.58$).

Conclusions

1) The Multicultural Education management model of an international school in the Thai private school system consisted of 7 elements. (1) Vision and commitment to education of everyone (2) Development of global curriculum (3) Learning activities focused on knowledge construction (4) Creation of a climate conducive to learning, social structure, and culture within school (5) Teaching based on social justice (6) Prevention of prejudice against the rights and equality of everyone (7) Enhancement of multicultural, collaboration, and student achievement. Because of Multicultural Education' elements were related to six components of the education; (1) purpose (2) curriculum (3) teacher (4) student (5) instructional process and (6) administration. This corresponds to the concept of Banks (1994, 2001, 2002, 2008, 2016); Grant & Sleeter (2003); Ameny-Dixon (2004); Gates (2006); Rios (2012); Ford (2014); Yongyaun, et al. (2010). In addition, seven in-depth interviews were developed following the Hypothesis Model. Mostly, study methodology was used for interviews, surveys, group discussions, etc. The results of the study will be used to determine the components or variables in the model, including the nature of the relationship between the elements or variables, or the sequence of preceding elements in the form. In this stage, the principle of rationality is essential. (Pengsawat, 2010)

2) The Multicultural Education management model of an international school in Thai private school system; In each issue averages a score in the range of 88.00 to 98.00 and there was a range of scores between the two experts' groups, i.e. The academic group and the practice group from 0.00 to 16.00. Reveals that all aspects of the Multicultural Education management model was "most important" and had a range difference "less". Because the model was drafted by studying the Best Practice models of three international schools, to achieve the Multicultural Education management model at Mataneedol School. This is a case study of real situations and problems found whilst developing this Multicultural Education Model, the opinions of experts by interview, group discussions, and case studies of the organization which performs well in the study and is based on the concept of Pengsawat (2010). Then set-up meetings for Multi-Attribute Consensus Reaching (MACR), was used to consider the importance and necessity of the Multicultural Education management model at Mataneedol School by writing a score on the scoreboard. Evaluation scores were based on the concepts of King, et al. (2001).

3) The relationship between components in the Multicultural Educational management model at Mataneedol School under schemes enterprise, environment, relationship, and challenges are divided into 7 elements with 34 practical indicators; (1) Vision and commitment to education of everyone, includes 4 indicators (2) Development of a global curriculum includes 5 indicators (3) Learning activities focused on knowledge construction includes 3 indicators (4) Creation of a climate conducive to learning, social structure, and culture within school, includes 6 indicators (5) Teaching based on social justice, includes 5 indicators (6) Prevention of prejudice against the rights and equality of everyone includes 5 indicators (7) Enhancement of multicultural, collaboration, and student achievement includes 6 indicators. The overall quality of Multicultural Education at Mataneedol School are in ranges of "Most" ($\mu = 4.58, \sigma = 0.56$). The overall administrative quality of Multicultural Education of Mataneedol School is in the ranges of "Most" ($\mu = 4.57, \sigma = 0.58$). Because this phase incorporated an action and a study of the research collaboration within the organization was needed by focusing on the work involved during all stages of research from defining the problem, choosing a solution, and developing the solution. This is inline with String's (1996) concept that participatory action research evaluation was an important tool in creating new knowledge and practical sharing in every step. The concept of Kemmis & McTaggart (1998) was that operational research is a cyclical process of planning, action, observing, and reflecting. Including the evaluation of the quality of Multicultural Educational management model at Mataneedol School in this institution, researchers evaluated their approach to the National Quality Award (TQA). Based on the concept of the National Quality Award Office (2011), a new quality management technique was used in both the business and government sectors.

Suggestions

The suggestions for using the research results are as follows: (1) The Office of the Private Education Commission (ECDC) has proposed the policy on Multicultural Education that is consistent with the developmental problems of the country. (2) Private schools collate research results to help in the future with new elements of Multicultural Education that will fit into the context of international schools in Thailand. (3) School administrators of private schools can utilize research results and use them as a guideline for planning Multicultural Education management in other international schools.

Suggestions for the next research; (1) there should be quantitative research, to help enhance the knowledge and diversity, such as the need to explore, the need for assessment of the structural model, etc. By utilizing the results of this research as a guide. (2) There should a comparative study of the elements of multicultural education in international schools under the Private Education Commission and under the Government Education Commission guidelines for promoting Multicultural Education in international schools should match their organizations in order

to properly develop the policy. (3) They should study the components of Multicultural Education in other international schools. In addition to this research, such as organizational culture Resource management, etc., to gain more relevant factors in promoting Multicultural Education in international schools. (4) There should research on non-institutional organizations, to determine whether each context of the organization has elements of Multicultural Education difference.

References

- Ameny-Dixon, Gloria M. (2004). Why multicultural education is more important in higher education now than ever, a global perspective. **Intellectual scholarly diversity journal**, 8(1): 1-9.
- Banks, James A. (1994). **Multiethnic education: Theory and practice**. 3rd edition. Boston: Allyn & Bacon.
- _____. (2001). **Cultural diversity and education: Foundations, Curriculum, and teaching**. Boston: Allyn and Bacon.
- _____. (2002). **An Introduction multicultural education**. Boston: Allyn& Bacon.
- _____. (2008). **An Introduction multicultural education**. 4th edition. Boston: Pearson Education.
- _____. (2016). **Cultural diversity and education**. 6th edition. Routledge Taylor & Francis Group: New York and London
- Banks James A. & Cherry A. McGee Banks. (2010). **Multicultural education: issues and perspectives**. Hoboken, NJ: Wiley.
- Ford, Donna Y. (2014). Why Education Must Be Multicultural Addressing a Few Misperceptions with Counterarguments. **Gifted Child Today**, 37(1): 59-62.
- Gates, Kevin D. (2006). Multicultural Education in Public Elementary Schools. (Doctoral dissertation, University of Denver, 2006). **Digital Dissertations**. Retrieved February 10, 2016, from <http://proquest,umi.com>
- Grant, C.A. & Sleeter, C.E. (2003). **Turning on learning: Five approaches for multicultural teaching plans for race, class, gender, and disability**. 3rd edition. New York: Wiley.
- Grant, Carl A. & Ladson – Billing, Gloria. (Eds). (1997). **Dictionary of multicultural education**. Phoenix, Arizona: Oryx Press.
- Jenks, C., Lee, J.O. & Kanpol, B. (2001). Approaches to multicultural education in preserve teacher education: Philosophical frameworks and models for teaching. **The urbanview**, 33(2): 87–105.
- Kanchanavasi, S. (2003). **Selection of appropriate statistics for research**. 3rd edition. Bangkok: Boonsiri Printing.
- Kemmis, S., & McTaggart, R. (1998). **The Action Research Planner**. 3rd edition. Victoria: Deakin University Press.
- King, J.A., et al. (2001). Toward a taxonomy of essential evaluation competencies. **American journal of Evaluation**, 22: 229-247.
- McClelland, D.C. (1973). Testing for competence rather than for intelligence. **American Psychologist**, 28(1): 1-14.
- National Quality Award Office. (2011). **TQA Criteria for Performance Excellence**. Bangkok: SiviGold Media.
- Nieto, S. & Bode, P. (2012). **Affirming diversity: The sociopolitical context of multicultural education**. Boston, MA: Pearson Education.
- North Central Regional Educational Laboratory (NCERL). (2009). **Critical issue: Technology leadership: Enhancing positive educational change**. Retrieved August 20, 2015, from <http://www.ncrel.org/sdrs/areas/issues/educatrs/leadership/le700.htm>.
- Pengsawat, W. (2010). Research Development. **Journal of Sakon Nakhon Rajabhat University**, 2(4): 1-15.
- Rios, Sylvia G. (2012). **A case study of principal leadership in the practice of multicultural education in high-achieving schools serving Hispanic students in south Texas**. A Dissertation Submitted to Ph.D. Curriculum and Instruction Major of Texas A & M University.
- Stringer, E. (1996). **Action Research: A handbook for practitioners**. Thousand Oaks: Sage Publications.
- Wan, Guofang. (2006). Teaching diversity and tolerance in the classroom: A thematic storybook approach. **Education**, 127(1): 140-154.
- Yongyaun, B., et al. (2010). **Development of Multicultural Education model in primary schools**. Office of the National Culture Commission, Ministry of Culture.

Multi-Level Structural Equation Model Of Factors Affecting The Learning Innovation In Thai Schools

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Abstract

The purpose of this research was to examine the structural equation model (SEM) of factors that affecting teachers' learning innovation in schools using multi-level methodology. Researchers employed a mixed mode design utilizing qualitative and quantitative methods to collect data. A total of five experts and practitioners were involved in in-depth interview at the first phase to identify the factors that affecting teachers' learning innovation. Qualitative findings from the first phase coupled with the literature reviews assisted researchers proceed to second phase using SEM with a total samples of 1,621 principals and teachers from 416 schools that affiliated to the Thailand Office of Basic Education Commission using multi-stage random sampling technique. Qualitative data was analyzed by using content analysis while quantitative data was analyzed using M-Plus program. A survey was employed at the second phase using questionnaire as an instrument. Findings from the first phase indicated that there are seven primary factors, 26 secondary factors, and 73 indicators of teachers' learning innovation. The quantitative findings indicated that the structural equation model of teachers' learning innovation factors has goodness fit with evident data with $\chi^2 = 1,012.203$, $df = 568$, $p = .052$, $\chi^2/df = 1.801$, $CFI = .953$, $TLI = .932$, $RMSEA = .010$, and $SRMRw = .181$, and $SRMRb = .242$.

Keywords: *Educational policy; professional learning community; self-efficacy; school leadership; teachers' learning innovation*

Introduction

In recent decades, global trends in cultural and economic development have brought forth reforms in the ways teachers design the curriculum (Naz & Murad, 2017). Therefore, teachers are professionals who can think about and look for innovative solutions when they face new problems but not technicians who implement the educational ideas and approaches of others only (Paniagua, 2018). Teachers play a crucial role in the interpretation of an innovative design and its translation to educational practice (Könings, Brand-Gruwel, & van Merriënboer, 2006). It is essential that educational innovations have to recognize the need of teachers' learning because they are the most important agents in shaping education for students and in bringing about change and innovation in educational practices (Bakkenes, Vermunt, & Wubbels, 2010).

Commitment to continuous teachers' learning innovation is crucial for the success of education reform, instructional improvement, and students' achievement (Bae, Hayes, Seitz, O'Connor, & DiStefano, 2016). Current educational policies are more concerned about equality of opportunity for education and employment opportunities for graduates (Teichler, 2004). As a result, Thailand's strategic plan for the Second Decade of Education Reform (2009-2018) has emphasized the importance on the quality of life-long learning among Thai people. Teachers' learning innovation is believed would be a strong foundation to improve the quality of education which in line with the standard and the transformation of the society (Aritatana, Sirisooksilp, & Tang, 2016). This is further supported by Somprach, Tang, and Popoonsak's (2017) study. Somprach et al. found that effective school principals have to foster and manage school cultures to develop collaborative working relationships and support on-going learning for students and teachers. This implies the importance of school leadership to promote teachers' learning innovation.

Owen (2015) interviewed teachers from three innovative case-study schools to investigate whether there are links between students' learning achievement and teachers' learning within professional learning communities. Owen had successfully provided specific examples of professional learning communities learning processes with regard

to co-planning, co-teaching, and co-assessment. Owen's findings revealed that professional learning communities are supported teachers' changes in their teaching practices that relevant to innovative contexts by utilizing the research instruments such as students' work samples and achievement data as well as teachers' observations and self-reports. Furthermore, teachers indicated that their participations in innovative professional learning communities had successfully increased students' learning outcomes in term of achievement, social skills, emotional aspects, more independence and creativity. The overall key impacts arising from professional learning communities operating within innovative contexts have improved the well-being of teachers and students. Finally, Owen concluded that teachers' innovative teaching approaches require changes to the traditional teacher role towards operating as co-facilitators, co-learners, and working in teacher teams, with considerable innovative professional learning communities.

Hsiao, Chang, Tu, and Chen (2011) found that teachers' self-efficacy is associated with their adoption of innovation. Moreover, their results showed that teachers' self-efficacy can predict their goals and attitudes toward innovation and change. They concluded that teachers with high efficacy are more likely to undertake more challenging activities that involving more creative practices. Cachia, Ferrari, Ala-Mutka, and Punie (2010) reported that many teachers and education experts felt that the curriculum in their countries is insufficient to encourage creativity and innovation mainly because they themselves are not clear how creativity should be defined and how it should be treated in learning and assessment. This situation become worse when curriculum are overloaded with content, which reduces the possibilities of creative and innovative learning approaches in practice.

Literature Reviews

Naz and Murad (2017) aimed to investigate the use of teachers' innovative strategies to respond to students' diversity at higher education level in public and private sector of Pakistan. Their findings showed that if teachers who used innovative teaching methods, can work effectively on students' diversity and will be able to enhance their performance. Moreover, their findings indicated that the innovation is more applied in private-sector universities than the public-sector universities. In addition, they found that the use of innovative strategies is more and highest in the discipline of humanities through mathematics subject. This implies that different disciplines of teachers perceived innovative learning differently. Teachers of humanities find the innovative strategies are more effective and easy to use particularly in mathematics teaching. Finally, they found that the class size decreases the effect of innovative strategies of teaching. In other word, the larger class size, the less impact of innovative teaching.

Barrett and Breyer (2014) found that school leaders must instill passion in teachers and provide effective leadership to motivate teachers to be innovative to engage and energize their students while they are teaching. Their study was focused on how modeling instructional strategies by school leaders to influence teachers' implementation of innovative strategies that promote greater student engagement and learning. They suggested that effective leadership and modeling can sustain teachers' passion for teaching and also provide them with the motivation to engage students in their lessons.

Cheng and Wu (2016) studied the learning experiences of teachers' professional development in Chinese secondary schools under a socio-cultural framework. Their findings revealed that social and individual affordances are very important to teachers' professional development and is prerequisite to the sustainable growth of teacher learning community. Cheng and Wu's findings were supported by past researchers such as Bae, Hayes, Seitz, O'Connor, and DiStefano (2016) and Morgan, Farkas, Hillemeier, and Maczuga (2016) who pointed out the importance of teachers working in professional learning communities to implement reformed teaching as they share knowledge and resources, critically examine and reflect on one another's practices, and use innovative evidence from student work and classroom observation to inform instruction.

Educational policy can be an important factor to cultivate a creative and integrative teacher. Therefore, South Korea has adopted a new national curriculum to promote flexibility and creativity of teachers on how the students address the new challenges of the 21st century (Cho & Huh, 2017). Moreover, there are six key competencies as the core skills for Korean students in the new educational policy, namely self-management, knowledge and information processing, creative thinking, aesthetic sensibility, communication skills, and civic competency. These competencies are found to be in line with Thailand Second Decade of Educational Reform (2009-2018) that highly emphasize the importance on the quality of life-long learning (Ariratana, Sirisooksilp, & Tang, 2016).

Research Objectives

Based on the literature reviews above, researchers would like to study the multi-level structural equation model of teachers' learning innovation at schools which affiliated to the Office of Basic Education Commission in Thailand. The following are the specific objectives of this study:

- i. To explore the primary factors, secondary factors, and indicators of teachers' learning innovation in a multi-level structural equation model.
- ii. To examine the congruence of the structural model with empirical data.

Methodology

This research consisted of two phases employing a mixed mode design to collect the qualitative data and quantitative data respectively. The in-depth interviews were the technique used to elicit a vivid picture of the five experts or practitioners' perspective on the factors of teachers' learning innovation. Researchers used qualitative research paradigm that was in-depth interview for the first phase in order to identify teachers' learning innovation factors of structural equation model. Purposive sampling technique was employed for the first phase for the identification and selection of information-rich cases for the most effective use of limited resources (Patton, 2002). This involves identifying and selecting individuals that are especially knowledgeable or experienced with this phenomenon of interest (Cresswell & Plano Clark, 2011). In addition to knowledge and experience, Bernard (2002) noted the importance of availability and willingness to participate, and the ability to communicate experiences and opinions in an articulate, expressive, and reflective manner.

After researchers conducted the in-depth interviews with the five experts or qualified practitioners to examine how they viewed the teachers' learning innovation factors and further to examine if they agreed with the results. Mixed mode design is referred as a combination of different modes of collecting data for a single research. Researchers intend to use the qualitative data analysis from the in-depth interviews to assist in explaining and interpreting the findings of the quantitative data at second phase (Creswell, 2014). At the second phase, a survey quantitative method was employed to 1,621 principals and teachers from 416 schools that affiliated to the Office of Basic Education Commission utilizing a multi-stage random sampling technique. Sample size was determined based on Meyers, Gamst, and Guarino's (2006) rules of thumb because Meyers et al. proposed that suitable sample sizes depend upon the numbers of items available for factor analysis. The unit of analysis of this study was school using questionnaire as an instrument.

The interviews were audio recorded and partially transcribed, then coded using a theme analysis approach (Miles & Huberman, 1994). During coding, key themes related to research questions were identified, such as concrete primary factors, secondary factors, and indicators were identified. After the first round of coding, similar themes were grouped into larger categories (Strauss & Corbin, 1990). Exact quotes representing each frequently occurring theme were then fully transcribed based on the audio recordings. To ensure participant anonymity, participants' quotes are identified only by symbol R. The identified factors further discussed and made the final decisions by the five experts or qualified practitioners. The research instrument for the first phase was a semi-structure interview protocol and data was analyzed using content analysis.

At the second phase, researchers utilized the quantitative data and analyzed using SEM in order to fit the model with empirical data. SEM is suitable to use because the theoretical constructs of this research are represented by the latent factor. The relationships between the theoretical constructs are represented by regression or path coefficients between the factors. The SEM implies a structure for the covariance between the observed variables. Confirmatory Factor Analysis (CFA) is used to validate the structural equation model. Secondly, SEM directs around fitting the structural model by measuring the significance of the relationship between latent variables, which is accomplished through path analysis (Kaplan, 2000). CFA was used as a desirable validation stage preliminary to the main use of SEM to identify the causal relations among latent variables (Schumacker & Lomax, 2004).

Findings

Findings of this study are presented according to the research questions as indicated above.

Qualitative findings of primary factors, secondary factors, and indicators of teachers' learning innovation

Qualitative findings from the five experts or qualified practitioners revealed that there are seven primary factors, 26 secondary factors, and 73 indicators included as the multi-level structural equation model. The macro or organizational level variables consisted of educational policy, school leadership, and professional learning community while the micro or individual level variables comprised of self-efficacy, creativity, and achievement motive.

Quantitative findings of identified factors of teachers' learning innovation in a structural relationship model

CFA was used to validate to identify the causal relationships among the latent variables from the first phase. An overview of teachers' learning innovation as indicated in Table 1 below shows that each factor had its loading

value ranging from 0.670 to 0.820 and 0.646 to 0.883 within and between levels respectively at significant level as 0.01. As a result, all the identified factors of teachers' learning innovation are found to be important construct either at micro (individual) or macro (organizational) levels. Table 1 shows the factor loading value and reliability of each factor in the multi-level structural equation model.

Table 1: Factor loading value and reliability of each factor in the multi-level structural equation model

Factors of structural equation model	ICC	Within level				Between level			
		β	SE	t	R ²	β	SE	t	R ²
Innovation novelty	.859	.670	.073	9.164**	.449	.646	.032	20.445**	.417
Innovation value	.883	.730	.057	12.741**	.533	.857	.017	49.237**	.735
Innovation development	.902	.820	.051	16.153**	.672	.883	.016	54.101**	.779
Utilization of innovation	.884	.762	.040	19.076**	.508	.878	.017	51.817**	.770
Policy objectives	.855	-	-	-	-	.840	.018	45.769**	.706
Policy means	.882	-	-	-	-	.963	.010	95.071**	.928
Policy mechanism	.876	-	-	-	-	.855	.019	45.061**	.732
Learning leadership	.873	-	-	-	-	.749	.030	24.872**	.560
Learning-centered leadership	.898	-	-	-	-	.831	.021	40.250**	.690
Constructivist leadership	.882	-	-	-	-	.900	.016	56.382**	.810
Creative leadership	.907	-	-	-	-	.808	.028	29.290**	.653
Shared values and vision	.874	-	-	-	-	.776	.026	30.390**	.602
Exchange practice interpersonal	.880	-	-	-	-	.874	.018	49.063	.764
Support and shared leadership	.873	-	-	-	-	.908	.013	71.983**	.825
Collaborative team	.870	-	-	-	-	.918	.012	74.204**	.842
Expectation towards self-capabilities	.884	.754	.055	13.784**	.569	-	-	-	-
Expectation towards action outcomes	.891	.909	.033	27.808**	.827	-	-	-	-
Initiation	.906	.803	.047	17.126**	.827	-	-	-	-
Flexibility thinking	.897	.757	.061	11.484**	.472	-	-	-	-
Elaborate thinking	.887	.701	.064	11.824**	.857	-	-	-	-
Synthesis	.885	.687	.055	12.575**	.492	-	-	-	-
Perseverance	.879	.708	.068	10.381**	.501	-	-	-	-
Enthusiasm	.885	.799	.053	14.986**	.638	-	-	-	-
Risk taking	.876	.791	.060	13.259**	.626	-	-	-	-
Consistent self-development	.883	.741	.053	14.010**	.549	-	-	-	-
Ambition	.893	.683	.059	11.616**	.467	-	-	-	-

Notes: * $p < .05$, ** $p < .01$

Table 2 shows that the total effect of factors between level to teachers' learning innovation was 81.4 percent ($R^2 = .814$) and within level was 75.9 percent ($R^2 = .759$). School leadership had direct and indirectly effect but educational policy and professional learning community only have direct effect to teachers' learning innovation at between level. Additionally, school leadership found to have direct effect to professional learning community and educational policy. On the other hand, creativity had direct effect but self-efficacy had indirect effect to teachers' learning innovation. Only achievement motive had both direct and indirect effects at within level. In addition, self-efficacy and achievement motive has direct effect to creativity of teachers.

Findings from the corrections between the factors of teachers' learning innovation could be evaluated in the standard component score (β) which indicated significantly high and positive correlations at 0.01. On top of that, it was found that the structural equation model has a goodness fit with evident data, with $\chi^2 = 1,023.203$, $df = 568$, $p = .052$, $\chi^2/df = 1.801$, CFI = .953, TLI = .932, RMSEA = .010, SRMRw = .181, and SRMRb = 0.242. Finding shows that the structural relationship model of teachers' learning innovation were consistent with empirical data as shown in Figure 1 and Table 2 below.

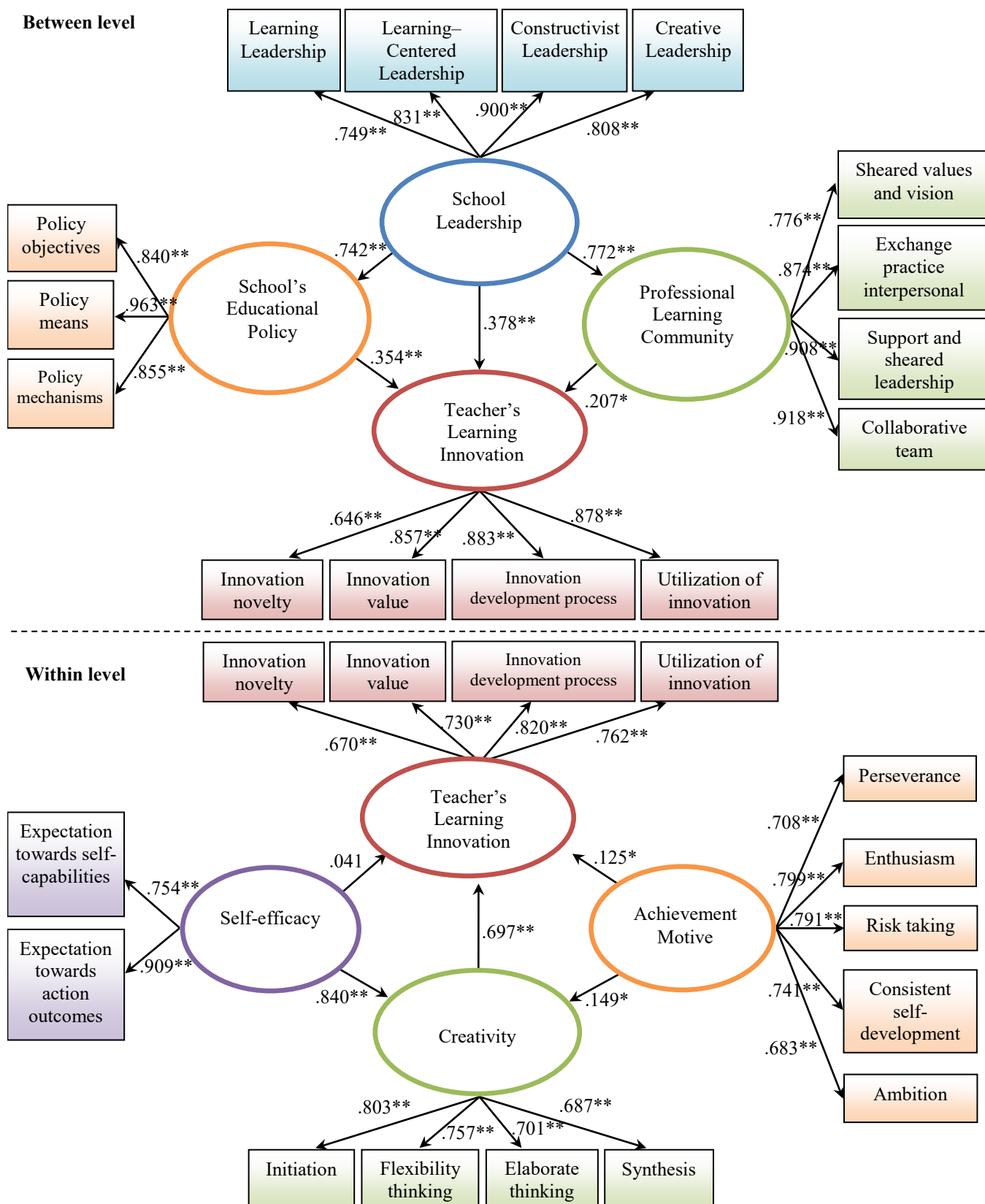


Figure 1: Multi-level structural equation model of teachers' learning innovation

Table 2: Loading values of direct, indirect, and overall influences of latent variables

Effect variables	Teachers' learning innovation			Creativity			Professional learning community			Educational policy		
	DE	IE	TE	DE	IE	TE	DE	IE	TE	DE	IE	TE
Between level												
School leadership	.378**	.160**	.538**	-	-	-	.772**	-	.772**	-	-	-
	.378**	.263**	.641**	-	-	-	-	-	-	.742**	-	.742**
Educational policy	.354**	-	.354**	-	-	-	-	-	-	-	-	-
Professional learning community	.207*	-	.207*	-	-	-	-	-	-	-	-	-
Within level												
Creativity	.697**	-	.697**	-	-	-	-	-	-	-	-	-
Self-efficacy	.041	.585**	.626**	.840**	-	.840**	-	-	-	-	-	-
Achievement motive	.125*	.019*	.144*	.149*	-	.149*	-	-	-	-	-	-
R ² of teachers' learning innovation between level = .814												
R ² of teachers' learning innovation within level = .759												
$\chi^2 = 1,023.203^*$, $df = 568$, $p = .052$, $\chi^2/df = 1.801$, $CFI = .953$, $TLI = .932$, $RMSEA = .010$, $SRMRw = .181$, and $SRMRb = 0.242$.												

Notes: DE = Direct effect; IE = Indirect effect; TE = Total effect

* $p < .05$; ** $p < .01$

Discussion

This research was designed to provide insight into the multi-level structural equation model of teachers' learning innovation in schools that affiliated to the Office of Basic Education Commission in Thailand. Owing to it is not always possible to deal with single level data structures, researchers have to check the model adequacy as an important step in the model building process through interviewing the five experts or qualified practitioners. The initial phase is made to estimate the factors to fit the multilevel structural equation model (Brown, Mason, Spokane, Cruza-Guet, Lopez, & Szapocznik, 2009).

Teachers' learning innovation in the model includes the values for causal factor analysis, as shown by the high values of factor loading for the six factors. This case has turned into an outcome based on two fundamentals driver, namely macro (organizational) and micro (individual) drivers. The developed multi-level structural equation model fit to the exact empirical data. All empirical data were consistent with the criteria of Diamantopoulos and Siguaw (2000). In addition, these factors were likewise as per the exploration of Songmunuaykun (2005), who utilized the Mplus software for preparing data with all factors as per the predetermined criteria. Be that as it may, they were not in accord with Tochat, Chanpeng, and Meemak (2012), whose χ^2 indicated factual essentialness that was not as per the determined criteria.

All factors in the multi-level structural equation model at both individual and organizational levels could clarify the effect of teachers' learning innovation and portray the teacher individual characteristics such as creativity, self-efficacy, and achievement motive coupling with organizational characteristics such as school leadership, educational policy, and professional learning community. The multi-level structural equation model could be used to describe the relationship of the cause and effect of teachers' learning innovation for both individual and school organizations. This model could be utilized as a means of detailing the underlying model and the results of its creation.

The multi-level structural equation model fit construct validity when considering the causal effect value affecting the teachers' learning innovation, as mentioned above. Alternatively, the empirical data fit with the theoretical model. At the macro level, school leadership affected teachers' learning innovation through educational policy, in which the direct, indirect, and total effects were at .378, .263, and .641, respectively and statistically significant at .01. School leadership also affected teachers' learning innovation through professional learning community, in which the size of direct, indirect, and total effects were at .378, .160, and .538, respectively and statistically significant at .01. This implies that school leadership is the process by which school administrators try to exert their power to gain rapport, respect, and hence have an influence to merge the differences exist among teachers' thought, interest, and want. Thus, the inferiors of teachers will make them willing and enthusiastic to do what the school administrators want. In this respect, teachers' learning innovation is one of the school's target used by the school administrators to motivate, encourage, and support their teachers for creation of innovations in their teaching. The finding is in accordance with Barrett and Breyer's (2014) and Somprach's (2014) findings who found that one of the key roles of school administrators is to encourage the creation of classroom innovations.

Educational policy affected teachers' learning innovation with the direct effect of .354 and statistically significant at .01. This implies that educational policy is a tool the school administrators use to set the direction and goal

towards success. It is the guidelines for establishing implementation means from the current situation towards the future including the school plans that will lead to emergence of teachers' learning innovations. This finding is in line with Lertnaisat and Charoensuk (2014) who highlighted that educational policy is the factor that supports potential and innovation development. Professional learning community affected teachers learning innovation with the direct effect as .207 and statistically significant at .05. This finding is supported by previous researchers such as Giles and Hargreaves (2006) and also Somprach et al. (2017) who emphasized that professional learning community model can lead to a greater strength of the school's general activities and innovations.

At the micro level, creativity found to be successfully affected teachers' learning innovation with the direct effect as .697 and statistically significant at .01. This implies that creativity is the ability that enables teachers to see the relationships among various conditions thus stimulates their ideas and thinking. This finding is correlated to Naz and Murad's (2017) finding. Naz and Murad believed that individual creativity is an important element behind innovation creation for the success of an organization. In addition, Chimthongdee and Kaemkate (2015) who conducted a causal model of teachers' ability to create innovation also found that creativity had direct effect on teachers' ability to create innovation.

Self-efficacy was found to affect teachers' learning innovation with the direct, indirect, and total effects as .041, .585, and .626, respectively and statistically significant at .01. This implies that self-efficacy enables teachers to work efficiently and influences their creation of learning innovations. Hsiao et al. (2011) stated that self-efficacy is related to creative problem-solving and innovation construction, and self-efficacy has positive correlation with innovation creating. Achievement motive was found to be significant factor in the model with direct, indirect, and total effects as .125, .019, and .144, respectively and at statistically significant at .05. This implies that achievement motive is teachers' expression that demonstrates their wants and needs for success and has positive impact on the creation of learning innovation. This finding is agreed by past researchers such as Chimthongdee and Kaemkate (2015) and Zennouche (2014).

Finally, researchers would like to suggest to Thailand Ministry of Education to conduct training which incorporating all the factors that affecting teachers' learning innovation. Our findings suggest that human resource department at the Ministry of Education needs to recruit school administrators who have potential for promote professional learning communities as a means to facilitate teacher individual characteristics such as creativity, self-efficacy, and achievement motive in order to encourage teachers' learning innovation. Other practical consideration may involve the facilitation of an increasing understanding and appreciation of research evidence to help basic education school administrators specifically and teachers generally on how to develop innovative abilities and promote maximum innovative performance in their teaching.

References

- Ariratana, W., Sirisooksilp, S., & Tang, K. N. (2016). The effect of leadership styles on professional learning community. *New Trends and Issues Proceedings on Humanities and Social Sciences*, 8, 60-69.
- Bae, C. L., Hayes, K. N., Seitz, J., O'Connor, D., & DiStefano, D. (2016). A coding tool for examining the substance of teacher professional learning and change with example cases from middle school science lesson study. *Teaching and Teacher Education*, 60, 164-178.
- Bakkenes, I., Vermunt, J. D., & Wubbels, T. (2010). Teacher learning in the context of educational innovation: Learning activities and learning outcomes of experienced teachers. *Learning and Instruction*, 20, 533-548.
- Barrett, C. & Breyer, R. (2014). The influence of effective leadership on teaching and learning. *Journal of Research Initiatives*, 1(2). Retrieved from <http://digitalcommons.uncfsu.edu/jri/>
- Bernard, H.R. (2002). *Research methods in anthropology: Qualitative and quantitative approaches* (3rd ed.). Walnut Creek, CA: Alta Mira Press.
- Brown, S. C., Mason, C. A., Spokane, A. R., Cruza-Guetttt, M. C., Lopez, B., & Szapoczink, J. (2009). The relationship of neighborhood climate to perceived social support and mental health in order Hispanic immigrants in Miami, FL. *Journal of Aging and Health*, 21, 431-459.
- Cachia, R., Ferrari, A., Ala-Mutka, K., & Punie, Y. (2010). Creative learning and innovative teaching. *Final report on the study on creativity and innovation in education in the EU member states*. European Commission: Institute for Perspective Technological Studies.
- Cheng, X. & Wu, L. Y. (2016). The affordances of teacher professional learning communities: A case study of a Chinese secondary school. *Teaching and Teacher Education*, 58, 54-67.
- Chimthongdee, W. & Kaemkate, W. (2015). A causal model of teacher's innovative ability with creative thinking as mediator. *OJED*, 10(1), 1-9.
- Creswell, J. W. (2014). *Research design qualitative, quantitative and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage.

- Cresswell, J.W., & Plano Clark, V.L. (2011). *Designing and conducting mixed method research* (2nd ed.). Thousand Oaks, CA: SAGE.
- Diamantopoulos, A. & Siguaw, A. D. (2000). *Introducing LISREL: A guide for the uninitiated*. London, UK: SAGE.
- Giles, C. & Hargreaves, A. (2006). The sustainability of innovative schools as learning organizations and professional learning communities during standardized reform. *Educational Administration Quarterly*, 42(1), 124-156.
- Hsiao, H. C., Chang, J. C., Tu, Y. L., & Chen, S. C. (2011). The influence of teachers' self-efficacy on innovative work behavior. *2011 International Conference on Social Science and Humanity IPEDR 5*. Singapore: IACSIT Press.
- Cho, J. & Huh, J. (2017). New education policies and practices in South Korea. UNESCO Bangkok: Asia and Pacific Regional Bureau for Education. Retrieved from <https://bangkok.unesco.org/index.php/content/new-education-policies-and-practices-south-korea>
- Kaplan, D. (2000). *Structural equation modeling: Foundations and extensions*. Thousand Oaks, CA: Sage Publications.
- Könings, K. D., Brand-Gruwel, S., & van Merriënboer, J. J. G. (2006). Teachers' perspectives on innovations: Implications for educational design. *Teaching and Teacher Education*. doi: 10.1016/j.tate.2006.06.004.
- Lertnaisat, R. & Charoensuk, A. (2014). An analysis of factors affecting the potential development and innovation of Thailand industrial sectors. Bangkok, Thailand: Faculty of Business Administration Thai-Japan Institute of Technology.
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2006). *Applied multivariate research: Design and interpretation* (2nd ed.). Thousand Oak, CA: SAGE
- Miles, M.B., & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: SAGE.
- Morgan, P. L., Farkas, G., Hillemeier, M. M., & Maczuga, S. (2016). Science achievement gaps begin very early persist, and are largely explained by modifiable factors. *Educational Researchers*, 45(1), 18-35.
- Naz, F. & Murad, H. S. (2017). Innovative teaching has a positive impact on the performance of diverse students. *SAGE Open, October to December*, 1-8.
- Owen, S. M. (2015). Teacher professional learning communities in innovative context: 'Ah hah moments', 'passion' and 'making a difference' for student learning. *Professional Development Education*, 41(1), 57-74.
- Paniagua, A. (2018). Innovation in everyday teaching: No more waiting for superman. Education Plus Development. Retrieved from <https://www.brookings.edu/blog/education-plus-development/2018/02/08/innovation-in-everyday-teaching-no-more-waiting-for-superman>.
- Patton, M.Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: SAGE.
- Schumacker, R., & Lomax, R. (2004). *A Beginner's Guide to Structural Equation Modeling* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Somprach, K. (2014). *School leadership and self-development for school administrators*. Khon Kaen, Thailand: Faculty of Education, Khon Kaen University.
- Somprach, K., Tang, K. N., & Popoonsak, P. (2017). The relationship between school leadership and professional learning communities in Thai basic education schools. *Educational Research Policy and Practice*, 16, 157-175. doi: 10.1007/s10671-016-9206-7.
- Songumnuaykun, S. (2005). *Effects of entrepreneurship on the intellectual contributions, and services of university departments: An application of non-recursive, multi-level structural equation model*. (Unpublished doctoral dissertation). Bangkok, Thailand: Thailand Development Research Institute.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research*. Thousand Oaks, CA: SAGE.
- Teichler, U. (2004). The changing debate on internationalization of higher education. *Higher Education*, 48, 5-26.
- Tochot, P., Chanpeng, P., & Meemak, P. (2012). The multilevel causal factors affecting the evaluation utilization. *Journal of Education Khon Kaen University*, 35(2), 48-60.
- Zennouche, M. (2014). Factors influencing innovation at individual, group and organizational levels: A content analysis. *International Journal of Information Systems and Change Management*, 7(1), 23-42.

Acknowledgements

The researchers would like to thank Faculty of Education, Khon Kaen University for providing the supports to conduct this research.

My First Piano Adventure Piyano Metodunun Görsel, Teknik, Teorik Ve Müzikal Açından İncelenmesi / Analyzing Of “My First Piano Adventure” Method In The Context Of Visual, Technical, Theoretical And Musical Expression

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Abstract

Piyano eğitimine başlangıç aşaması kadar piyano eğitimine hazırlık dönemi de özellikle erken yaş çocukluk döneminde önemli bir yere sahiptir. Erken yaş dönemi için yazılmış ve piyano eğitimine hazırlık olması hedeflenen metotlar piyano eğitimcileri tarafından yazılmaya başlanmıştır. Bu dönemde kullanılan metotlar küçük yaş çocukların gelişimi için önemli olduğu kadar ortalama yaş piyano eğitimine hazır bulunuşluk sağlamak açısından da önemlidir. Buradan yola çıkılarak bu çalışmada erken yaş piyano eğitimini hedefleyen My First Piano Adventure (Faber ve Faber, 2006) - Lesson Book A, Lesson Book B, Lesson Book C metotlarının görsel, teknik, teorik ve müzikal yönden incelenmesi amaçlanmaktadır. Araştırmacı tarafından görsel, teknik, teorik ve müzikal yönden metotları incelemek amacıyla hazırlanan inceleme kriterleri uzman görüşüne sunulmuştur ve yeniden düzenlenerek son halini almıştır. İlgili metotlardan elde edilen verilerin analizinde içerik analizinden yararlanılmaktadır. Belirlenen kriterler doğrultusunda incelenen metotlar araştırmacı tarafından yapılan tablo yardımı ile sunulacaktır. Araştırmanın veri analizleri devam ettiği için bulgu ve sonuçlar ilerideki süreçte paylaşılacaktır.

The primer level of piano training is very important for all ages of children. These methods are generally written to answer the demand for a course of study designed especially for students who are 3 and up years. It seems important for the further stages of piano education how these methods prepare to students. Based on this idea, selected primary level piano methods will be analyzed. For this study, My First Piano Adventure (Faber and Faber, 2006) – Lesson Book A, Lesson Book B, Lesson Book C were chosen. This study is a qualitative research. The purpose of this research is analyze the methods in terms of visual, technical, theoretical and musical expression. The data collected will be analyzed by descriptive analysis. The data will be presented in tables. Since the research is on the analysis process, the findings and results will be presented later on.

Naslardan Hüküm İstinbatı Sürecinde Arap Dilinin Tesiri

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Özet

Kendisine has bazı hususiyetleri olan Arap dilinin İslam Hukukunun oluşması sürecinde önemli bir araç olarak kullanılmış olması fıkıhın teşekkülünde oldukça etkili olmuştur. Elbette dilin içtihadı faaliyetine ve dolayısıyla fıkıh ilmine olan etkisi, Arap dilinin taşıdığı olduğu lengüistik özelliklerine göre farklı şekillerde tezahür etmiştir. Biz de dilin İslam Hukukundaki etkilerinin nasıl ve ne ölçüde olduğunu gösterebilmek için Arap dilinin hususiyetlerinden birisi olan “Hurûfu’l-Meânî” konusunu merkeze almayı tercih ettik. Bu çerçeveden hareketle şer’î hükümlerin oluşumunda müçtehitlerin dili nasıl kullandıklarını, naslarla olan irtibatlarını nasıl kurduklarını ve müçtehidin naslardan hüküm istinbat ederken dil unsurundan ne kadar etkilendiğini ortaya koymayı amaçlıyoruz.

Anahtar Kelimeler: *İslam Hukuku, Hurûfu’l-Meânî, Fıkıh, Dil.*

Giriş

Fıkıh ilmi tafsîlî ve şer’î delillerden istinbat edilen hükümler manzumesi olan bir ilimdir. Bu sebeple fıkıhın en başat delillerini, Şâri’nin hitabı olan hükmü ifade ediyor oluşu nedeniyle kitap ve sünnet oluşturmaz. Müçtehid tüm gayretini nasları anlama ve yorumlama gayretine sarf eder. Nasların anlaşılmasında birçok farklı etmen etkili olduğu kadar tabiatıyla nasların lafızlardan müteşekkil olması lafzın anlaşılması adına dil hususiyetlerini de önemli kılmaktadır. Biz bu çalışmada Şâri’nin hitabına anlamada dolayısıyla fıkhi görüşlerin oluşumunda Arap dilinin tesirini yansıması adına Hurûfu’l-Meânî konusu üzerinde duracağız.

Arapçada kelime isim, fiil ve harf diye üç kısma ayrılır. Arapçadaki harfleri de kendi içerisinde iki kategoride toplamak mümkündür. Bunlardan birincisi, Türkçedeki harf kullanımıyla aynı olan kısımdır. Yani kendi başına bir anlamı olmayan ve “ و ” kelimesindeki “Vav” harfi gibi kelimenin oluşmasında yapı taşı olarak kullanılan harflerdir. Usûlcüler bu kategorideki harflere “Hurûfu’l-Mebânî” ismini vermişlerdir. İkincisi ise, Türkçede tam karşılığı edat olan harflerdir. Yani “ قام زيد و عمرو ” cümlesindeki “Vav” harfi gibi başkasına muhtaç olmakla birlikte kendi başlarına bir anlam taşıyan harflerdir. İşte bu ikinci kategorideki harflere usûlcüler “Hurûfu’l-Meânî” demişlerdir. İsimler ve fiiller yerine göre hakikat ve mecaz anlamlarda kullanıldığı gibi harfler de bazen hakikat bazen de mecaz anlamlarda kullanılabilir. İşte harflerin fıkhi ihtilaflar konu oluşu bu kullanım farklılığından kaynaklanmaktadır.

Edat anlamındaki harflerin sayısı ve bunlara ilişkin malumatın oldukça fazla olması buna karşılık tebliğin sunumu için ayrılan sürenin kısıtlı olması nedeniyle biz iki harf üzerinden konuyu izah etmeye çalışacağız.

A. “İzâ” Harfi Ve Kullanıldığı Anlamlar

1. Zaman ve Şart

“İza” harfi zaman ve şart anlamlarında kullanılmaktadır. Fakat dilciler ve fakihler, “İza” harfinin bu anlamları aynı anda mı yoksa duruma göre sadece birini mi ifade ettiği hususunda ihtilaf etmişlerdir. Ebû Hanîfe’ye göre, “İzâ” harfi hem zaman anlamını hem de şart anlamını müştereken taşır. Fakat cümle içerisinde, bu anlamlardan sadece birisi için kullanılır. Diğer, o esnada kullanılmaz. Yani şart anlamında kullanıldığında vakit anlamı düşer ve “İn” harfinin içerdiği manada sadece şart harfi olur. Ayrıca şart için kullanıldığında ceza cümlesi de gerektirir. Vakit için kullanıldığında ise, şart anlamı düşer ve sadece vakit anlamı için kullanılır. Kûfeli dilciler de Ebû Hanîfe’nin görüşünü desteklemektedirler. Onlara göre de “İza” harfi bu iki anlamı müştereken taşımaktadır (Teftâzânî, t.z.; Zerkeşî, 1993; İbn Melek, t.z.).

İmameyne ve Şâfi’ye göre ise, “İzâ” harfi zaman için kullanılır ve istikbal manasındaki fiil cümlesinin başına gelir. Bazen de tıpkı “Meta” harfi gibi mecazen şart için de kullanılır ki o durumda da “zaman anlamı” kaybolmaz. (İmameyne göre, “Meta” harfi zaman içindir ve bu anlam şart için kullanıldığında bile devam eder.) Şîrâzî’ye göre de, “İzâ” harfinin hükmü “Meta” harfinin hükmüyle aynıdır. Mesela, “ متى القتال ” “Savaş ne zaman?” sorusuna, “ شئت اذا ” demekle, “ متى شئت ” demek arasında bir fark yoktur. “Meta” harfi ile aralarındaki tek fark şudur; “Meta” harfi “İzâ” harfine göre, zamana delaleti bakımından daha geneldir. Bu konuda Basralı dilciler İmameyn ile aynı fikirdedirler (Teftâzânî, t.z.; Zerkeşî, 1993; İbn Melek, t.z.).

2. Hal

“İzâ” harfi yemin cümlelerinden sonra “ و الليل اذا يغشى ” “İnsanların sükûna vardığı geceye and olsun ki” (Duha 93/2) ayetinde olduğu gibi hal olarak gelir. Örnek; “İzâ” harfi hal olduğunda şart manasından soyutlanır. Çünkü şart anlamı taşıdığına, şartın cevabı ya cümlede zikredilmesi gerekir, ya da “İzâ” harfi önceki cümlelerin şart olduğuna delalet

eder. Bu ayette ise, ne cevap zikredilmiştir ne de “İzâ” harfi önceki cümlelerin şart olduğuna delalet etmektedir. Bu yüzden şart anlamı verilmemektedir (Zerkeşî, 1993).

B. İzâ Harfinden Kaynaklanan Fıkhi İhtilaflar

1. Her Namaz İçin Abdest Almanın Hükümü

“إذا قمتم إلى الصلوة فاغسلوا وجوهكم و ايديكم إلى المرافق و امسحوا برؤسكم ارجلكم إلى الكعبين” “*Namaza kalktığınız zaman, yüzlerinizi, dirseklere kadar ellerinizi ve –başlarınızı sıvayıp- topuklarınıza kadar ayaklarınızı yıkayın.*” (Maide 5/6) ayeti bizlere namaz kılacak kişi için abdest almanın farz olduğunu ifade etmektedir. Bu konuda bir ihtilaf mevcut değildir. Fakat her namaza kalkmanın abdest almayı gerektirip gerektirmediği hususunda fakihler ihtilaf etmiştir.

Cumhura göre, abdest bozulmadığı sürece her namaz için ayrı abdest almak gerekmez (Râzî, 1995). Bu konuda selef ve halef arasında bir ihtilaf yoktur. Ayrıca lafızda namaz için kalktıktan sonra abdestin tekrar edilmesini gerektiren bir durum da mevcut değildir. Ayette yer alan “İzâ” harfi ise, her namaz için kalkmadan sonra abdest almanın vacip olması hususunda umum anlam ifade etmez. Çünkü “İzâ” harfi Arap dilinde tekrar gerektirmez. Mesela, bir kimse hanımına “انت طالق اذا دخلت الدار” “*Eve girdiğinde boşsun*” dese, hanımı da bir kere eve girse boş olur. Daha sonra hanımı, ikinci kez eve girse, karısı ikinci kez boşanmış sayılmaz. İşte bu örnek, “İzâ” harfinin umum ifade etmediğine delalet eder. Başka bir örnek ise, bir kimse, “اذا دخل زيد الدار فاعطه درهما” “*Zeyd eve girdiğinde ona dirhem ver*” dese ve Zeyd bir kere eve girse, dirhemi almaya hak kazanır. Başka bir defa daha girse bir şey hak edemez. Bu örnekten anlaşılıyor ki, ayetteki “İzâ” harfi her namaz için kalkmanın tekrarıyla abdestin tekrar etmesinin zorunlu olduğuna delalet etmez (Cessâs, 1335; Râzî, 1995). Cumhurun dayandığı ikinci delil ise, Hz. Peygamber’in Mekke’nin fethinde bir abdestle günün bütün namazlarını kılmasıyla ilgili olan âhad haberdur (Râzî, 1995).

Zahiri kaynaklardan Muhallâ’ya baktığımızda bununla ilgili bir görüşe rastlayamadık fakat Râzî’nin Zahirilere yaptığı isnatta Zahirilere göre, her namaz için ayrı abdest almak vaciptir (Râzî, 1995). Râzî’ye göre, Zahirî mezhebinin bu görüşü benimseme nedeni ise, “إذا قمتم إلى الصلاة” ayetinin zahiridir. Yani onlara göre ayetin takdiri, her namaz kılmaya niyetlendiğiniz de abdest alın şeklindedir. Ayetten anlaşılan budur. Çünkü ayetteki “İza” harfi umum ifade eder (Râzî, 1995). Zahiriler “izâ” harfinin tekrar ifade etmediğine dair Cumhurun verdikleri örneklerin tekrar ifade etmemesini olayı kuşatan karinelere bağlamış ve haklı bir örnek olmadığına kanaat getirmişlerdir. Oysa Kuran’da varit olan mükellefiyetlerin temeli, tekrara dayanmaktadır. Bu sebeple söz konusu ayetteki “İzâ” harfi de umum ifade etmelidir (Cessâs, 1335; Râzî, 1995).

2. Talak Cümlesindeki “İzâ” Harfinin Hükümü

Bir kişinin hanımına, “اذا لم اطلقك فأنت طالق” “*Seni ne zaman boşamazsam o zaman boşsun*” demesi halinde talağın ne zaman gerçekleşeceği hususunda Hanefî âlimler ihtilaf etmişlerdir. Ebû Hanefî’ye göre talak ancak birinin ölümüyle gerçekleşir, aksi takdirde gerçekleşmez. Çünkü Ebû Hanife’ye göre, “İza” harfi yukarıda belirttiğimiz gibi hem şart hem de zaman ifade etmek için kullanılır. “İza” harfi şart için kullanıldığında zaman anlamı düşer ve sadece şart ifade eder. Tıpkı “İn” harfi gibi görev görür ve cümle “إن لم اطلقك” şeklinde denmiş gibi olur. Dolayısıyla kişi hanımını boşanmayı, onu boşamama şartına bağlamış olur. Onu boşamama ihtimali de ikisinden birisi ölünceye kadar devam eder. Bu yüzden birisi ölünce boşama gerçekleşir.

Ebû Yusuf ve Muhammed’e göre ise talak, konuşmadan hemen sonra gerçekleşir. Onlara göre “İza” harfi belirttiğimiz gibi mecazen şart anlamında kullanılır. Bu durumda ise zaman anlamı kaybolmaz. Bu yüzden “Meta” harfi gibi görev görür. Bu durumda cümle tıpkı “متى لم اطلقك” denmiş gibi olur. Dolayısıyla adam boşamayı, talaktan hâli olan bir vakte izafe etmiştir. Bu vakit ise, kişi sustuğunda mevcut olur ve boşama gerçekleşir. İmam-ı Şafii’ye göre de, “İza” harfi vakit için olduğundan bu örnekte boşama konuşmadan hemen sonra gerçekleşir. Çünkü konuşmadan sonraki zamanda boşama gerçekleşmemiştir.

Buradaki ihtilaf şart veya zamana niyet edilmeksizin kullanılan “İza” harfi hakkındadır. Eğer kişi, “İzâ” harfinin bu iki anlamından birine niyet ederse, o zaman ittifakla niyet edilen mana geçerli olur. Eğer “İza” harfi ile şart kastettim derse, ikisinden birisi ölmedikçe talak gerçekleşmez. Tıpkı “İn” harfi ile söylenmiş gibi olur. Eğer zaman kastettim derse, boşama hemen gerçekleşir. Bu durumda da “Meta” harfiyle söylenmiş gibi olur (Serahsî, 1984; Zerkeşî, 1993; İbn Melek, tz.).

A. “Min” Harfinin Kullanıldığı Anlamlar

1. İbtidâu’l-Gâye

“Min” harfi “İlâ” harfinin aksine “İbtidau’l-Gaye” için kullanılır (Gazzâlî, 1980; İbn Rüşd, tz.; Bâcî, 1989; İsnevî, 1985; Zerkeşî, 1993; Neseî, 1986; Hilâlî, 1986; Zelemî, 1983). Ali b. Süleyman, Müberred, İbn Sıraç, Süheyli ve bir grup dilciye göre “Min” harfi sadece “İbtidau’l-Gaye” için kullanılır. Aşağıda anlatacağımız anlamlarda kullanılmaz. Bu görüşü Uşfur da teyit etmektedir. “Gaye”nin başlangıcı olarak kullanıldığı cümledeki yerine “الذى” konulduğunda cümlelerin doğru olmasından anlaşılır (Sübkî, 1981). Min harfinin “İbtidau’l-Gaye” anlamında kullanılması “من المَسْجِدِ”

”مِنْ أَوَّلِ يَوْمٍ أَحَقُّ أَنْ تَقُومَ فِيهِ فِيهِ“ (İsra 17/1) ayetinde olduğu gibi ya mekân yönünden olur, ya da “مِنْ أَوَّلِ يَوْمٍ أَحَقُّ أَنْ تَقُومَ فِيهِ فِيهِ” (Tevbe 9/108) ayetinde olduğu gibi zaman yönünden olur (Sübkî, 1981; Zelemî, 1983).

Dilciler, “Min” harfinin mekânlar için “İbtidau'l-Gaye” olduğu hususunda ittifak etmişlerdir. Fakat zamanlar için “İbtidau'l-Gaye” olup olmadığında ihtilaf etmişlerdir. Sibeveyh'e ve Basralı Cumhura göre, zamanlar için “Gaye”nin başlangıcı olamaz. Onlara göre sadece mekânlar için

“Gaye”nin başlangıcı olur. Zamanlar için “Gaye”nin başlangıcını bildiren “منذ” harfidir. Ahfeş, Müberrek, İbn Mâlik ve Kûfeli dilcilere göre ise, “لِلَّهِ الْأَمْرُ مِنْ قَبْلُ وَمِنْ بَعْدُ” (Rum30/4) ayetinde olduğu gibi “Min” harfi zaman bakımından da “Gaye”nin başlangıcı olabilir. Bunu destekleyen daha birçok örnek mevcuttur (Zerkeşî, 1993).

Bazen ise “Min” harfî, “من محمد رسول الله إلى هرقل عظيم الروم” “Hz. Muhammed'den büyük Rum kralı Heraklius'a” örneğinde olduğu gibi mekân ya da zamanın dışındaki bir durumda da “İbtidau'l-Gaye” için kullanılabilir (Sübkî, 1981).

2. Tebyin

“Min” harfî, öncesinde bir âmm lafzın gelmesi, sonrasında ise bir has lafzın gelmesi koşuluyla (Zerkeşî, 1993) bazen “Tebyin” görevi görür (İbn Rüşd, tz.; Sübkî, 1981; Zerkeşî, 1993). Mesela, “فَاجْتَنِبُوا الرِّجْسَ مِنَ الْأَوْثَانِ” (Hacc 22/30) ayetinde pis durumdan kaçınmak emredilmektedir. “الرِّجْسَ” Âmm bir lafızdır, “Min” harfî de kendinden sonra gelen hass lafızla pis olan durumu açıklamaktadır.

Ebû Hayyan, mensubu bulunduğu mezhebin çoğunluğunun, “Min” harfine “Tebyin” görevini yüklediklerini ve bu anlamı yüklemeyi de uygun bulmadıklarını ifade etmiştir. Onlara göre, “Min” harfî hiçbir zaman bu anlama gelmez. Yukarıda ifade edilen ayetteki “Min” harfî onlara göre, “Gaye”nin hem başlangıcı hem de sonudur. Çünkü putlar demirden, bakırdan, altından ya da başka bir şeyden şekillendirilerek yapılan şeylerdir. Dolayısıyla bunlar zatı itibarıyla pis olan şeyler değildir. Ayette emredilen kaçınma, putlardan değil, onlara ibadet etmekten kaçınmadır. Dolayısıyla ayetteki “Gaye”, putlara tapınmaktan kaçınmaktır. Bu kaçınma eylemi ise, putlara tapmanın hem başını hem de sonunu kapsadığı için “Min” harfî bu ayette, “putlara tapınmaktan kaçınmak” “Gaye”sinin hem başlangıcı hem de sonudur (Sübkî, 1981).

Serahsî ise, bu örneği “Min” harfinin “Sıla” olarak kullanılmasına örnek vermiştir. Gerekece olarak da vaz olunduğu hakikat anlamına ya da mecaz anlamlara hamletmenin imkânsız oluşunu ve cümlede bu harfe ihtiyaç duyulmasını delil göstermiştir (Serahsî, 1984).

3. Teb'iz

“Min” harfinin kullanıldığı anlamlardan birisi de “اخذت من الدراهم” “Dirhemlerden bazılarını aldım” örneğinde olduğu gibi “Teb'iz” anlamıdır (Cessâs, 1985; Cüveynî, 1999; Gazzâlî, 1980; Bâcî, 1989; İsnevî, 1984; İsnevî, 1985; Zerkeşî, 1993; İbn Melek, tz.). Bu örnekten, dirhemlerin tamamının değil bir kısmının alındığı anlaşılır. “Min” harfinin “Teb'iz” anlamında kullanılıp kullanılmadığı, onun yerine “بعض” kelimesinin getirilmesi ve bu kelimenin cümle anlamını bozmamasıyla anlaşılır. Mesela bir kadına, “طَلَقِي نَفْسَكَ مِنْ ثَلَاثٍ مَا شِئْتَ” “Üç talaktan dilediğin kadar boşa” dense, kadının bir yada iki boşamayı kullanma hakkı vardır. Üç talakın hepsini de kullanamaz (İsnevî, 1984).

İbn Duhan, bazı âlimlerden “Min” harfinin “Teb'iz” anlamında kullanılması için “بِأَمْرِ اللَّهِ يَنْقُصُ مِنْهُمُ مَنَّا وَمِنْهُمْ مَنَّا فَصَصْنَا عَلَيْكَ وَمِنْهُمْ مَنَّا نَقْصُصُ عَلَيْكَ” “Onlardan bazılarını Mü'min'dir ve çoğunluğu fasıktır” (Âli İmran 3/110) ayetine dayanırlar.

Âlimlerin çoğunluğuna göre böyle bir şartın olmaması gerekir. “مِنْهُمْ مَنْ قَصَصْنَا عَلَيْكَ وَمِنْهُمْ مَنْ نَقْصُصُ عَلَيْكَ” “Ve onlardan bazılarını sana anlattık ve bazılarını anlatmadık” (Mü'min 40/78) ayetinde olduğu gibi bunu ispatlayan birçok ayet de mevcuttur (Zerkeşî, 1993).

4. Umum-u Te'kid

“Min” harfî bazen “Umum-u Te'kid” anlamında kullanılır. Bu durumda “Cins-i Nefyetme” anlamı içerir (Gazzâlî, 1980). Konuyla alakalı olarak Sibeveyh, şu örneği ifade etmektedir; “ما جاءني رجل” “Bana bir adam gelmedi” cümlesi umumdur fakat “ما جاءني رجل بل رجلان” “Bana bir adam gelmedi fakat iki adam geldi” şeklinde teville ihtimali vardır. Fakat “ما جاءني من رجل” “Bana hiçbir adam gelmedi” cümlesi ise umumdur ve “Min” harfinden dolayı tevil ihtimali olmaksızın adam cinsinin hepsini nefyetmektedir (Cüveynî; İsnevî, 1985).

Âlimler, yukarıda anlatılan dört anlamdan hangisinin, “Min” harfinin asıl anlamını olduğu hususunda ihtilaf etmişlerdir. Birinci görüşe göre, “Min” harfinin asıl anlamı “İbtidau'l-Gaye” dir. Diğer anlamlar ise bu anlama tabidir. Cürcanî'nin de belirttiği gibi, “Min” harfî “İbtidau'l-Gaye” anlamını hiçbir zaman yitirmez. “Teb'iz” ve “Cins-i Beyan” anlamları karineler yardımıyla bilinir. Bu yorum, lafızlara müşterek anlam vermekten ya da kelimeyi mecaz yapmaktan daha geçerlidir. Bu görüşün destekçisi olan İbn Arabî, bu anlatılanların doğru olduğunu belirttikten sonra şunları demektedir; Her “Teb'iz” anlamı, “Gaye”nin başlangıcıdır. Fakat her “Gaye”nin başlangıcı “Teb'iz” değildir.

İkinci görüşe göre, “Min” harfinin gerçek anlamı “*Tebyin*”dir. Yani “*Cins-i Beyan*” dır. Diğer anlamlar bu anlama tabidir. Bu anlam, bütün anlamlar arasında müşterek anlam olarak kullanılır. Mesela, “سرت من الدار الى السوق” “*Evden çarşıya kadar yürüdüm*” cümlesinde, yürümenin başlangıcı beyan edilmiştir. Diğer örnekler de bunun gibidir.

Üçüncü görüşe göre, “Min” harfinin asıl anlamı “*Teb'iz*”dir. Bu görüş dilcilerin fazla rağbet etmemesinden dolayı tercih edilen bir görüş olmamıştır.

Dördüncü görüşe göre, “Min” harfinin asıl anlamı “*Teb'iz*” ya da “*Gaye*” anlamlarıdır. Yani bu iki anlamdan birisi için kullanılır. Hangisi için kullanılırsa, kullanıldığı o anlam, “Min” harfinin asıl anlamı olur (Zerkeşi, 1993).

5. Kullanıldığı Diğer Anlamlar

“Min” harfi bazen “كَلَّمَا أَرَادُوا أَنْ يَخْرُجُوا مِنْهَا مِنْ غَمٍّ...” *Üzüntüden dolayı oradan her çıkmak istediklerinde*” (Hacc 22/22) ayetinde olduğu gibi “*Ta' lil*” anlamında kullanılır (İsnevî, 1984; İsnevî, 1985; İbn Melek, tz.; Hilâlî, 1986). “يَنْظُرُونَ” “*Göz uçlarıyla baktıklarını...*” (Şura 42/45) ayetinde olduğu gibi, bazı yerlerde “*Be*” harfi anlamında kullanılır (İsnevî, 1985; Hilâlî, 1986; Zelemî, 1983). Bu ayetin takdiri “بَطْرَفٍ خَفِيٍّ” şeklindedir. “Min” harfi bazı kullanımlarda ise, “أَرُونِي مَاذَا خَلَقُوا مِنَ الْأَرْضِ” “*Bana yerden ne yarattıklarını gösterin*” (Fâtır 35/40) ayetinde olduğu gibi, “*Fi*” harfine uygun bir anlamda kullanılır (Hilâlî, 1986; Zelemî, 1983). Zerkeşi’ye göre, “Min” harfi bu ayette “*Fi*” harfi anlamında değil “*Beyanü'l-Cins*” olarak görev yapmaktadır (Zerkeşi, 1993).

“Min” harfinin, “*Alâ*” harfiyle aynı anlamda kullanıldığı durumlar da mevcuttur (Cüveynî; Gazzâlî, 1980; İsnevî, 1985; Hilâlî, 1986; Zelemî, 1983). Mesela; “وَنَصْرَنَاهُ مِنَ الْقَوْمِ” “*O topluma yardım ettik*” (Enbiya 21/77) ayeti, “عَلَى الْقَوْمِ” şeklinde takdir edilir. Suyuti’ye göre, “لَنْ تُغْنِي عَنْهُمْ أَمْوَالُهُمْ” “*Malları onları korumayacaktır*” (Âli İmran 3/10) ayetinde olduğu gibi “Min” harfinin “*İnde*” harfinin kullanıldığı anlama yakın bir anlamda kullanılması da mümkündür (Hilâlî, 1986; Zelemî, 1983).

İsnevî, “Min” harfinin yukarıdaki anlamların dışında “*Fasl*”, “*Bedel*”, “*An*” ve “*Bima*” harfleri anlamında da kullanılabileceğini ifade etmiştir. Fazla kullanılmaması nedeniyle olsa gerek, bu anlamları sadece isim olarak zikretmekle yetinmiştir. Örnek verme ihtiyacı hissetmemiştir (İsnevî, 1985).

B. Min Harfinden Kaynaklanan Fıkhi İhtilaf

Teyemmüm Edilecek Şeyler

“وَإِنْ كُنْتُمْ مَرَضَىٰ أَوْ عَلَىٰ سَفَرٍ... فَلَمْ تَجِدُوا مَاءً فَتَيَمَّمُوا صَعِيدًا طَيِّبًا فَامْسَحُوا بِوُجُوْهِكُمْ وَأَيْدِيكُمْ مِنْهُ” “*Eğer hasta veya yolculukta iseniz yahut biriniz tuvaletten gelmişse veya kadınlara yaklaşmışsanız ve su da bulamamışsanız, tertemiz toprağa teyemmüm edin ve yüzlerinize ve ellerinize sürün. Allah affeden ve bağışlayandır.*” (Maide 5/6) ayetiyle teyemmümün ne zaman yapılacağı bildirilmiştir. Fakat âlimler teyemmüm yapılacak şeyin neler olduğu hususunda ihtilaf etmişlerdir. Bu ihtilafın kaynağında ise konuyla ilgili hadislerin yanında teyemmüm ayetindeki “Min” harfinin anlamıyla ilgili yapılan yorumlar ve “*Said*” kelimesine verilen anlamlar yatmaktadır.

Ebû Hanife’ye göre kum, taş, kireç, kırmızı çamur gibi yeryüzü cinsinden olan her şeye teyemmüm yapılabilir. Ebû Yusuf ise sadece toprak ve kum üzerine teyemmüm yapılabileceğini söylemiştir (Cessâs, 1335; Şirbînî, tz.). Ebû Hanife’ye ait görüşün delilleri şunlardır:

1. Teyemmüm Ayetindeki “Min” harfi “*İbtidau'l-Gaye*” anlamındadır (Zerkeşi, 1993; Şirbînî, tz.). Yani ayetteki “Min” harfi teyemmümün yerin bir kısmıyla yapılmasını değil, teyemmüme elleri yere vurarak başlanmasını ifade etmektedir. “Min” harfinden “*Gaye*”nin, yerin bazı kısımlarına hamledilmesi gerekir” anlamı çıkarılamaz. Dolayısıyla kişi sert bir kayayı veya taşı meshetse yeterlidir. Çünkü yeryüzünden başlanmıştır. Şayet bir hayvanı veya elbiseyi meshetseydi yeterli olmazdı. Çünkü bunlar yeryüzünün kapsamına girmez (Zerkeşi, 1993).
2. Cassas ise, bu anlamla ilgili olarak şöyle bir yorum yapmaktadır; ayette vurgulanmak istenen, mesh için niyetin vacip olduğunu tekit etme anlamıdır. Çünkü “Min” harfi bazen “خرجت من الكوفة” “*Kufe’den çıktım*” sözünde olduğu gibi “*İbtidau'l-Gaye*” anlamında kullanılır. Buna göre ayetin tevili “işe yerden başlayıp ellere ve fasılaj olmaksızın yüze ulaşın” şeklindedir. Fakat mesh ile yerden başlama arasında fasıla bulunmaktadır. Dolayısıyla niyet hükmü kesintiye uğramaktadır. Bu yüzden niyetin yenilenmesi ihtiyacı hâsıl olur. Mesela, “توضأ” “من النهر” “*Nehirden abdest al*” cümlesi, abdesti almaya nehirden başlanılmasını ve kesinti olmaksızın abdest organlarına ulaşılmasını ifade eder. Ayrıca ayetteki “منه” kısmının Şafiilerin dediği gibi “بعض منه” şeklinde de anlaşılması mümkündür. Bu durumda ise, kendisine mesh edilebilecek şeyler için kullanılır. Bunlar ise yeryüzü cinsinden olan her şeyi kapsar. Çünkü Allah cc. toprağı suya bedel kılmıştır. Yani teyemmüm için, suyun yerine toprağı temizleyici kılmıştır. Yeryüzündeki şeyleri suyun yerine bedel kılmamız bizim yetkimiz dâhilinde değildir. Bunlar ancak tevkifi olarak bilinebilir. Hz. Peygamber “yeryüzü bana mescit ve temiz kılındı.” ve de “toprağı bizim için temizdir.” buyurmuştur. Bu da bize yeryüzünün tamamının bedel kılındığını gösterir. Altın, gümüş ve inci gibi şeyler teyemmüme uygun sayılmaz. Çünkü bunlar yeryüzünün tab’ından değildir. Bunlar yere emaneten bırakılmış madenlerdir. Hz. Peygambere madenler hakkında sorulduğunda şöyle demiştir; “Altın ve gümüş

Allah'ın yeryüzünü yarattığı günde yarattığı şeylerdir. İnci ise Sedeften çıkarılır. O da su hayvanıdır. Kül ise odundur." Dolayısıyla bunlar yeryüzünün tab'ından ve özünden değildir. Aynı şekilde pamuk ve kar gibi şeyler de teyemmüme uygun olmaz. Çünkü bunlar da yeryüzünün cinsinden değildir (Cessâs, 1335).

3. Ayette geçen "Sâid" Ebû Bekir'e göre yeryüzünün kabuğunu teşkil eden bütün parçaların adıdır. Bu ise özel olarak toprağın tahsis edilmesini gerektirmez. Aksine yeryüzünün bütün cüzlerini kapsar ve hepsine teyemmüme müsait kılar. İbn Arabî'den gelen rivayet de bu yöndedir. Ayetin zahirine göre yerin bütün cüzlerine mesh etmek caizdir (Cessâs, 1335).

4. Ebû Hüreyre'den yapılan rivayet; "Çöl halkından bir grup kimse Hz. Muhammed'in yanına gelerek şöyle dediler: "Bizler üç dört ay kumluklar arasında kalıyoruz. Aramızda cünüp, loğusa ve hayızlılar oluyor. Bizler su bulamıyoruz." Peygamber efendimiz şöyle buyurdu: "عليكم بأرضكم" "Size bulunduğunuz yer yeter" Hadiste tavsiye edilen yer kumlu bir bölgedir. Kum ise yeryüzünün bir cüzüdür. Bu da sadece toprağa hasredilmenin yanlış olduğunu aksine, yeryüzünün cinsinden olan her şeyin teyemmüme uygun olduğunu gösterir (Cessâs, 1335; İbn Kudame, tz.; Zühaylî, 199).

İmam-ı Şafii'ye göre teyemmüm sadece ele bulaşacak şekilde tozu bulunan (Cessâs, 1335; İbn Kudame, tz.; Şirbînî, tz.) ve yanmamış toprak üzerine yapılabilir. Bundan başka bir şey üzerine teyemmüm yapılamaz. Şafiiler buna ilaveten tozu bulunan kuma da teyemmüm yapılabileceğini ifade etmişlerdir (Cessâs, 1335; İbn Kudame, tz.; Şirbînî, tz.; Zühaylî, 1994). Ebû Yusuf da bu görüşü savunmaktadır (Cessâs, 1335; İbn Kudame, tz.). Şâfiilerin delilleri ise şunlardır:

1. Ayetin "فَامْسَحُوا بِمِئْتَةٍ" kısmındaki "Min" harfi "Teb'iz" anlamındadır. Zemahşerî, ayetteki "Min" harfinin "Teb'iz" anlamında olduğu göstermek için "مَسَحَ بِرَأْسِهِ مِنَ الدُّهْنِ" "Biraz yağ ile başını meshetti" sözünü delil gösterir. Arap olan bir kimse bu sözden ancak "Teb'iz" anlamı anlar. Ayetteki "Min" harfinin "Teb'iz" anlamında olduğu anlaşıldığına göre, teyemmümün yeryüzünün bir parçasıyla yapılması gerekir. Yeryüzünün teyemmüme uygun olan kısmı ise, tozu bulunan şeylerdir. Çünkü teyemmüm bir taharettir. O halde bu taharete temizleyici olan unsurun, başın meshinde olduğu gibi taharet yerine ulaştırılması gerekir. Bu da ancak tozu olan şeyle mümkün olur.¹

2. Hz. Peygamberden yapılan rivayet; "Yeryüzü bana mescit, toprağı da temiz kılındı." Bu hadise göre teyemmüm yapılacak şey topraktır. Çünkü toprağın temiz kılındığı bu hadisle anlaşılmaktadır (Şirbînî, tz.).

Sonuç

Harflerin fûru fıkıh konularındaki ihtilaflara olan etkisi kendilerine yüklenen anlamların çeşitli oluşu ve naslardaki kullanımlarında bu anlamlar üzerinde bir ittifakın bulunmamasıdır. Harflerin taşıdığı anlama ilişkin iki temel ihtilaf noktası vardır. Bunlardan ilki harflerin taşıdığı bu anlamlardan hangisinin hakikat hangisinin mecaz anlam olduğunu tespit hususudur. Bir grup usûlcüye göre harfin hakikat olan anlamı diğer gruba göre mecaz anlamı olabilmektedir. Mesela, bir grup usûlcü "Min" harfinin hakikat anlamının "İbtidau'l-Gaye" olduğunu iddia ederken başka bir grup hakikat anlamının "Teybin" olduğunu iddia etmiştir. Bu şekildeki ihtilafa bağlı olarak "Min" harfinin hakikat anlamı için dört farklı anlam dile getirilmiştir. Hakikat anlamının tespiti hususunda usûlcülerin yaşadıkları bir başka ihtilaf nedeni ise, harfin hakikat anlamında ittifak etmekle birlikte bu anlamın mahiyetini tespitteki görüş ayrılıklarıdır. Mesela usûlcüler "Vav" harfinin hakikat anlamının "cem" olduğunda ittifak etmekle birlikte, her bir ekol "cem" anlamının mahiyetini farklı biçimlerde algılamışlardır. Hanefiler, "cem" anlamını mutlak olarak (tertib ve maiyyet gerektirmeksizin) algılamak, Şâfiiler "tertibe uygun cem" şeklinde yorumlamışlardır. Malikiler ise "maiyyete göre cem" anlamında olduğunu iddia etmişlerdir. Bir

Harflerin hakikat veya mecaz anlamlarına bağlı olarak yaşanan ihtilafın ikinci şekli hakikat anlam üzerinde ittifak edilmesine karşın cümle içerisinde kullanıldığında hakikat anlamında mı yoksa mecaz anlamında mı kullanıldığının tespit edilmesinde tezahür eder. Bu harflere ilişkin ihtilaf nedenleri arasında en sık rastlanılan durumdur. Mesela, "Ev" harfinden kaynaklanan fıkhi ihtilafı anlatırken belirttiğimiz gibi, bir ekol ayetteki "Ev" harfinin mecaz anlamda kullanıldığını söylerken, diğer ekol hakikat anlamında kullanıldığını söylemiştir. Tabi ki bu durum farklı görüş ve hükümlerin verilmesine neden olmuştur.

Harflerin neden oldukları bir başka ihtilaf çeşidi, taşıdıkları anlamdan ziyade cümlede kullanılmasının uygun olup olmamasından kaynaklanan ihtilafıdır. Bazı harfler, taşıdığı anlamın kullanıldığı cümlelerin konusuna uygun olmaması sebebiyle bazı usûlcülerce o tip cümlelerde kullanılması hoş karşılanmamıştır. Mesela, "tahyir" anlamı taşıyan bir harfin mehir yahut vekâlet cümlesinde kullanılması uygun bulunmamıştır. Çünkü tahyir, mehrin veya vekâlet verilen kişinin bilinmemesine neden olur. Bu da mehrin tespitine yahut vekilin tayinine engel olur. Fakat bazı fakihler bu harflerin bazı şartlar altında bu cümlelerde kullanılmasına vermiştir. Dolayısıyla bu tip cümlelerde izin vermeyen fakihler cümleden farklı bir hüküm çıkarırken, izin veren fakihler daha farklı hükümler çıkarmışlardır.

¹ Zerkeşî, 1993; Şirbînî, tz.; Zühaylî, 1994;

Bazı harflerin taşıdıkları anlamların mahiyetini tespitteki ihtilaflar da fıkhi ihtilaflara neden olmaktadır. Mesela, gaye anlamı taşıyan “İla”, “Hatta” ve “Min” harflerinin bu gaye anlamını hangi sınırlar içerisinde taşıdığı hususunda usulcüler ve fakihler ihtilaf etmişlerdir. Bir grup gayenin muğayyaya dâhil olduğunu söylemiş, bir grup da dâhil olmadığını söylemiştir. Fırû meselelerinde de ona göre hüküm çıkarmışlardır.

Bütün bu durumlarda usulcüler kendi savundukları anlamın geçerliliğini kanıtlamak için yine harflerin Arap dilindeki kullanımlarını gerekçe göstermişlerdir. Bu da bize usulcülerin ve fakihlerin, harflerin anlamlarını tespit ederken Arap dilindeki anlamlarına sadık kaldıklarını yeni bir Şer’i anlam yükleme çaba ve gayreti içerisinde olmadıklarını göstermektedir. Bunun yanında ayetlerdeki kullanımları da kendilerine dayanak almışlardır. Fıkhi meselelerde de ise, görüşlerini kanıtlamak için Hz. Peygamber’in uygulamalarını delil göstererek fikirlerini desteklemeye çalışmışlardır.

Kaynakça

- Bâcî, Ebû'l-Velid Süleyman b. Halef, İhkamu'l-Fusul fi Ahkami'l-Usul, tah Abdullah Muhamed ec-Cebburi, Beyrut 1989.
- Cassas, Ebû Bekir Ahmed b. Ali er-Râzî, Ahkamu'l-Kur'an, İstanbul 1335.
- el-Fusul fi'l-Usul, tah Acil Casım en-Neşami, Kuveyt 1985.
- Cüveynî, Ebû'l-Meali Abdullah b. Yusuf, el-Burhan fi Usuli'l-Fıkıh, II, tah. Muhammed Hasan ed-Dîb, 1999.
- Gazzâlî, Ebû Hamid Muhammed b. Muhammed, el-Menhul min Ta'likati'l-Usul, tah, Muhammed Hasan Heyto, Şam 1980.
- Hilâlî, Hadi Atiyye Matarcı, Hurufu'l-Amile fi Kur'ani'l-Kerim Beynen'n-Nahviyyin, Beyrut 1986.
- İbn Kudame, Ebû Muhammed Abdullah b. Muhammed, el-Muğni li-İbn Kudame, IX, Riyad tz.
- İbn Melek, Abdu'l-Latif b. Ferište, Şerhu Menari'l-Envar, yy., tz.
- İbn Rüşd, Ebû'l-Velid Muhammed b. Ahmed el-Endulisi, el-Beyan ve't-Tahsil ve's-Şerhu ve't-Tevcihu ve't-Ta'lil fi Mesaili'l-Mustahrec, IV, Beyrut tz.
- İsnevi, Cemaleddin Ebû Muhammed Abdurrahim, Kevkebû'd-Durri, Beyrut 1985.
- Nesefî, Ebû'l-Berekat Abdullah b. Ahmed, Keşfu'l-Esrar (Nuru'l-Envar ve Kameru'l-Akmar ile birlikte), İstanbul, 1986.
- Râzî, Ebû Abdullah Fahreddin Muhammed b. Ömer, Mefatihü'l-Gayb, Trc. Suat Yıldırım, Ankara 1995.
- Serahsî, Muhammed b. Ahmed b. Ebi Sehl, el-Mebsut, Mısır 1324.
- *Usulu's-Serahsî*, II, İstanbul 1984
- Subki, Ali b. Abdilkafi, el-İbhac fi Şerhi'l-Minhac, tah. Şaban Muhammed İsmail, Ezher 1981.
- Şirbînî, Şeyh Muhammed eş-Şirbînî el-Hatib, Muğni'l-Muhtaç ila Ma'rifeti Elfazi'l-Minhaç (Metnü'l-Minhaç ile birlikte), Beyrut tz.
- Teftâzânî, Sa'du'd-Din Mesut b. Ömer, Şerhu't-Telvihi ale't-Tavdihi, II, Beyrut tz.
- Zelemî, Mustafa İbrahim, Delaletü'n-Nusus ve Turuku İstinbatı'l-Ahkâm, Bağdat 1983.
- Zerkeşî, Ebû Abdullah el-Mısri el-Hanbeli, Şerhu'z-Zerkeşî ala Muhtasari'l-Hiraki, Riyad 1993.
- Zühaylî, Vehbi, İslam Fıkhi Ansiklopedisi, Trc. Ahmet Efe, İstanbul, 1994.

Nat And His Friends: A Learning Support In Mathematics Education

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Abstract

We describe a path which came into being after it was noted that Italian primary school children (aged 6-11 years) have difficulty in understanding the necessity for using different numerical sets depending on the problem they are dealing with. We decided to use a mostly visual support which would be simple, engaging and able to evolve over time. Thus, the poster “Nat and his friends” was born, where the characters appear, for the first time, in the moment in which a problem requires it in the five years of Italian primary school. Besides “Nat” (the set of natural numbers), “Ra” (the set of rational numbers), “Rel” (the set of relative numbers), other characters were necessary, that is, “Al”, “Geo”, “Misu”, “Alea”. “Geo” and “Alea” represent two areas, respectively that of geometry and that of mathematics of uncertainty; “Al” is the “depository” of procedures, while “Misu” steps in when there are problems of measurement. Lastly, there is “Logic the Traveller”. This character, given that she is a “traveller”, is not on the poster; she is mostly used when dealing with problems of classification.

1. Introduction

At Italian primary school level (5 years: from first to fifth year, with children aged 6-11 years), mathematics aims to provide tools to investigate and explain many of the phenomena of the world which surround us, favouring a rational approach to the problems that reality sets (see MIUR, 2018; see also Canetta, Manara & Marchi, 1986, and Angeli, D’Amore, Di Nunzio & Fascinelli, 2011). This happens for the natural number, in both cardinal and ordinal aspects: The first aspect stems from the spontaneous and “natural” operation of counting and translates, first via concepts and then symbols, the relationship of equipotency between finite sets of concrete objects; the second aspect may be reached through elementary operations of comparison between sets of different cardinality or using “natural” intuition in linear ordering or alignment. The first moment of construction of the natural number is therefore that of carrying out a comparison between finite sets which leads to the construction of an abstract concept.

The aim of primary school is to widen the learners’ fields of interest and, as a consequence, there are more and more things to learn about the world outside: Thus, from handling concrete sets which have a finite number of elements, requiring the use of natural numbers, we arrive at the presentation of problems with solutions in other numerical sets. Therefore, the foundations are created for the necessity for new cognitive and expressive “worlds”, which will be the subject for study after primary school.

Obviously, difficulty in comprehension and, correspondingly, didactic difficulty increase. It should be said that the difficulties encountered by the learners, in their experiences with numbers, are the same as those of human beings through the centuries, in the historical evolution of the concept of the number, as the various numerical systems were introduced in response to differing questions regarding means to control certain situations. If the subject of natural numbers seems to be managed (quite) well, difficulties arise with handling and understanding the significance of rational numbers (and their representations) and continue to increase when, at secondary school level, real numbers, not to mention complex numbers, are dealt with.

2. The Research Project

The project illustrated here was born in the context of our research group (“Nucleo di Ricerca in Didattica della matematica”, Department of Mathematics and Earth Science, University of Trieste, Italy), comprising a mixed group of teachers from nursery, primary, middle and high school level (who teach children and young people between 3 and 19 years old), led by university teachers involved in many activities to promote and improve mathematics teaching at the various school levels. In the course of the periodical group meetings, difficulties, gaps, and misconceptions are highlighted and together we try to find strategies and approaches of “prevention” and “solution”. Our activity is also “outward-looking” whereby we organize events to promote mathematics for children and young people and initial training or refresher courses for teachers; among these activities we should

remember “La matematica dei ragazzi”, which has been held every two years since 1996 this year being the twelfth time (see Leder, Scheriani & Zuccheri, 2002, and Zuccheri & Zudini, 2014).

The idea for the present research came from the observation over a period of years by one of the authors of this paper (a primary school teacher since 1996 in Trieste) that primary school children experience great difficulty in recognizing that an entity belongs to a certain numerical set (in particular, distinguishing between natural and rational numbers) or other mathematical fields (for example, geometry, measurement, ...).

In the specific context of our project, we believe that the research experience presented here has importance both for preventing the formation of misconceptions and for limiting the difficulties encountered by the children. According to the project, the experience would be expected to start right in the first year of primary school and to run throughout the whole period of primary school, ending in the fifth year.

With regard to the present state of the research, begun in the first year of the Primary School “G. Foschiatti” of Trieste (15 pupils) in 2015, we are now at the end of the third year (June 2018).

3. “Nat And His Friends”

3.1 The Birth Of The Poster

Previous experience of one of the authors of this paper (over a period of more than 15 years) demonstrates that the use, right from the first year of primary school, of a poster which shows a picture of nine children, the “Children of Mother Grammar”, allows all pupils, even the ones who have some difficulty, to recognize the nine parts of speech of Italian grammar.

The drawing (see Figure 1) is based on the fact that every child-character, who represents a part of speech (noun, article, verb, adjective, adverb, preposition, pronoun, exclamation, and conjunction), has his/her own colour and “is doing” something related to his/her grammatical function. For example, “Article” (drawn slightly smaller than “Noun”) holds hands with “Noun”, who, in turn, holds hands with “Adjective”: In Italian grammar, these agree, or “get on with each other”.



Figure 1. The poster “Mother Grammar” (Figure and photo by D. Leder)

If the methodology works for learning Italian grammar, why not then use the same sort of visual aid (poster) for mathematics and try creating a poster with characters relating to it?

3.2 Characters Of The Poster

In the first year of the Primary School “G. Foschiatti of Trieste, the following characters were born in 2015 (listed in order of appearance), each of whom are depicted as a boy/girl, identified with a colour and the characteristics accessible to the pupils at the present state of the research (that is, at the end of the third year, June 2018):

1. “Nat” (coloured blue), representing natural numbers; in line with his prerogative, he does not write anything and counts pointing (cardinal and ordinal aspects of the natural number) (see Figure 2).



Figure 2. “Nat” (Figure and photo by D. Leder)

2. “Al” (coloured white, perhaps because he is acknowledged as “cutting across” various fields), representing the writing of numbers; Nat’s precise and fussy brother, in line with his prerogative, he puts everything in order and records by writing down (he compares, orders, writes, and enables the consultation of the algorithms of operations) (see Figure 3). The children, for the time being, have understood more the operative aspect rather than that of the writing.



Figure 3. “Al” (Figure and photo by D. Leder)

3. “Ra” (coloured red), representing rational numbers; in line with her prerogative, she shares out a bar of chocolate (see Figure 4). “Ra” has appeared a little earlier than usual in the school syllabus but in this way the learners arrive, with greater familiarity, at decimal numbers and fractions.



Figure 4. “Ra” (Figure and photo by D. Leder)

4. “Misu” (coloured green), representing measurement. In line with his prerogative, he compares two equal baskets which contain quantities of fruit to decide if they are equal or, if not, which one is lesser or greater

than the other (see Figure 5); when he has decided, he might need “Nat” and then, if “Nat” cannot help him, he calls “Ra”.



Figure 5. “Misu” (Figure and photo by D. Leder)

5. “Geo” (coloured brown), representing geometry; in line with her prerogative, she traces paths and identifies the shapes of the fruit and leaves and dreams about an ice cream and a witch’s hat (in order to have solid figures, such as cones and cylinders, represented also in other contexts) (see Figure 6). “Nat” and “Ra” are very friendly and close with her, even if she often has to ask for help also from “Al” (for example, for calculating a perimeter).



Figure 6. “Geo” (Figure and photo by D. Leder)

All these characters are drawn in a wood, on the poster of “Nat and his friends” (see Figure 7)



Figure 7. The poster “Nat and his friends” (Figure and photo by D. Leder)

Starting from the first year, whenever there is a need or a necessity, these child-characters are “called”. For example, if I have a cake and I want to divide it up into 6 equal parts, who shall I call? Surely “Nat”! And also “Al” and maybe even “Ra”.

Further characters have been added:

6. In the third year (this year), Mrs. “Logic” has appeared; she is a traveller. She is the twin sister of the “Logic” used in Italian and is multi-coloured, like a rainbow (as she is recognized as “cutting across” various fields and therefore not part of the poster) (see Figure 8). The choice of her name is due to her interventions with “and”, “or”, “not”, while remaining clear that she is to be distinguished from her twin sister who intervenes in Italian.



Figure 8. “Logic the Traveller” (Figure and photo by D. Leder)

7. At the end of the third year, also “Alea” (“die” in Latin) has appeared as an objective necessity for the problematic situation to be solved, representing probability and statistics; in fact, she plays with dice. “Alea” does not have a colour, but her clothes have the same markings as a die (see Figure 9). She is not yet on the poster, but she will appear at the beginning of the fourth year (September 2018).



Figure 9. “Alea” (Figure and photo by D. Leder)

8. Instead, “Rel” has shyly appeared in the third year, representing relative numbers; he wears red and black clothes and has in his hand a notebook and a pen to record losses and gains (see Figure 10). He has been informally introduced because the children became curious about “numbers with minus in front”, mentioned by adults during some very cold days, therefore linked to measuring temperature in degrees Celsius. This provided an opportunity to explain that the numbers on the thermometer and the numbers represented by “Rel” are two different things. “Rel” has shyly appeared because it was not yet the right moment to introduce him mathematically and it has not yet been explained why he is dressed as he is, nor why he is holding that notebook...that will be for future discussion... for the moment we have only ruled out that he is a Milan football fan (whose players and fans are identified by the colours red and black). We can disclose that the colours red and black relate to the method of accounting (red is used for outgoings and black for incomings).



Figure 10. “Rel” (Figure and photo by D. Leder)

It should be made clear that the names of the characters make way for the “real” names which the learners will encounter (formally) later on, at middle and high school (for example, “Nat” leads to “natural numbers”, “Ra” to “rational numbers”).

4. First Assessment Of The Poster As A Teaching Support

It is still early to make an objective assessment inasmuch as we are at the end of the third year, only a little over halfway through the experimental period. The children have had time to get to know the characters better and better as they themselves consolidated their knowledge in the field of mathematics.

The fact that they could discuss together in class has allowed for possible doubts to come out and then new stimuli to introduce or develop the subject (see Pontecorvo, Ajello & Zuccheromaglio, 1999). To give an example, we have discussed who we should “call” when meeting an apparent fraction: “Ra” or “Nat”? Or again, for zero...is “Nat” alright or “Ra”, or both? Or, furthermore, can “Al” stand alone?

Certainly, the children have been very taken by these characters, so much so that at the end of the third year (June 2018), of their own volition, they performed a short show for the parents, playing the parts of the characters and showing how they “function”, i.e. setting problematic situations which the parents had to solve “calling” the correct (appropriate) characters. It was a useful experience where everybody, even the pupils who have difficulty, took active part.

4.1 Recognition Of The Character Required By The Situation

At the end of the third year, first specific tests were held to ascertain if the children were able to link correctly the character/s with the context provided, showing awareness of the problematic situation that they were dealing with. There were two types of test: In the first type (“PROVA 1”) the children were presented with numbers, operations, and measurements which they had to circle, using the colours of the characters and thus showing that they recognized by colour the character/s which needed to be “called” (graphic test); in the second type of test (“PROVA 2”), which dealt with problematic situations (in the form of a text), the pupils were required to choose the characters (more than one) to “call” putting an “X” on the characters which were written beside.

If, during the curricular lessons, there was always someone in the group who verbally found the right correspondence, in the written tests, in the situations where the pupils just have to call a single character (it does not matter whether it is “Nat” or “Ra”, given that “Al” cannot stand alone, and “Misu” and “Geo” rarely appear alone), 98% of the children identify “Nat”, while 87% identify “Ra”.

Clearly, a problematic situation which requires the consideration of more than one aspect at the same time (i.e. calling more than one character) can be more difficult for 8-year-old children (as is seen from the results obtained regarding, for example, “Nat” and “Ra”: only 84% of the children recognize “Nat” and 53% “Ra”). The ability to take into account simultaneously various aspects is, after all, a skill which should be fostered in relation to the pupils’ cognitive development; we can work towards this to help acquire a greater awareness of the difficulties of the problematic situations and to develop a positive attitude towards it (without fear).

4.2 Future Developments In Research

We have seen how the characters and their personalities have evolved since the beginning of the research, acquiring over time features and prerogatives as the children, bit by bit, encountered increasingly complex problematic situations.

This will presumably also happen as the research continues (starting up again in September 2018, with the beginning of the fourth year, and continuing until the end of the fifth year), where we might reasonably suppose that the characters will be better defined and discussed in their peculiarities in relation to new learning situations. It will be useful to evaluate step by step, through suitably-prepared tests, the competencies which the pupils develop in recognizing that an entity belongs to a certain numerical set or to other mathematical fields. After modifying their text accordingly, the same tests may be given, with the cooperation of teachers who are part of our research group, also to learners in schools of higher level, in order to check the correspondence with our results.

References

- Angeli, A., D'Amore, B., Di Nunzio, M., & Fascinelli, E. (2011). *La matematica dalla scuola dell'infanzia alla scuola primaria*. Bologna: Pitagora.
- Canetta, P., Manara, C. F., & Marchi, M. (Eds.) (1986). *Per un curriculum continuo di educazione matematica nella scuola dell'obbligo*. Quaderni IRRSAE, 13.
- Leder, D., Scheriani, C., & Zuccheri, L. (2002). "La matematica dei ragazzi: scambi di esperienze tra coetanei". Una valutazione del lavoro svolto. In L. Zuccheri, D. Leder, & C. Scheriani (Eds.), *La matematica dei ragazzi: scambi di esperienze tra coetanei*. Antologia delle edizioni 1996-1998 (pp. 167-179). Trieste: EUT.
- MIUR (2018). *Indicazioni nazionali e nuovi scenari*. Documento a cura del Comitato Scientifico Nazionale per le Indicazioni Nazionali per il curriculum della scuola dell'infanzia e del primo ciclo di istruzione (<http://www.miur.gov.it/documents/20182/0/Indicazioni+nazionali+e+nuovi+scenari/3234ab16-1f1d-4f34-99a3-319d892a40f2>).
- Pontecorvo, C., Ajello, A. M., & Zucchermaglio, C. (1999). *Discutendo si impara*. Roma: Carocci.
- Zuccheri, L., & Zudini, V. (2014). *Io e la matematica. Un'indagine sul rapporto dei ragazzi con la matematica*. In L. Zuccheri, M. Stoppa, & V. Zudini (Eds.), *La matematica dei ragazzi: scambi di esperienze tra coetanei*. Edizione 2010 (pp. 155-184). Trieste: EUT.

Need Assessment For The Supervision Model To Enhance Critical Thinking For Science Teachers In Expansion Schools

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Abstract

This research was aimed to investigate the current and desirable supervision conditions and thus develop a draft model that enhancing critical thinking of science teachers in expansion schools. This is followed by evaluating the developed draft model. A total of 384 science teachers were selected as respondents using a multi-stage random sampling technique. Researchers employed a quantitative survey design. This research utilized two types of instruments namely questionnaire and evaluation form. Descriptive statistics such as percentage, mean score, and standard deviation and also the formula Modified Priority Needs Index were used to analyze the data. Findings of this research revealed that the current supervision condition to enhance critical thinking is at moderate level whereas the desirable supervision condition is at highest level. Subsequently, finding of the development model needs for supervision demonstrated in descending order as follows: (i) principles of supervision; (ii) work evaluation and improvement, and (iii) knowledge distribution and learning methods. Finally, the developed draft model ATOMS to enhance critical thinking was comprised of five factors namely assessment of context, teaching and learning methods, objectives, mentoring and coaching, and summative evaluation and improvement.

Keywords: *Coaching; critical thinking; primary school; supervision model*

Introduction

In recent years, there has been a shift in many countries including Thailand in their national educational curriculum policy statements from an emphasis on knowledge to an emphasis on higher order thinking skills (Fung, Townsend, & Parr, 2004). In Thailand, critical thinking is considered to be an important educational goal at all levels of schooling. However, there appears to be little agreement about the importance of increasing critical thinking ability, there appears to be little agreement in what is it, how critical thinking should be done, and how to facilitate students. In general, the major difficulty in educating for critical thinking is lack of a synthesized understanding about what is meant by the term, and what an effective critical thinking supervision model to enhance critical thinking for science teachers in particular becomes urgency to investigate.

The foundation for critical thinking (n.d.) clarified the importance of evaluating instruction for critical thinking is to improve students' abilities to think their way through content, using disciplined skill in reasoning. Critical thinking issues such as how to define critical thinking, how to teach critical thinking, and whether critical thinking should be taught or learned through social interaction plague science teachers who think about enhancing the critical thinking skills of their students (Choy & Cheah, 2009). Tang (2018) defined critical thinking as a skill that is taught at school and university but its main purpose is to better equip the students to understand the world, to make more sense of the vast amount of information that is available to us and to avoid, being manipulated. This is further supported by Prasertcharoensuk, Tang, and Tuksino (2017) as life skill.

Critical thinking, in a broad sense, is the thinking that alerts and guides science teachers to examine the quality of their thinking as well as that of others so that science teachers become more certain of whether they are making a good choice of what to believe and do. In a strict sense, when science teachers engage in critical thinking they want to put themselves in a position to distinguish good thinking from faulty thinking, and also in a position to identify what has made it good or faulty. Through critical thinking science teachers want to enhance our thinking ability so that they can respond to problems and opportunities in ways that facilitate individual and collective well being and growth.

Thailand 4.0 model is currently promoted by current Thai government to lead the country to its innovation economy stage, with the aim to elevate potentially to be a wealthy and secure developed nation of the first world in the context of a 4th phase economic revolution (Chantarasiri, 2017). Sungchai (2009) emphasized that school administrators have to emphasize the learning processes that enabling the development of critical thinking, problem-based learning, and knowledge implementation skills for real life situation in accordance with the

National Education Act of Thailand. This is further highlighted by Nillapun (2011) stated that the concept of 21st century skills including two main skills namely critical thinking and problem-solving as well as creative and innovative skills. These skills are vital for students to be independent learning with a high level of critical thinking when comprehending information.

Research Objectives

The main aim of this research was to investigate the supervision model seeking to enhance critical thinking for science teachers in expansion schools, Thailand. To achieve this aim the following specific objectives were formulated to guide the research:

- i. To investigate the current and desirable conditions of supervision to enhance critical thinking for science teachers in expansion schools.
- ii. To evaluate the developed draft supervision model to enhance critical thinking for science teachers in expansion schools.

Method

Researchers employed survey questionnaire as a method to collect quantitative method. A total of 7,063 Grade 7 science teachers who are working in expansion schools under the administration of Primary Educational Service Areas, Office of the Basic Education Commission were the population of this research. The required sample size was 364 samples according to Krejcie and Morgan's Table at 95 percent confident level using multi-stage random sampling technique.

The research instruments used were a questionnaire and an evaluation form. Both instruments were administered in Thai language to ensure that the respondents were clear about the statements. The questionnaire was constructed to enquire on current and desirable conditions of supervision that enhancing critical thinking. Furthermore, respondents' responses towards the needs of the supervision model to enhance critical thinking, a five-point Likert scale was utilized, ranged from most, much, moderate, less, and least.

Other than the survey questions in the form of questionnaire, an evaluation form was used to measure the suitability of the developed draft supervision model by the nine experts. This methods benefits this study in terms of obtaining data more efficiently as time, energy and costs could be minimized (Sekaran 2006), provides an excellent means of measuring attitudes and orientations in a large population which can, therefore, be generalized to a larger population (Babbie 2002).

According to Chueachot, Srisa-ard and Srihamongkol's (2013) interpretation of opinions toward current and desirable conditions of supervision that seeking to enhance critical thinking were analyzed using the formula of Modified Priority Needs Index (PNI_{Modified}). As a result, researchers determined its level as shown in Table 1. Data was analyzed using descriptive statistics include percentage, mean score, and standard deviation. This is followed by the analysis and priorities the needs for supervision seeking to enhance critical thinking for science teachers in expansion schools were prioritized (The Institute for Promotion of Teaching Science, Mathematics, and Technology, 2014).

Table 1: Interpretation of mean range

Mean range	Interpretation
1.00 – 1.50	The least level of comments
1.51 – 2.50	The less level of comments
2.51 – 3.50	The moderate level of comments
3.51 – 4.50	The much level of comments
4.51 – 5.00	The most level of comments

Results

The initial result is the descriptive results related to the characteristics or backgrounds of the respondents that derived from the Section 1 of the questionnaire. This is followed by results about the current and desirable conditions of supervision seeking to enhance critical thinking for science teachers in expansion schools. Next, the needs required conditions as well as the PNI reading on development supervision model are presented. Finally, an evaluation was conducted on the developed ATOMS model.

Descriptive results

Majority of the respondents (67.9%) are female, 40.19 percent of them aged between 36 to 45 years old. On top of that, all the respondents are holding the position as specialized teachers. A total of 50.09 percent of the respondents obtained a master's degree or higher academic qualification and 68.54 percent of them have

experience related to critical thinking training or have been trained in any program related to critical thinking (38.63%).

Results about current and desirable conditions of supervision

Results of respondents' opinions on current and desirable conditions of supervision seeking to enhance critical thinking for science teachers were categorized into two groups: (i) Current and desirable conditions of supervision seeking to enhance critical thinking; (ii) Current and desirable conditions of science teachers' abilities and behaviors related to critical thinking, as shown in Table 2.

Table 2: Current and desirable conditions of supervision

Supervision to enhance critical thinking	Current			Desirable			Needs index	Level of need index
	Mean	SD	Interpret	Mean	SD	Interpret		
Factors of supervision model to enhance critical thinking								
Principles of supervision	2.88	0.57	Moderate	4.60	0.42	Highest	0.60	1
Purpose	2.96	0.62	Moderate	4.71	0.42	Highest	0.54	4
Process:	2.64	0.58	Moderate	3.11	0.58	Moderate	0.17	8
Assessment of context								
Process: Teaching and learning methods	3.08	0.67	Moderate	4.68	0.38	Highest	0.52	5
Process: Objectives	2.99	0.69	Moderate	4.65	0.41	Highest	0.55	5
Process: Mentoring and coaching	3.09	0.56	Moderate	4.71	0.36	Highest	0.52	5
Process: Summative evaluation and improvement	3.01	0.63	Moderate	4.71	0.42	Highest	0.56	2
Use factors	3.21	0.58	Moderate	4.76	0.36	Highest	0.48	7
Total	3.00	0.58	Moderate	4.61	0.41	Highest		
Conditions of science teachers' abilities and behaviors related to critical thinking								
Learning management for enhancing critical thinking	3.24	0.50	Moderate	4.76	0.39	Highest	0.47	2
Behaviors related to critical thinking	3.36	0.56	Moderate	4.82	0.38	Highest	0.35	1
Total	3.33	0.58	Moderate	4.79	0.38	Highest		

Table 2 shows that the overall current condition of supervision to enhance critical thinking was at moderate level while the overall desirable condition of supervision to enhance critical thinking was at highest level for science teachers in expansion schools in Thailand. The needs for supervision to enhance critical thinking for science teachers in expansion schools, prioritized from highest to lowest in descending order are supervision principles, evaluation and improvement, and knowledge distribution and learning methods.

Results Of The Development Of A Supervision Model

Based on the findings above, researchers drafted a supervision model seeking to enhance critical thinking for science teachers. The drafted supervision model was then evaluated by nine experts. Findings from the nine experts' evaluation illustrated that the overall suitability of the supervision model is at the highest level ($\bar{x} = 4.78$; $SD = 0.18$). Specifically, findings indicated that the preparation, improvement while working, and post improvement evaluations were at the highest level as mean score 4.56, 4.81, and 4.68 respectively. However, the nine experts evaluated training as high level with a mean score as 4.50.

In addition, the nine experts suggested three additional concepts which could inform factors of supervision seeking to enhance critical thinking for science teachers in expansion schools, as follows:

- Current condition evaluation
- Relationship promotion
- Principles of supervision
 - Principles
 - Objectives
 - Supervision process
 - Assessment of context
 - Teaching and learning methods
 - Observations
 - Pre-observation conference
 - Event
 - Reflection
- Mentoring and coaching
- Summative evaluation and improvements

Development of ATOMS supervision model

The end product of this research was the development of ATOMS supervision model seeking to enhance critical thinking for science teachers. ATOMS is a concept of supervision that implies supervision should cover the content thoroughly and the roles of supervisor and science teacher should be clearly separated in every step of the teaching process. Researchers utilized a career developmental process or mentoring and coaching. The time shared between the supervisor and science teachers during supervision was significant as well as their friendly and close relationship played more than a coaching role itself. The principle of coaching was to give no direction, instructions or answers. If an answer was to be told in the context of two answers. A particular thinking process occurred in the supervisor's mind as a result of mentoring and coaching.

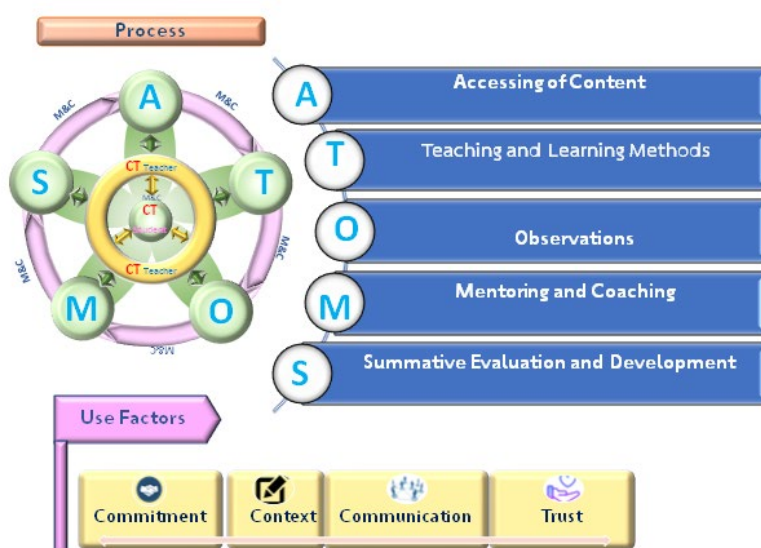


Figure 1: ATOMS Supervision Model

Discussion And Conclusion

The priority needs for supervision in descending order are principles of supervision, evaluation and improvement, and ability to manage the class to enhance critical thinking skills for science teachers. The findings show that overall and sub-items relating to the current condition of supervision seeking to enhance critical thinking are at moderate level but the desirable condition of supervision seeking to enhance critical thinking for science teachers are at highest level. On the other hand, the needs for learning management abilities in descending order are activities that allow students to identify the factors of a situation, to relate the problem to the information in order to choose the most relevant information, and to reflect on their opinions by recording them for examination and review in order to integrate them after the lesson. Moreover, findings of science teachers' critical thinking abilities showed that science teachers demonstrated open-mindedness and then logic in descending order. All the above findings are consistent with Buachoon, Yutakorn and Suwanruji's (2015) study, this implies that teachers' critical thinking development was found to be inconsistent and lacked of evaluation. Additionally, findings of this research also correlate with Iamsamang's study (2012) that investigated commercial college teachers' critical thinking

dispositions in Thailand.

Findings relating to ATOMS model consisted of five main factors, namely assessment of context (A), teaching and learning methods (T), observation (O), mentoring and coaching (M), and summative evaluation and improvement (S). This supervision model is correspond to Sungchai (2009) and Chuenklin (2010). Researchers would like to suggest to Educational Service Area Offices and expansion schools to implement a systematic development for science teachers that focusing on developing the principles of supervision, work evaluation and improvement, and knowledge distribution and learning methods in order to promote sustainable learning organizations. Finally, implication of this research is encouraging the policy level agencies to focus on supervision through managing a motivation system for supervisors, school administrators, and senior science teachers who can conduct effective supervision.

Research and development should be conducted using the factors obtained from this research. The obtained factors can be used as concrete criteria when carrying out supervision of science teaching. Researchers would like to recommend to future researchers to conduct a strategic supervision, especially to enhance critical thinking or advanced thinking level using monitoring and coaching. This will support the offensive development approach for supervisors throughout Thailand.

References

- Babbie, E. (2002). *The basic of social research* (2nd ed.). USA: Thomson Learning, Inc.
- Buachoon, N., Yutakorn, N., & Suwanruji, P. (2016). The study of the state teaching and learning of science for quality of life in general education. *VRU Research and Development Journal Humanities and Social Science*, 11(2), 98-109.
- Chantarasira, P. (2017). *Policy and strategic planning for the new era*. Maha Sarakham, Thailand: Apichart Printing.
- Choy, S. & Cheah, P. (2009). Teacher perceptions of critical thinking among students and its influence on higher education. *International Journal of Teaching and Learning in Higher Education*, 20(2), 198-206.
- Chueachot, S., Srisa-ard, B., & Srihamongkol, Y. (2013). The development of an assessment for learning model for elementary classroom. *International Education Studies*, 6(9), 119-124.
- Chuenklin, T. (2010). The development of coaching model to enhance nursing instructors' competency that promotes critical thinking skills of nursing students in Prabormarachanok Institute, Ministry of Public Health. Unpublished doctoral thesis. Bangkok, Thailand: Silpakorn University.
- Fund, I. Y. Y., Townsend, M. A. R., Parr, J. M. (2004). *Teachers facilitating critical thinking in students: The search for a model and a method*. Paper presented at the European Conference on Educational Research, University of Crete, 22-25 September.
- Iamsamang, C. (2012). *The development of peer cognitive model to develop coaching competency and instructional competency enhance analytical thinking skills commercial college teachers*. Unpublished doctoral thesis. Bangkok, Thailand: Silpakorn University.
- Nillapun, M. (2011). An evaluation project to enhance the teacher quality system: The new supervision development activity. *Silpakorn University Journal*, 31(2).
- Prasertcharoensuk, T., Tang, K.N., & Tuksino, P. (2017). The effect of risk management and student characteristics on life skills of higher education students. *Pertanika Journal of Social Sciences & Humanities*, 25(2), 891-906.
- Sekaran, U. (2006). *Research methods for business: A skill building approach* (4th ed.). India: John Wiley & Sons Inc.
- Sungchai, K. (2009). The development of science teachers' instructional supervision model for developing academic capabilities of science talented students. Unpublished doctoral thesis. Bangkok, Thailand: Silpakorn University.
- Tang, K. N. (2018). The importance of soft skills acquisition by teachers in higher education institutions. *Kasetsart Journal of Social Sciences* (in press).
- The foundation for critical thinking. (n.d.). Critical thinking, testing, and assessment. Retrieved from www.criticalthinking.org/pages/critical-thinking-testing-and-assessment/594
- The Institute for Promotion of Teaching Science, Mathematics, and Technology. (2014). *Follow up the results of teaching Science, Mathematics and Technology of the Teacher Grade 9*. Bangkok, Thailand: Research Department of Institute for the Promotion of Teaching Science and Technology.

Acknowledgements

The researchers would like to thank Faculty of Education, Maha Sarakham University for providing the technical and research supports to conduct this research. Researchers would like to take this opportunity to thank all the contributors who had involved and helped until completion of this research operation.

Needs Assessment In The Talent Management For Basic Education Schools In Thailand

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Abstract

The purpose of this research were to study the current condition, expected condition, and needed in talent management for basic education schools in Thailand. The sample is 380 school administrators in basic education schools. Data were collected by questionnaire with the 0.874 reliability. Data were analyzed by Priority Needs Index_{modified} (PNI_{modified})

The research found that : The current condition of talent management in basic education school in Thailand is overall level. Considering each component find all the overall level as more. The component with the most current condition is the retaining talent people, rewarding, the development of talented people, and identify the talented people respectively.

The expected condition of talent management in basic education school in Thailand is highest level. Considering each component find all the highest level as most. The component with the most expected condition is the retaining talent people, rewarding, the development of talented people, and identify the talented people respectively.

The needs assessment in the development of talent management in basic education school in Thailand found the component with the highest needs is identify the talented people (PNI_{modified} = 0.148), rewarding (PNI_{modified} = 0.103), the development of talented people (PNI_{modified} = 0.102), and the retaining talent people (PNI_{modified} = 0.084) respectively.

Keywords : *Needs Assessment, Talent, Management, Talent Management, Basic Education School*

Introduction

Good human resources refers to staff members who impose excellent skills and deliver high core competence at work. A proportion of good human resources at the working level accounts for only 3-5 percent of all workers in most institutes while the figure is reported at around 10 percent at the management level. Compared to other lay workers, good human resource people stand out from other lay workers based on the extent of the current and future impacts that the persons have upon their office affiliations. The amount of these qualified people in most offices lessens over time (Garuetin Kulpheng, 2009). Based on a school perspective, being a good staff member means being a teacher or other personnel who have a high degree of work commitment, creativity, work competence, and leadership who can help to direct the schools toward their goals. Therefore, managing talented school staff to get the best out of their capacity requires well-rounded professional skills (Dawruwan Thawinkarn, 2016). The management of talented staff members is done for the purpose of helping the staff to achieve the organization's goals. The capacity exhibited by good staff members exaggerates the survival of the institution and its competitive advantage. Schools represent another form of social units which are comprised of people of different hierarchies, such as administrators, teachers and other educational personnel. These groups of people are the gears that turn the wheels of educational mobilization. School principals should pay attention to carefully carving their staff members into talented associates because learning to manage the existing talented staff is not of secondary importance in school development.

Talent management means exercising measures to support the talented staff. Stated another way, talent management means attempting to obtain, develop, hire, and maintain good staff members within the organization. The principles, relating to talent management, have been consistently developed in different arenas, such as firms in the fields of education, business, and human resources. It is a kind of development that places emphasis on increasing the performance of individuals in alignment with the success of the organizations. When attempting to successfully manage talent in schools, management is often confronted with challenges to the creation of innovation and leadership for educational change. It is advisable for schools to continue their efforts in developing a talented staff and in encouraging networking with external institution. Moreover, it is important to tailor Training curricula that are aimed at developing leadership and talented staff. Accordingly, talent management should be set as a means for identifying, developing, hiring, maintaining and exploiting the talented staff members in the organization (Davies and Davies, 2011). Reviewing the literature related to talent management has shown that this kind of management directs the

schools toward excellence. Rudhambu (2014) investigated the talent management system in Botswana University and discovered that talent management contributes to workings of a progressive school. Agrawal (2010) conducted research about the talent management system of business schools. It was observed in this research that factors indicating of the success of talent management involved the following: school quality, motivation, work advancement, and wages. Annakis, Dass, and Isa (2014) explored factors contributing to the efficiency of talent management in government and private universities. They found that the talent staff's academic perceptions, the talent staff's development, and the culture for the talent staff's development are crucial for the success of talent development. A review of several research studies revealed a similar pattern of findings given the extent that talent management is mainly based on the following factors: 1) identifying talent staff, 2) the development of talent staff, and 3) the rewarding and maintaining of the talent staff {Arunwadee Nuntawattanukul, Pornrat Sadangharn, & Apinya Ing-art (2014), Supaporn Prasongtan (2015), Dawruwan Thawinkarn (2016), Collings and Mellahi (2009), Agrawal (2010), Tymon, Jr., Stumpf, & Doh (2010), Mandloi (2014), Cappelli & Kellahi (2014), Chauhan & Bhatt (2015)}.

Based on the importance of talent management as identified above, schools should be prompted to find effective measures especially for talent staff development. Talent management has not yet been introduced for Thai schools in the basic education system. Furthermore, there are relatively few research studies about talent management in the Thai schools. Consequently, the researcher has gravitated towards exploring the factors and indicators of talent management in the Thai primary schools. It is expected that the results derived from this research will be beneficial in helping the schools to successfully manage their talented people and direct their schools toward their set goals.

Research Objective

To study needs assessment of talent management for primary schools in Thailand.

Literature Review

In order to be able to precisely address the facets related to talent management in the Thai schools in the basic education system, the following documents were reviewed.

Definitions and philosophies of talented people

Talented people are defined based the two classifications below:

Group 1: Talented people can be classified from other members of a group based on their state of being a creator, a rule breaker, an initiator for change, and generator of knowledge. Davies & Davies (2011) explained that talent people are those who are blessed with many different professional skills. Talented people usually spend interesting, enthusiastic and energetic lives. They exhibit high capacity in problem-solving and finally manage to find solutions to the problems via effective use of resources. Similar ideas have been dictated by Apron Phoo Wittayapan, (2010) who stated that talented people are persons who possess talents, gifts, and characteristics that make them stand out from other candidates. Talented people are good at work and human management. It is important that talented people possess both good virtues and good knowledge since possessing only one of these two qualities does not mean anything for the institutional development.

Group 2: Talented people are associated with the person's traits, such as their capacity and potential. The Office of Civil Service Commission defines talented people as persons with high performances that are well-recognized by their affiliations. Talented people tend to possess high levels of work etiquettes and are prompted to become the crucial strength of organization. Wichai Wongyai (Mo.Po.Po.) regards talented people as those who stand out from the crowd with their creative thinking, high potential, effective performance, talents, and natural abilities. Talented people usually exhibit high degree of achievement and are well-respected by others. They are learning persons who have a passion for escalating their work advancement. Suganya Rasamitamachot (2011) says that talented people are those with high occupational skills that enable them to create superior performances. Talents that people from different fields of professions have can be various and can be based on the nature and culture of the individual organization.

This research study has attempted to investigate the management of talented people in Thai primary schools. The term, "talented people", is defined under the Thai school context as teachers or educational personnel who generate an outstandingly high level of performance as evidenced by their levels of education, academic positions, awards, and other empirical evidences. The impacts that talented teachers have on students, school and communities are used for locating talented teachers. More importantly, there are 11 desirable qualities for high school work potential that have been used to indicate talent teachers as follows: 1) demonstrating achievement-based performance, 2) giving good service, 3) having professional expertise, 4) endorsing justice and ethics, 5) demonstrating teamwork, 6) having bureaucratic commitment, 7) being creative, 8) having an holistic viewpoint, 9) being devoted to the public, 10)

participating in interpersonal interaction, and 11) being a learning person. The evaluation of these talents was based on the criteria imposed by the Office of Civil Service Commission.

Principles relating to talented people management in schools.

Josh Bersin (2007) imposed 8 steps for talented teachers evaluation as detailed below:

1. Workforce planning
2. Recruiting
3. Onboarding new employees
4. Performance management
5. Training performance support
6. Succession planning
7. Compensation and benefits
8. Critical skills gap analysis

Birchall, Holley & Reid (2008) applied human resource principles into the development of talent people and postulated 5 steps involved in the development of talented people.

1. Identification
2. Development Opportunities for Talent
3. Transparency
4. De-Selection
5. Creating Developmental Opportunities for The Talent Pool

Factors relating to the management of talented people in schools

After reviewing a hundred of documents with themes concerned with the components of managing talented people, the factors needed for managing talented people in school have been clarified in Table 1.

Table 1: Components, definitions, and sub-components for managing talented people in basic education schools

Components	Definitions	Sub-components
1. Identifying	The process of identifying talented people should be systematically carried out in order to be able to correctly specify the members of the talented group and to direct the appropriate development for them.	1) Planning personnel 2) Determining the talented people 3) Defining the key positions 4) Evaluating the advanced practitioners
2. Developing Talented People	Encouraging talented people with respect to their professional development in order to enhance their work potential.	1) Offering challenging assignments 2) Giving Empowerment 3) Enhancing the abilities of the talented people
3. Rewarding	Finding prevailing ways to increase the motivation of the talented people via forms of subsidization or other rewards.	1) Allocating incentives 2) Strengthening trust 3) Receiving recognition from the team 4) Strengthening the spirit
4. Retraining Talented People	Finding ways to retain talented people with the organization, increasing their patriotism & loyalty, and giving in for organizational development.	1) Strengthening the dialogue 2) Creating a supportive work environment 3) Developing role-models

Needs Assessment

Needs assessment is the process of value judgment or discretion to consider any one thing. By collecting and analyzing data. To obtain useful information in decision making and select the best choice. The research needs assessment is to determine the significance level of the needs assessment of talent management of primary school in Thailand. By evaluation framework principle 4 elements include: 1) Identifying 2) Developing Talented People 3) Rewarding 4) Retraining Talented People.

Research Methodology

- 1) Reviewing a hundred of documents with themes concerned with the components of managing talented people
- 2) Study current condition, desirable condition and needs assessment of talent management of primary schools in Thailand.

Instrument Of Research

Instrument is questionnaire needs assessment with 52 items that needs assessment of talent management of primary schools in Thailand. It is 5-level scale.

Sample Of Research

The sample is the primary school principals. Under the office of basic education study in 2560 of 380 people by multi-stage random sampling that determine the sampling size by using the concept of Hair et al. (1998) proposed criteria.

Data Analysis

Data were analyzed by mean, standard deviation, and Priority needs index : PNI modified

Results

The study found the main elements are 1) Identifying 2) Rewarding 3) Developing Talented People 4) Retaining talented people respectively. As shown in table 2.

Table 2: The needs of talent management for primary schools.

Components	Current condition			Desirable condition			PNI _{modified}	rank
	\bar{X}	S.D.	Translate	\bar{X}	S.D.	Translate		
Identifying	4.00	0.65	More	4.59	0.56	Most	0.148	1
Developing Talented People	4.25	0.60	More	4.69	0.51	Most	0.102	3
Rewarding	4.28	0.59	More	4.72	0.47	Most	0.103	2
Retraining Talented People	4.37	0.57	More	4.74	0.46	Most	0.084	4
Total	4.23	0.55	More	4.69	0.48	Most		

Conclusion And Discussion

The element has the highest needs is identifying talented people. According to Davies and Davies (2011) explained that identifying the talented person is the important role of school administrators. How to identify people who are doing a great job in their present role and how to help them to develop their potential is a vital process for the management of talent. The second element of needs is rewarding. According to Thome, Kaye, & Pellant, Andy (2007) suggested that the reward is associated with the assessment that talented people receive. Talented people want to be praised and admired for their success. So, the allocation awarded to people is so important. The third element of needs is developing talented people. According to Wichai Wongyai. [Mo.Po.Po]. explained that developing talented people is to increase knowledge, skill, abilities to plan, personal development training, in parallel with the operating. To evaluate the performance and potential of personnel to know who are the best people and then continue training and development, with both the knowledge, skills, expertise, operational or technical expertise. The fourth element of needs is retraining talented people. According to Davies and Davies (2011) suggested that retained people is important. Especially to communicate by talking to colleagues, the leadership skills needed to manage people in schools. Which held that expresses sincerity and build trust with colleagues or subordinates. The leader should demonstrate confidence in their abilities and competencies and a willingness to accept the opinions of others.

Acknowledgements

This research has been sponsored and supported by the Nongkhai Primary Educational Service Area Office 2 and The Graduate School of Khon Kaen University. The researchers would like to express their sincere gratitude and thanks to all of the supporters who have made large contributions towards the completion of this research.

References

- Agrawal, Swati. (2010). Talent Management Model for Business Schools: Factor Analysis.
The Indian Journal of Industrial Relations, 45(3), 481-491.
 Annakis, Dass,& Isa. (2014). Exploring Factors that Influence Talent Management

- Competency of Academics in Malaysian GLC's and Non- Government Universities.
Journal of International Business and Economics, 2(4), 163-185.
- Apron Phoowittayapan, (2010) . *Strategies for talent people management*. Bangkok's H.R. Center.
- Aroonroong Au-Arisooksakul and Thirawat Juntuek. (2015) Strategic management for talented people: Factors for sustainable competitive advantage. *Journal of Humanities and Social Sciences and Arts, Silapakorn University*. 8(3), 1096-1113.
- Arunwadee Nuntawattanukul, Pornrat Sadangharn, & Apinya Ing-art (2014). Model for talent and good people management of the electronic and electrical industrial entrepreneurs. *Journal of Business Management, Bhurapha University*. 1(1), 55-71.
- Birchall, David., Holley, Nick., & Reid, Benjamin. (2008). *Talent Management*. Retrieved on 30th July, 2015. from <http://www.henley.ac.uk/research/research-centres/henley-centre-for-hr-excellence/SP2>.
- Chauhan, Pratapsinh, & Bhatt, Kinjal. Managing People of an Organization Through Talent Management: A Factor Analysis Approach. *IJSR – International Journal of Scientific Research*, 238-241.
- Choochai Samitigrai. (2007). *Personnel Training*. Third Edition. Bangkok: Chulalongorn University Press.
- Chuchai Samitigrai. (2013). *Recruitment, selection and evaluation of personnel*. 4th Ed. Chulalongkorn University Press.
- Collings, David G., & Mellahi, Kamel. (2009). Strategic talent management: A review and Research agenda. *Human Resource Management Review*, 19 (2009), 304-313.
- Davies, Brent., & Davies, Barbara J. (2011). *Talent Management in Education*. London: SAGE Publication.
- DawruwanThawinkarn. (2016).The Talent Management in the 21st Century. *Journal of Education, Khon Kaen University*. 39(2), 15-22.
- Dessler, Gary. (2011). *Human Resource Management*. Boston: Pearson.
- Garuetin Kulpheng. (2009). *How to prevent losing of good staff*. Bangkok H.R. Center.
- Hair, Jr., J. F. et al. (1998). *Multivariate Data Analysis with Readings*. Englewood Cliffs, NJ: Prentice-Hall.
- Jomphong Mongkolwanich (2012). *Organization and personnel management in education*: Bangkok: Chulalongkorn University Press.
- Josh Bersin(2007). *Talent Management Changes HR*. Retrieved on 20th June, 2016. from <http://joshbersin.com/2007/06/talent-management-changes-hr>.
- Mandloi, Namrata. (2014). Talent management: A strategic approach towards growth in IT industry. *Research conference on Innovative Business Strategies*. SIBM, Pune, 28-29 March.
- Rothwell, William J., Chee, P., & Ooi, J. (2016). *The Leader's daily role in talent management*. Singapore: Mcgraw-Hill Education.
- Rudhumbu, Norman. & Maphosa, Cosmas. (2015). Implementation of Talent Management Strategies in Higher Education: Evidence from Botswana. *J Hum Ecol*, 19(1-2): 21-32.
- Suganya Rasamitamachot, (2011). *Talent Management by Competency-Based Career Development and Succession Planning*. Bangkok: Print City.
- Supaporn Prasongtan. (2015). Talent Management: Tools to increase the capacity of the organization. *Srinakharinwirot Business Journal*. 6(2), 145-150.
- Suwimon wongwanich. (2015). *Needs assessment research*. 3rd Ed. Bangkok: Chulalongorn University Press.
- Thome, Kaye. & Pellant, Andy. (2007). *The Essential Guide to Managing Talent*. Kogan Page Limited.
- Thunnissen, Marian. (2015). *Talent Management in academia*. [n.p.]: Dutch universities.
- Tymon Jr, Stumpf, & Doh. (2010). Exploring talent management in India: The neglected role of intrinsic rewards. *Journal of World Business*, 45 (2010), 109-121.
- Wichai Wongyai. [Mo.Po.Po]. *Talent Management*. Retrieved on 1st March, 2016. from <http://www.curriculumandlearning.com>.

New Approaches To Creativity In Music Education: Soundpainting In Teacher Training

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Abstract

The following research is motivated by the conviction that music and the arts in general should be present in teaching and learning activities, in such a way that is useful to and connected with student practices, trusting in the learner's ability to establish links, and to work in the face of uncertainty and surprise. A collaborative participation is taken as a fundamental when embarking on an exploration like this, which is both individual and collective. When creative activities are carried out in a group and the opportunities arise to improvise together, this all happens in real time, straight away: it occupies mind and body together, and signifies an understanding of content on different levels which move between social consensus and individual expression, and present children with the opportunity to take advantage of their own natural inclinations and fulfill different types of musical activities. In accordance with these premises, we carried out a case study on the training of music teachers, exploring collaborative practices using Soundpainting language with the aim of incorporating tools for creative learning. The research methodology is qualitative; it employs the analysis of student's diaries and group interviews. The main findings show that the application of the language of Soundpainting allows its participants to trust in their own creative capacity and in their possibilities to use this language as a source in their future practices.

Key words: *Creativity, music education, soundpainting, teacher training.*

Introduction

This study starts out from the desire to explore the potential role of improvisation and creativity as a vehicle for building new relations between students and music, for transforming the music room into a place where knowledge is conveyed in order to act and think, with the aim of liberating the mind (Kanellopoulos, 2007).

Experiences such as those carried out by Paynter (1992), Schafer (1965, 1986) and Delalande (1995, 2013) have been led by the conviction that unless children experiment, improvise and compose, music education will be dominated by structured sound exercises which are closed and exclusive. The focus of these composers and educators has been not only to discover children's creative potential but also to propose innovative approaches to the exploration of sound which will open the way towards every kind of music.

However, music education is dominated by technical concepts characterised by what Regelski (2002) calls methodolatry, giving undue importance to methods, which "limits the wide field of possibilities that can be applied in music education" (Loizaga, 2007, p. 216). As a consequence, the place and the role of improvisation in music education is not always addressed adequately. Experimentation and respect for the students' voices are key aspects in knowledge and skill acquisition; the desire to control, to predict what will happen, to know what works, derives from lineal, progressive processes which are an obstacle to critical questioning and fulfilling experiences. It is important that the teaching staff are prepared to ask themselves what they are teaching and why, to follow paths that their real-time exploration might take them, and to trust in their pupils' potential to build dialogues through improvisation. Equally, teachers need to feel comfortable working as co-musicians rather than instructors, enabling students to develop their intentions freely – both in terms of musical activities and discussions. It is not simply a question of including improvisation as a technique, focused on output, but rather of using it as a means or process through which to develop a way of thinking and acting (Burnard & Boyack, 2017) which is neither linked to nor restricted by any aesthetic limitations related to improvisation techniques (Kanellopoulos, 2007).

To this end, music teaching must be flexible and creative, and permit pupils to participate in a way that is spontaneous, as interpreters, composers, improvisers, and singer-songwriters, allowing music to help their emotional well-being and allowing young people to develop their imaginations and carry out activities for themselves (Burnard & Murphy, 2017). A fundamental condition for this is that music teachers trust in their own creative capacity and in their possibilities to act as a source of creativity and invite their future pupils to develop their imaginations, carrying out activities related to improvisation and creativity which will form a large part of their music classes. This means working towards a style of pedagogy based on principles – rather than set-pieces – in which the pupils can converse, create and lean on their own musical experience, knowledge and understanding, to participate, in a creative manner, in the here

and now (Burnard, 2017). Glover (2002) underlines the need to promote creativity with a demand that goes beyond technical skills, and connects with values, risk and courage. It is a question of seeing the primary classroom as a dynamic learning community founded on the supposition that creativity is a social and cultural construct in which the commitment to compose music on the part of teachers and pupils can be seen in and around their own personal spaces; it can additionally be seen as a classroom where the teacher generates the questioning and exploring of ideas while keeping options open (Burnard, 2017, p. 84). Odena and Welch (2012) also attach value to teachers being more open, not just when it comes to preparing the classroom environment, but when evaluating their students' work.

Along the same lines, the idea of free and collective improvisation designates a style of performance which does not have the objective of emulating determined musical styles but rather strives to experiment with sounds and techniques and ways of structuring sound, starting out with an idea that might be simple and then proceeding from there to explore sounds and the relations between sounds and musicians, as specific ways of being together in and through music. It is about developing an approach which looks to make music with children, instead of making music for children. The improvisatory process does not refer only to the realisation of a defined structure, or application of a pre-existing technique; it is an act of discovery with no aspirations beyond itself. An improvisation does not have a perfect model to aspire to; when you improvise, you are embarking on a series of musical actions which have a meaning beyond their realisation. The music speaks and then disappears. Improvisation conceived in this way has important educational implications since it presents a vision of learning which contrasts with the accumulation of abilities; the key to this learning is to look for ideas in situ, to trust in intuition and to develop the ability to respond to your own sounds and those of your classmates, with no other purpose than making them for their own sake, with no fixed expectation (Kanellopoulos, 2007).

From this perspective, there is a need, starting from the initial training of music teachers, to introduce new, experiential initiatives, which are articulated through creative, collaborative projects and accompanied by tools which prompt reflection and the interchange of ideas. It often happens that primary teachers, during their training, have not had the positive experiences which allow them to grow in confidence as teachers and creative people, and thus they encounter difficulties in carrying out their classes in this way. The teacher's job in the classroom is to contribute to the development of their pupils' creative abilities, stimulating them to generate ideas (Hickey, 2009; Giráldez, 2014), but it is evident that teachers require practice to help them with this. Carrillo and Vilar (2012) state that the skill relevant to the development of a person's ability to create music is one of the least utilised by teachers, arguing that the limited preparation received in the activity of creating music in their initial training could be partly responsible for its scarce use in practice. Koutsoupidou (2005), in her study of primary school teachers' work with improvisation, found that they were more likely to use it in their classes if this kind of activity had been a part of their higher education. According to Beineke (2017), several studies centred on composition exercises in music education have found that the lack of training and experience and the use of inadequate methodologies make it difficult to develop creative activities. All of which leads us to affirm the need to reinforce the level of preparation that teacher training programmes provide for music creation, with the objective of achieving the wider employment of this skill in a practical setting.

Soundpainting is a tool which provides for all of these premises. It is a language of gestures, created by Walter Thompson, which allows for improvisation and creativity in real time. The soundpainter, through set gestures, asks for a material with which to create a global proposal integrating the different contributions of the participants (Thompson, 2006). The learning of Soundpainting language starts out from a non-traditional area of music education, whereby the students learn the parameters of each gesture of the language of Soundpainting according to their abilities. Any student can participate, whatever their level of musical competence, which eliminates the barriers and learning norms. For Thompson (2009), it is fundamental that in musical learning we use who we are and what we already have inside us. He affirms that in order to interpret music, it is vital that the student uses their own skills, and does not focus on what they cannot do, and the language of Soundpainting fulfills this criterion. Its use in the ambit of education is conditioned in some way by the need to provide students with an environment in which they can express themselves with confidence through sound, movement and images. Wigram (2004) conceives musical education as the combination of sounds created from a setting of trust, and Burnard (2017) notes the need to communicate acceptance and to build a shared idea between teacher and pupil; Burnard, Boyack and Howell (2017) proffer suggestions for developing the composition process which begin with the idea of developing self-confidence, of making everyone feel that they are a composer: through exploring, experimenting, discovering, building, revising, interpreting, practising, collaborating and co-operating. In this sense, Soundpainting can also contribute in a positive way by generating a climate of trust, for both teacher and pupil (Bilgin & Çoşkuner, 2017), since one of its basic premises is that errors do not exist; any

material offered by the participants can be used by the Soundpainter, integrating it into their creative discourse, which thereby enables the participants to feel free to develop their creative powers.

Equally, Soundpainting allows for a multi-disciplinary use, offering the possibility of integrating simultaneously different artistic expressions: music, dance, drama, visual arts. If teachers in their initial training can gain a familiarity with this tool, it can help the understanding of their own sound experience through exploring with their own voice, with their body, with images or with instruments or sound objects, as well as boosting their interest in other forms of sound expression (Çoşkuner, 2016). In a Soundpainting performance, the participants' concentration grows and its practice contributes additionally to the development of their motor and improvisational abilities (Vidal & Morant, 2017). There is no avoiding the fact, also, that group improvisation signifies a complex and enriching artistic space for all involved; a space where, according to what is perceived, the different participants interact among themselves, and each one interprets what is happening in the moment of interpretation (Burnard, 2002; Burrows, 2004). In this sense, Soundpainting is conceived as an artistic conversation between the Soundpainter and the interpreters (Giacco & Coquillon, 2016), involving a collective action in which the group expresses itself through exploration and creativity – something which is especially relevant for our research.

To follow on, we should underline the main aim of this study which is to describe and analyse an experience that teacher training students in music have realised through Soundpainting language, both in their musical training and their future teaching work. From this general objective, the following specific objectives follow:

- To explore the possibilities of Soundpainting as a mean of improving the professional abilities of future music teachers in primary education.
- To investigate Soundpainting's suitability for the reinforcing of musical and creative abilities.

Contextualising the experience

The proposal was carried out with 29 students taking the subject of Instrumental Training, which is part of the final year of a teacher training degree, for those specialising in music. It began in September and ended in December. The students had no prior knowledge of Soundpainting and it was noted that their experience of creative activities in previous courses had been scarce. Yet they decided to work with this language and to link it to their future career.

We designed the activity through a collaboration with a music school and with four primary schools nearby, as well as with a Soundpainter to oversee the process. It was agreed that once they had internalised some beginner-level signs, the university students would go to those schools to practise them with the pupils. The work began with presenting the syntax of the language, which is articulated through four points: who, what, how, and when. The Soundpainter must use the signs in this order. However, the how is not always used by the Soundpainter, to give those interpreting more scope to improvise, to choose the tone and the quality of their production. The principles of Thompson's ideology (2006) were explained, and it was stressed that – in the event of any doubt – those interpreting should continue to create, regardless of the elements being used, unless they received a clear indication from the Soundpainter to pass to another sign. It was also stressed that there are no errors; if somebody accidentally interprets a different sign, they must continue with what they have understood until the next gesture. It was also highlighted that Thompson (2006) underlines the difference between conductor and Soundpainter: the former is an interpreter and the latter a composer. This is a crucial point because the students must understand this distinction in order to participate actively in the creative process. Subsequently, the students were gradually introduced to some basic, beginner's level gestures with which they carried out the first compositions. They reproduced the gestures at the same time as the teacher in order to integrate them better. After the first two sessions, they had the opportunity to take the place of the Soundpainter and to lead the class.

In these following sessions, they began to prepare the classes they were going to deliver at the primary schools. Working together, they designed the presentation of the language of Soundpainting, agreeing the signs they were going to produce, and establishing which ones they would work with for more musical concepts, related to sound parameters, different instruments, voice and body percussion and short musical phrases. They were introduced to signs related to elements such as the sounds of the wind, of laughter, of freezing. They also agreed on different strategies as regards the order of the presentation of the different signs and the incorporation of sound objects. In the university class sessions, they kept interchanging the roles of Soundpainter and interpreter in order to design a practical session and gain confidence in their potential. The school visits were a success since, because of the methodology applied, they had the opportunity to assume the teacher's role and the school pupils took on the instructions in a quick, intuitive

way. At the end of each session, the pupils noted what they had learned in their personal diaries, how it had been carried out, how they had felt, and the difficulties and positive aspects.

Running parallel to the work in the university classroom, we undertook an activity involving a small Soundpainting orchestra, meeting outside school hours and made up of teachers and pupils from the music school, the university and primary schools, as well as local actors and dancers. Given the interest this activity generated among the participants in the orchestra, a final performance was organized and the teachers and pupils of the primary schools were invited to take part altogether. Overall, the participants in this performance comprised a Soundpainter, university lecturers, music school teachers, and university and music school students – all of whom were involved in the Soundpainting orchestra – as well as 204 primary schoolchildren in the audience, and the experts in visual arts who were also taking part.

Research process

This research is presented as a case study, and a strategy that looks deeply into and delivers an exhaustive and holistic description of a single or multiple structure within a specific time frame (Creswell, 2013). In our research, we used two instruments for collecting data, the students' class diaries and group interviews. According to the ethical guidelines, we asked those participating for permission to carry out the study and divulge any information contributed, guaranteeing their anonymity. Twenty-nine people took part (20 women and nine men), all of them fourth-year students on the teacher training degree in Primary Education, specialising in music education, during the 2017/18 academic year.

In this study, the diary was used as an instrument for research and self-development, helping to give a structure to thoughts and experiences; additionally, it helped us with the collection of important data, and their analysis and systemisation (Jurado, 2011). In accordance with this, at the beginning of the course the students were asked to complete a diary after each session, making note of what they had learned and their experiences, thoughts and reflections. The objective was to understand the process experienced in the Soundpainting project, and the possible influence on each participant's creative and musical development and their future teaching work. Following Jurado (2011), we established the importance of showing and sharing with other colleagues the information gathered in the diaries; on top of this, a series of group interviews were recorded on video in which the students had the opportunity to discuss their experience together.

Prior to these group meetings, a series of initial categories was defined: the development of creative, musical and professional abilities. These were related to the research objectives and complemented the findings of the first analysis of the diaries, using a content analysis technique which involved grouping the data into different categories for analysis. The categorisation process consisted of looking for common themes which made it easier to obtain results related to the goals of the experience (Coffey & Atkinson, 2003). These categories, just as we will explain, were inductive-deductive; inductive, because they came out of the replies, and deductive because they were based on a literature review on Soundpainting.

Discussion of results

To carry out the analysis of the diaries and the group interviews, we performed an initial analysis which involved a detailed reading of the diaries and interview transcripts, allowing the participants' voices to emerge and making a first selection of the themes that kept on arising; this allowed us to put together a tool of data analysis and interpretation that we call the categorical system. This option is justified by our wish to integrate what happens in reality. At the same time, this was contrasted in a deductive way by the methodological principles that come from experience, generating an emerging categorical system.

Lastly, taking these defined categories and with the participants' voices behind it, we built a categorical system. In an attempt to respond to the objectives we had initially proposed, we proceeded to structure the results around three key elements, corresponding to the categorisation carried out: the development of creative, musical and professional abilities.

Table 1. Categories y subcategories referenced

CATEGORIES	SUBCATEGORIES	N° Diary references	N° Group interview references	N° Total references	%
Development of creative abilities		28	34	62	19.38%
	<i>Intuition</i>	4	9	13	4.06%
	<i>Freedom</i>	10	9	19	5.94%
	<i>Exploring sound material</i>	7	9	16	5.00%
	<i>Confidence in creative abilities</i>	7	7	14	4.38%
Development of professional abilities		95	108	203	63.44%
	<i>Autonomous learning</i>	5	6	11	3.44%
	<i>Co-operative learning</i>	14	10	24	7.50%
	<i>Language adaptation by levels</i>		7	7	2.19%
	<i>Ludic activity</i>	9	9	18	5.63%
	<i>Calmness</i>	3	8	11	3.44%
	<i>Confidence in teaching abilities</i>	15	12	27	8.44%
	<i>Responsibility</i>	1	4	5	1.56%
	<i>Memory</i>	1		1	0.31%
	<i>Attention</i>	8	3	11	3.44%
	<i>Innovation</i>	4	9	13	4.06%
	<i>Concentration</i>	1		1	0.31%
	<i>Exploring other roles (protagonist)</i>	13	10	23	7.19%
	<i>Motivator</i>	13	9	22	6.88%
	<i>Learning to listen</i>	3	9	12	3.75%
	<i>Diversity</i>	1	8	9	2.81%
	<i>Planning</i>	1		1	0.31%
	<i>Multi-disciplinary possibilities</i>	3	4	7	2.19%
Development of musical abilities		18	37	55	17.19%
	<i>Trying different instruments</i>	6	10	16	5.00%
	<i>Openness to other styles</i>	7	9	16	5.00%
	<i>Experimenting with music</i>	2	8	10	3.13%
	<i>Musical characteristics (sound parameters, musical syntax)</i>	3	10	13	4.06%
TOTAL		141	179	320	100%

The abilities that the students interviewed believe can be developed through this experience – in which Soundpainting plays a central role – are set out, as Table 1 shows, in three categories, as the following shows:

-Development of creative abilities. Through the analysis of the information gathered in the diaries and group interviews, we can see that this is regarded as a particularly valid experience for the development of these abilities (19.38%). Of these abilities, freedom was the subcategory that received most mentions (5.95%), followed by the opportunity presented to Explore sound material (5.00%) and Confidence in creative abilities (4.38%). The students' voices, both in the diaries and interviews, tell us that, while for some it was a relief that "errors do not exist", for others this was uncomfortable at first – especially for those with a more traditional musical background, in conservatories and music schools, where they learned to "repeat a repertoire". These students say that they are used to learning music through imitation and to playing with a score, meaning they found it difficult at first to improvise. However, after the first sessions, they began to feel more comfortable, and they believe it is a way of learning music that provides a lot of freedom, as well as the opportunity to interpret and experiment with different instruments even without the necessary technique.

-Development of professional abilities. This is the category which earns the highest number of references (63.44%). Within this category, Confidence in teaching abilities (8.44%) is mentioned the most, followed by Co-operative learning (7.50%), Exploring other roles (7.19%) and Motivator (6.88%). The school visit and opportunity to interact with pupils struck them as particularly enriching; they had previously enjoyed preparing for the visit, by allocating the different roles, practising the visit in class, working together in groups under their own initiative, interchanging ideas and possible sequences for the phrases, self-evaluating, and correcting. At the same time, Soundpainting enabled them to establish contact very quickly with the school pupils, who wanted to take part not only by interpreting but also by adopting the role of Soundpainter; all of which was pivotal in transmitting confidence to them in their role as teachers. The ludic quality of Soundpainting allowed it to be seen as a game, and this enabled a certain shedding of inhibitions; if some were shy at first, they teamed up in pairs and in the end everybody took part. Furthermore, they agreed that it was a highly motivating way of working with sounds, one that is open, dynamic and creative.

-Development of musical abilities. This category receives the third most references (17.19%). The highest number of statements regarding the subcategories concern Trying different instruments and Openness to other styles (5.00% each). The students experienced other possible forms of musical education – approaches that allow for more integration, and the incorporating of different levels of knowledge and ability into musical activities, as well as the exploring of ideas and processes and an openness towards all kinds of music. We wish to highlight also the fact they were struck by the speed with which they learned the gestures and were able to carry out musical productions. It helped them hugely – in a very intuitive fashion – to interiorise concepts such as sound parameters (intensity, pitch, tone, duration) and practise them.

Finally, we would like to underline that, according to the voices gathered, the act of delivering the final performance, with artists on the stage, allowed them to experience the integration of different artistic disciplines and this proved very enriching. Moreover, the characteristics of the language of Soundpainting enabled a manner of active participation that they had not known in any other type of show or concert. Equally, they said that they felt they had gained a freedom and certain complicity from meeting the primary-school pupils, thanks to the school visit, and sharing the experience of the concert with them. Additionally, they affirmed that the use of a diary as a tool for self-development, and the opportunity to visit the centres and teach Soundpainting to primary pupils, as well as to exchange experiences as a group and compare them with their colleagues and teachers, helped them to structure their thoughts and experiences – something which will be of great use to them in their future as teachers – as well as to reflect on and feel confidence in their creative possibilities.

Conclusions

The participants stated that this educational process had developed their sensitivity with regards to understanding how to relate to students creatively. They also said that the act of getting involved in activities with primary school pupils, and with a Soundpainting orchestra, and feeling like participants in a collective project, had helped them to feel engaged and confident about developing their professional work in a way that encourages innovation and integration.

The application of the language of Soundpainting provided tools to guide future teachers in the design and implementation of projects which promote collective creativity, the generation of ideas, and the ability to organize events based on the creative processes. The implementation of this experience allowed its participants to open their

minds as well as offering norms to change ways of thinking and moving forward with the creative and musical training of future teachers. Soundpainting is a way of focusing teaching on the recognition of the quality of the process of artistic creativity, rather than the analysis of the final product. It makes it possible to understand creativity as an activity which develops different abilities and critical thought in a collaborative space. To conclude, we will note the words of one student after his first Soundpainting class:

“None of us knew anything about this language but it was clear that, as well as surprising us and having an impact on us, it succeeded in motivating us and we actually enjoyed the music. With Soundpainting we can learn to listen, and promote group work, improvisation and real-time composition. What is more, we were able to become composers and lead a group – and if it had an impact on me, imagine how a child might experience it! ... Through this language we will succeed in integrating diversity and opening the limits of children’s imaginations.”

Funding

This work was supported by the University of the Basque Country [number GIU16/58], to Research Groups for the project entitled *Investigación sonora y espacio artístico. Nuevas herramientas técnicas y conceptuales para la creación*.

References

- Beineke, V. (2017). Componiendo colaborativamente en la escuela: entre teorías y prácticas en el campo del aprendizaje musical creativo. *Revista Internacional de Educación Musical*, 5, 31-39.
- Bilgin, Y. & Çoşkun, S. (2017). Effects of soundpainting studies on students’ self-confidence. *International Periodical for the Languages, Literature and History of Turkish or Turkic*, 12(4), 91-110.
- Burnard, P. (2002). Investigating children’s meaning-making and the emergence of musical interaction in group improvisation. *British Journal of Music Education*, 19(2), 157-172.
- Burnard, P. (2017). Teaching music creatively. In P. Burnard & R. Murphy, *Teaching music creatively* (pp. 1-12). Abingdon, Oxon (UK): Routledge Abingdon, Oxon (UK): Routledge.
- Burnard, P. & Boyack, J. (2017). Engaging interactively with children’s group improvisations. In P. Burnard & R. Murphy, *Teaching music creatively* (pp. 26-38). Abingdon, Oxon (UK): Routledge.
- Burnard, P., Boyack, J. & Howell, G. (2017). Children composing: Creating communities of musical practice. In P. Burnard & R. Murphy, *Teaching music creatively* (pp. 39-59). Abingdon, Oxon (UK): Routledge.
- Burnard, P. & Murphy, R. (2017). *Teaching music creatively*. (2nd. edition). Abingdon, Oxon (UK): Routledge.
- Burrows, J. B. (2004). Musical archetypes and collective consciousness: Cognitive distribution and free improvisation. *Critical Studies in Improvisation*, 1(1). Retrieved from <http://www.criticalimprov.com/article/view/11/35>
- Carrillo, C. & Vilar, M. (2012). Las competencias profesionales del profesorado de música opiniones de una muestra de docentes. *Cultura y Educación*, 24(3), 319-335.
- Creswell, J.W. (2013). *Qualitative inquiry & Research design: choosing among the five approaches*. (3rd edition) Los Angeles, CA: Sage.
- Coffey, A. & Atkinson, P. (2003). *Encontrar el sentido a los datos cualitativos. Estrategias complementarias de investigación*. Medellín: Editorial de la Universidad de Antioquia.
- Çoşkun, S. (2016). Effects of Sound painting applications on performance. *Educational Research and Reviews*, 11(15), 1351-1354. DOI: 10.5897/ERR2016.2753
- Delalande, F. (1995). *La música es un juego de niños*. Buenos Aires: Ricordi.
- Delalande, F. (2013). *Las conductas musicales*. Santander (Spain): Universidad de Cantabria.
- Giaccio, G. & Coquillon, S. (2016). On the Process of Sound Creation: Some Models for Teaching Artistic Creation in Music Using a Soundpainting Project in a French Primary School. *Visions of Research in Music Education*, 28.
- Giráldez, A. (2014). Enseñar y aprender en el aula de música. In A. Giráldez (coord.), *Didáctica de la música en Primaria* (pp. 39-76). Madrid: Síntesis.
- Glover, J. (2002). *Children Composing 4-14*. London: Routledge.
- Hickey, M. (2009). Can improvisation be ‘taught’? A call for free improvisation in our schools. *International Journal of Music Education*, 27(4), 285-299.
- Jurado, D. (2011). El diario como un instrumento de autoformación e investigación. *Curriculum: Revista de teoría, investigación y práctica educativa*, 24, 173-200.

- Kanellopoulos, P. (2007). Musical Improvisation as Action: An Arendtian Perspective. *Action, Criticism, and Theory for Music Education* 6/3. Retrieved from http://act.maydaygroup.org/articles/Kanellopoulos6_3.pdf
- Koutsoupidou, T. (2005). Improvisation in the English primary music classroom: Teachers' perceptions and practices. *Music Education Research*, 7(3), 363-381.
- Loizaga, M. (2007). Thomas Adam Regelski. In M. Díaz y A. Giráldez, *Aportaciones teóricas y metodológicas a la educación musical. Una selección de autores relevantes* (pp. 211-219). Barcelona: Graó.
- Odena, O. & Welch, G. (2012). Teacher's perceptions of creativity. In O. Odena (Ed.), *Musical creativity: Insights from music education research* (pp. 29-49). Surrey: Ashgate.
- Paynter, J. (1992). *Sound and Structure*. Cambridge: Cambridge University Press.
- Regelski, T. A. (2002). On 'methodolatry' and music teaching as critical and reflective praxis. *Philosophy of Music Education Review* 10(2), 102-23.
- Schafer, R. M. (1965). *The composer in the classroom*. BMI Canada.
- Schafer, R. M. (1986). *The thinking ear: Complete writings on music education*. Arcana Editions.
- Thompson, W. (2006). *Soundpainting: The art of living composition, Workbook I*. New York, NY: Author
- Thompson, W. (2009). Soundpainting: el arte de la composición en directo. *Eufonía: Didáctica de la música*, 47, 77-83.
- Vidal, O. & Morant, R. (2017). Aplicaciones didácticas del lenguaje Soundpainting en diferentes ámbitos educativos: una herramienta para la creación en tiempo real. *Revista Electrónica Complutense de Investigación en Educación Musical*, 14, 329-349.
- Wigram, T. (2004). *Methods and Techniques for Music Therapy Clinicians, Educators and Students*. London: Jessica Kingsley Publishers.

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New Technologies And Geography: Supporting Development Of Inclusive Practices

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Abstract

Il documento tratta delle prospettive di utilizzo di un'app Web (GeoBes), appositamente realizzata per questo scopo, nell'ambito dell'educazione ambientale. La metodologia di approccio proposta si basa sulla Neogeografia che consiste in un insieme di tecniche e strumenti che non rientrano nel campo del GIS tradizionale, Geographic Information Systems (Turner, 2006, p.2). In questo senso, GeoBes funge da risorsa didattica e come strumento per la promozione dei processi di apprendimento, inoltre, l'App Web è stata progettata per includere anche bambini SEN (bisogni educativi speciali) nello studio della geografia nei contesti di istruzione a distanza. L'app utilizza una metodologia basata sull'apprendimento ludico, con una serie di attività che consentono un apprendimento significativo, attraverso la visualizzazione e la localizzazione virtuale di mappe di aree geografiche specifiche. In particolare, il tema del percorso di educazione ambientale sarà il fiume Irno, che attraversa la città di Salerno (Italia). Il fiume sarà indagato da diverse prospettive che ne individuano le caratteristiche fisico-geografiche e come bene comune da tutelare nell'interesse della sostenibilità intergenerazionale.

Obstetric Triage Acuity Scale Setting To Turkish

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Abstract

The rate of maternal mortality in the world and our country is unacceptably high. Women die as a result of complications during and after pregnancy and delivery. Most of these complications develop during pregnancy and many can be prevented or treated. In protecting maternal health, it is vital that obstetric problems can be identified at the earliest time and appropriate treatment and care can be provided. In order to prevent maternal / mortality and morbidity, it is inevitable to develop a triage scale specific to obstetric acuity in order to ensure that health personnel are able to perform the earliest and appropriate intervention in an emergency obstetric situation or, if necessary, refer the patient to the procedure promptly. In Turkey, there is no nationally accepted classification system for the standardization of obstetric triage of patients coming to the complaint. The purpose of this study is to plan the language validity and coverage of the obstetric triage urgency scale. The study was conducted between 01.01.2018 and 30.03.2018 at Akdeniz University Hospital Emergency Service Triage Unit in Antalya city center. Statistical Package for the Social Sciences (SPSS) 20.0 software package program was used to analyze the data obtained from the research. For this study, the language expression content index is 0.983 and the scale content index is 0.8636. As a result, the language expression content index for this study is 0.983, it has a very high content content validity, and the scale content index is 0.8636 in terms of language expression, and our scale has a content validity close to perfection.

Keywords: *Obstetric triage acuity scale, Obstetric emergencies, Obstetric triage, Triage.*

Introduction

Triage is the process of prioritization of healthcare services according to the urgency of the care and treatment needs of the patient and is often used in healthcare for emergencies (Evans et al., 2015). The development of the emergency care triage system allows standardization of care and better utilization of resources (Gratton et al., 2016), while determining which patients should be evaluated urgently and which can be safely waited for. Standard workflows and acuity indexes benefit the nursing profession by creating standards and expectations. Patient care is elevated through the practice of the nursing staff measuring, monitoring, and disseminating patient care quality indicators and metrics, and working to continuously improve patient outcomes (DePaoli, 2016). Emergency triage used in the literature; Canadian Triage Acuity Scale (CTAS), Emergency Severity Index (ESI) and Manchester Triage System (Mackway-Jones, 1997; Eitel et al., 2003; Bullard, Unger, Spence, Grafstein, 2008). These scales include limited practice for obstetric triage and do not reflect special triage needs of obstetric patients. The Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN, 2016), has also created a 5-level obstetric acuity index tool. The Obstetric Triage Acuity Scale (OTAS) has been developed because of the limited obstetric markers of triage clearness scales (Smithson, 2013). OTAS was modeled on 5 categorized CTAS instruments and Smithson et al. (2013). Obstetric triage is the entry into labor and delivery and the obstetric operating rooms, and patients should be evaluated for life-threatening risk factors and dangers immediately upon arrival, rather than waiting to be seen on a first-come-first-served basis. The implementation of obstetric triage standards and the utilization of an obstetric triage index have the potential to dramatically increase throughput, patient outcomes, patient safety, and patient satisfaction (DePaoli, 2016). In protecting maternal health, it is vital that obstetric problems can be identified at the earliest time and appropriate treatment and care can be provided. In order to prevent maternal / mortality and morbidity, it is inevitable to develop a triage scale specific to obstetric acuity in order to ensure that health personnel are able to perform the earliest and appropriate intervention in an emergency obstetric situation or, if necessary, refer the patient to the procedure promptly. In Turkey, there is no nationally accepted classification system for the standardization of obstetric triage of patients coming to the complaint.

Methods

This study was planned with the aim of adapting the obstetric triage acuity scale to Turkish. The data of the methodological planned study was collected between 01.01.2018-30.03.2018 at the Akdeniz University in the city center of Antalya. The "Obstetric Triage Acuity Scale" (OTAS) was used for the collection of research data. Studies have been carried out on the language availability and content validity of the Obstetric Triage Acuity Scale. Statistical Package for the Social Sciences (SPSS) 20.0 software package program was used to analyze the data

obtained from the research. Permission was obtained from the Ethics Committee of the Institute of Health Sciences of the Akdeniz University before the research started.

Otas

Obstetrical Triage Acuity Scale, a five-category (1-resusitative, 2-emergent, 3-urgent, 4-less urgent, 5-nonurgent) triage acuity scale with a complete set of obstetrical determinants. The scale consists of triage-focused segments of the patient's assessment time, medical complications, and complaints of obstetric determinants (Smithson et al., 2013). In 2016, the National Triage Working Group finalized OTAS with the addition of substance use and mental health assessment. Gratton et al. (2016) added the final chapter with the aim of supporting the determination of the urgency level of the assessors. The last section included the haemodynamic status of the patient (shock), respiratory stress, fetal evaluation (fetal heart rate, meconium in the amnion fluid) and cervical dilatation evaluation (Gratton et al., 2016). In the original scale, kappa was found to be OTAS 1-4 0.61-0.77 and OTAS 5 0.87 (Smithson et al., 2013).

Results

Language Validity

After the Turkish translation of the Obstetric Triage Emergency Scale was made by the researcher, the scale was translated from English to Turkish by three teaching staff who knew two languages (English / Turkish). After the translations were organized by the researcher and consultant lecturer, Scale Turkish form was created. The "blind back translation" method was used in the scale language adaptation. The translation of the scales into English was done by a lecturer at the Faculty of Foreign Languages of Akdeniz University. After the translation work done, the scale was sent to the author. The necessary corrections have been made in the direction of the suggestions coming from the author and the scale has been finalized.

Internal validity

Expert opinion has been referred to evaluate the internal validity of OTAS. The Turkish form of the completed scale was requested from 8 faculty members who were experts in the field. In evaluating the expert opinion, the Content Validity Index was used. The content validity index was used in the evaluation of expert opinions. The evaluation of the validity of this index, developed in 1983 by Waltz and Bausell is made in the form of 4 likert type. In Likert 1, "very change is necessary" (2) "little change is required" (3) "appropriate", 4 "very appropriate" (Polit and Beck, 2006). The descriptive statistics of the scores given by the experts to each item of the scale are presented in Table 1. In this table, it is seen that the average scores of the expert points are between 3-4, and the minimum values are between 2 and 4 and the maximum values are all 4.

Table 1. Descriptive statistics of the scores of the experts

	N	Ort.	Ss	Min.	Max
S1	8	3.7500	.46291	3.00	4.00
S2	8	4.0000	.00000	4.00	4.00
S3	8	3.7500	.46291	3.00	4.00
S4	8	3.8750	.35355	3.00	4.00
S5	8	3.1250	.35355	3.00	4.00
S6	8	3.6250	.51755	3.00	4.00
S7	8	3.7500	.46291	3.00	4.00
S8	8	3.3750	.51755	3.00	4.00
S9	8	3.7500	.46291	3.00	4.00
S10	8	3.1250	.64087	2.00	4.00
S11	8	3.3750	.51755	3.00	4.00
S12	8	3.7500	.46291	3.00	4.00
S13	8	3.6250	.51755	3.00	4.00
S14	8	3.2500	.70711	2.00	4.00
S15	8	3.5000	.53452	3.00	4.00
S16	8	3.3750	.74402	2.00	4.00
S17	8	3.8750	.35355	3.00	4.00
S18	8	3.8750	.35355	3.00	4.00
S19	8	3.5000	.53452	3.00	4.00
S20	8	4.0000	.00000	4.00	4.00
S21	8	3.6250	.51755	3.00	4.00
S22	8	3.5000	.53452	3.00	4.00

Content validity index; substance validity index and for the whole scale. The item content index is found by dividing the number of experts who score 3 or 4 points for each item by the total number of experts. If there are 6

or more experts, it means that the item content index (I-CVI) is 0.78 and above, and that the scale has excellent article content validity (Polit and Beck, 2006). The language expression content index for this study is 0.983 and it can be said that it has a very high content content validity.

Scale content validity index; is calculated by dividing the number of items given by 3 or 4 points for each expert by the total number of items. In the content analysis of the scale, the scale content validity index (S-CVI) can be accepted between 0.80-0.90 and it can be said that the scales having 0.90 and above have excellent content validity (Polit and Beck, 2006). In this study, the scale content index is 0.8636 in terms of language expression and our scale has the content validity of a scale close to perfection.

In addition to the average scores of the experts in the survey, the suggestion of the expression style and content of the items was also evaluated. In line with the views and suggestions of the Prime Minister, 1., 4., 5., and 14th items have been rearranged, the scales have been finalized with various additions / subtractions to provide semantic integrity and on-the-ground reliability.

Conclusion

As a result, the language expression content index for this study is 0.983, it has a very high content content validity, and the scale content index is 0.8636 in terms of language expression, and our scale has a content validity close to perfection.

References

- AWHONN. (2016). Maternal fetal triage index. Retrieved from <https://www.awhonn.org/?page=MFTI>
- Bullard MJ, Unger B, Spence J, Grafstein E. Revisions to the Canadian Emergency Department Triage and Acuity Scale (CTAS) adult guidelines. CJEM 2008;10(2):136e51.
- DePaoli, W. (2016). Obstetric Triage Improvement. <https://repository.usfca.edu/cgi/viewcontent.cgi?article=1326&context=capstone>
- Eitel DR, Travers DA, Rosenau AM, Gilboy N, Wuerz RC. The emergency severity index triage algorithm version 2 is reliable and valid. Acad Emerg Med 2003;10(10):1070e80.
- Evans M. K., Watts N. and Gratton R. (2015). Women's Satisfaction With Obstetric Triage Services. JOGNN, 44, 693-700; 2015. DOI: 10.1111/1552-6909.12759
- Gratton RJ., Bazaracai N., Cameron I., Watts N., Brayman C., Hancock G., Twohey R., Alshanteer S., Ryder JE., Basso M., Smithson DS. (2016). Acuity Assessment in Obstetrical Triage. Journal Obstet Gynaecol Can, 38(2):125-133
- Mackway-Jones K. Emergency triage: Manchester Triage Group. London: BMJ Publishing Group; 1997.
- Smithson DS., Twohey R., Rice T., Watts N., Fernandes CM., Gratton RJ. (2013). Implementing an obstetric triage acuity scale: interrater reliability and patient flow analysis. American Journal of Obstetric&Gynecology, <http://dx.doi.org/10.1016/j.ajog.2013>
- Polit, D. F., & Beck, C. T. (2006). The content validity index: Are you sure you know what's being reported? Critique and recommendations. *Research in Nursing & Health*, 29, 489-497.

Okullarda İnternet Bağımlılığının Önlenmesinde Yönetici, Psikolojik Danışma ve Rehberlik Merkezleri ve Veli İşbirliği Üzerine Bir Çalışma: Özel Arı Okulları Örneği

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Özet

Günümüzde internet kullanımındaki artış, yaşamımızda sağladığı kolaylıklar interneti vazgeçilmez konumuna sokmuştur. Türkiye İstatistik Kurumu (TÜİK) (2017) hanehalkı bilişim teknolojileri kullanım araştırması sonuçlarına göre, bilgisayar ve internet kullanımı 2017 yılında 16-74 yaş grubundaki bireylerde sırasıyla yüzde 56,6 ve yüzde 66,8'dir. Aynı araştırma sonuçlarına göre 2017 yılı Nisan ayında hanelerin yüzde 80,7'si evden internete erişim imkânına sahip.Türkiye'deki Dijital Dünyaya Genel Bakış (2018) istatistikleri 81 milyon nüfusa sahip ülkemizde; nüfusun % 67'sini oluşturan 54.3 milyon internet kullanıcısı ve İnsanlar internette günde ortalama 7 saat geçiriyorlar. Son yıllarda artan internet kullanımının bilgiye kısa sürede erişim imkanı sunma, hizmetlerin sunumunda zaman ve maliyet açısından ekonomiklik sağlama gibi özellikleri internete olan ilgiyi ve kullanımını artırmıştır. Teknolojik gelişmeler yaşamımızı kolaylaştırdığı kadar beklenmedik güçlükleri de beraberinde getirmiştir. İnternet bağımlılığı da bunlardan biridir. İnternet bağımlılığı her yaşta görülebilmekte ancak diğer bağımlılıklara göre daha erken yaşlarda başlamakta. İnternet bağımlılığı kısaca, İnternetin aşırı kullanılması isteğinin önüne geçilememesi, internete bağlı olmadan geçen zamanın önemini yitirmesi, yoksun kalındığında ise aşırı sinirlilik hali ve saldırgan olunması olarak tanımlanır. Bu sorunun çözümünde okul yöneticileri, okul PDRM ve eğitim koordinatörlüklerine büyük sorumluluklar düşmektedir. Kuşkusuz bu süreçte okulların ailelerle işbirliği, ailelerin bilinçlendirilmesi, öğrencilerin bilgilendirilmesi ve bilinçlendirilmesine destek olacaktır. Bu çalışmada Özel Arı Okullarında okul yönetimi ve PDRM işbirliğiyle yürütülen İnternet Bağımlılığını Önleme çalışmaları özellikle de veli bilinçlendirme boyutu anlatılacaktır.

Okullarda Örgütsel Yenilik Düzeyi İle Örgütsel Bağlılık Düzeyi Arasındaki İlişki

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Özet

Bu çalışmada, okul yöneticilerinin örgütsel yenilik düzeyleri ile öğretmenlerin örgütsel bağlılık düzeyi arasındaki ilişkinin belirlenmesi amaçlanmıştır. Araştırmanın evrenini 2017-2018 eğitim öğretim yılında Muğla il merkezi ve ilçelerindeki ilköğretim, ortaokul ve liselerde görev yapan öğretmenler oluşturmaktadır. Tarama modelinde yapılan araştırmanın örneklemini 418 öğretmenden oluşmaktadır. Araştırmada, Eğitim Örgütleri İçin Yenilik Yönetimi Ölçeği ve Örgütsel Bağlılık Ölçeği kullanılmıştır. Araştırmanın sonuçlarına bakıldığında, öğretmenlerin görüşlerine göre okul yöneticilerinin yenilik yönetimi davranışı boyutlarının, öğretmenlerin örgütsel bağlılık düzeylerini tüm boyutlarda anlamlı şekilde yordadığı söylenebilir. Öğretmenlerin örgütsel bağlılık davranışını arttırmak için okul yöneticilerinin daha çok yenilikçi davranışlar sergilemesi önerilebilir.

Anahtar kelimeler: Örgütsel yenilik, örgütsel bağlılık, yenilik yönetimi, öğretmen, yönetici

Giriş

Örgüt kavramı sosyoloji, psikoloji, antropoloji, siyaset bilimi, yönetim bilimleri gibi birçok sosyal bilimlerin alanına giren bir kavramdır (Şişman, 1995). Genel olarak bakıldığında örgüt, belli ortak amaçlara ulaşmak için oluşturulan canlı yapılardır. Örgüt içinde örgüt üyeleri, örgütün amaçlarına ulaşması için çalışırken kendi özel amaçlarına ulaşmayı da hedeflerler. Örgütün bu hedeflere ulaşabilmesi için de birçok etkenin doğru şekilde yönetilmesi gerekir.

İnsan yaşamı sürekli bir değişim ve gelişim halindedir. Gelecek kestirilemeyecek kadar belirsiz olsa da, insanlar sürekli ve gittikçe hızlanan bu değişimin arkasından gitmek zorundadır (Töremen, 2002). Bu hızlanan değişim ve gelişimin en önemli sebebi ve sonucu teknolojidir, çünkü teknoloji iletişimi kolaylaştırmış ve bilgiyi daha rahat ulaştırılabilir hale getirmiştir. Bu da insanların ve kurumların kendilerini daha kolay geliştirmesini mümkün kılarak, neredeyse tüm sektörlerde rekabet ortamlarının oluşmasına sebep olmuştur (Öğüt, Aygen, ve Demirel, 2007). Rekabetin ön plana çıkması örgüt içindeki kişilerin iş performanslarının ve performanslarını etkileyen unsurların da beraberinde inceleme konusu olmasını sağlamıştır. Özel sektörde ve kamu kurumlarında çalışan tüm personelden performans beklentisi artmıştır. Kişilerin işyerindeki verimliliğini arttırmada önemli unsurlardan olan kişinin çalıştığı yere bağlılığı ve örgütteki lider durumunda olan kişilerin yeniliğe açık olması, örgüte yeni şeyler kazandırabilecek nitelikte olması önemlidir.

Yenilik ve yenilikçilik, örgütlerin değişen zamana ve çevreye uyum sağlayabilmesi için gereklidir. Yenilik, örgütlerdeki çalışanların yetkin kişilerden oluşması ve örgütlerin hitap ettiği kitlenin gözünde popülerliğini yitirmemesi için önemli bir unsurdur (Bozkurt, 2015). Yapılan araştırmalar da bunu destekler niteliktedir. Bu araştırmalardan birisi de Yavuz'un (2010) araştırmasıdır. Yavuz (2010), bir örgüt üzerinde yaptığı çalışmada örgütte yapılan yenilikler ile örgüt performansı arasında anlamlı bir ilişki olabileceğini ortaya koymuştur.

Her alanda olan değişim ve gelişim hem insanları hem de toplumu değiştirmeye ve yenilemeye zorlamaktadır. Eğitim kurumları da tüm alanlara kaynak sağlayan kurumlar olarak yeniliğe ihtiyaç duymaktadır. Eğitim örgütleri tüm bilimsel, teknolojik, çevresel değişim, gelişim ve yeniliklerden etkilenmektedir (Göl ve Bülbül, 2012). Bu değişim ve gelişime ayak uydurma sürecinde en büyük rol eğitim örgütlerinde lider konumunda olan kurum yöneticilerine düşmektedir. Öncelikli olarak yöneticinin yeniliği yönetebilmek için birçok boyutta yeterli olması beklenir. Özellikle de örgüt içinde liderin girdi yönetimini iyi yapması, birtakım yenilik stratejilerini uygulaması, örgütün kültür ve yapısının yeniliğe açık olmasını sağlaması ve örgüt üyelerini bir arada ve aktif tutmak adına proje yönetimini iyi yapması gerekir.

Örgütsel bağlılık örgüt üyelerinin dâhil olduğu gruba bağlılığıdır. Kişinin örgüte olan bağlılığını etkileyen kendisinden ve örgütten kaynaklanan birçok faktör vardır. Bu faktörlerden öne çıkanlar kişinin yaşı, eğitim düzeyi, görev süresi ve yapılan işin ücret düzeyi, örgütün büyüklüğü ve yapısı, örgüt, içinde uygulanan liderlik stili, örgüt içi ödüllendirme, sosyal ilişkiler, örgütsel adalet düzeyi şeklinde sıralanabilir.

Örgütsel bağlılık eğitim örgütlerinde incelediğinde, öğretmenlerin örgüte olan bağlılığının eğitim öğretim faaliyetlerini de olumlu etkilemesi beklenir. Okullarda öğretmenlerin örgütüne bağlılık davranışı göstermesi,

onların okulda daha çok vakit geçirmesini, öğrencileri ve örgütü için daha çok çalışmasını beraberinde getirir. Bu da örgütsel bağlılığın görüldüğü eğitim örgütünün başarı durumunun daha iyiye gitmesini sağlayabilir. Okullardaki örgütsel bağlılığa araştırmalar üzerinden bakılacak olursa, Atik ve Üstüner (2014) tarafından ilköğretim okullarının örgüt tipi ile öğretmenlerin örgütsel bağlılıkları arasındaki ilişkinin incelendiği bir araştırma yapılmıştır. Bu araştırmada araştırmaya katılan öğretmenlerin okullarına orta düzeyde bağlılık gösterdiği sonucu çıkmıştır. Araştırmaya katılan öğretmenlerin örgütsel bağlılık düzeylerinde cinsiyet ve mesleki kıdem değişkenleri açısından anlamlı fark görülmüştür. Gönen'in (2016) öğretmenlerin örgütsel bağlılık düzeyleri ile karar verme süreci arasındaki ilişkiyi incelediği bir araştırmada, öğretmenlerin örgütsel bağlılık düzeyleri ile karara katılma süreçleri arasında pozitif yönde, orta düzeyde anlamlı bir ilişki olduğu sonucu çıkmıştır.

Örgüt liderinin tutumuna göre örgüt üyelerinin bağlılık düzeyleri artar ya da azalabilir. Eğitim örgütlerinde okul yöneticilerinin yeniliğe yaklaşımları ve yenilikçi tutumları öğretmenlerin örgütsel bağlılık düzeylerini önemli derecede etkileyebilir çünkü yenilikçi tutumun örgütün gelişimini olumlu yönde etkilemesi ve örgüt üyelerinin örgütüne olan bağlılığını arttırması beklenir. Okul yöneticisinin yeniliğe açık olması örgüt içinde bulunduğu kısır döngünün dışına çıkmasını ve örgüt olarak çeşitli başarılarla imza atmasını sağlayabilir. Bu da öğretmenlerin motivasyonunu olumlu yönde etkileyerek örgüt içinde mutlu olmasını, örgüt içinde daha çok zaman geçirmesini, işe zamanında gelmesini ve örgüt için birşeyler yapmaktan haz duymasını sağlayabilir.

Alanyazın araştırması sürecinde eğitim örgütlerinde örgütsel yenilik ve örgütsel bağlılık arasındaki ilişki üzerine yapılmış bir çalışmaya rastlanmamıştır. Ancak otomotiv sektöründe Zerenler ve Celep (2011) tarafından yapılan araştırmada yenilik ve yenilikçiliğin arttırılabilmesi için örgüt üyelerinin örgüte olan bağlılığının arttırılması gerektiği ve örgüt liderlerine bu konuda büyük görev düştüğü sonucu çıkarılmıştır. Zannad ve Rouet (2003) tarafından yapılan bir çalışmada da örgütsel bağlılığın yenilikçi örgüt yapılarında daha etkili olduğu ancak örgüt üyelerinde belli düzeyde de sadakat eksikliğine görüldüğü belirtilmiştir.

Eğitim örgütlerinde örgütsel yenilikle ilgili yapılan az sayıda çalışma vardır. Araştırma sırasında ise eğitim örgütlerinde örgütsel yenilik ile örgütsel bağlılık arasındaki ilişkiyi inceleyen hiçbir çalışmaya rastlanmamıştır. Bu nedenle eğitim örgütlerinde ayrı ayrı araştırılmış olan örgütsel yenilik ve örgütsel bağlılık değişkenleri arasındaki ilişki, araştırmacı için merak haline gelmiş ve araştırma konusu olarak bu bağlamda olgunlaşmıştır.

Bu araştırmada ilkökul, ortaokul ve liselerde görev yapan okul yöneticilerinin örgütsel yenilik düzeyleri ve öğretmenlerin örgütsel bağlılık düzeylerinin incelenmesi hedeflenmiştir. Buna uygun olarak aşağıdaki sorulara cevap aranmıştır.

- 1) Öğretmenlere göre okul yöneticilerinin örgütsel yenilik düzeyleri nedir?
- 2) Öğretmenlerin örgütsel bağlılık düzeyleri nedir?
- 3) Okul yöneticilerinin örgütsel yenilik düzeyi demografik değişkenlere göre farklılık göstermekte midir?
- 4) Öğretmenlerin örgütsel bağlılık düzeyleri demografik değişkenlere göre farklılık göstermekte midir?
- 5) Okul yöneticilerinin örgütsel yenilik düzeyleri ile öğretmenlerin örgütsel bağlılık düzeyleri arasında anlamlı bir ilişki var mıdır?

Yöntem

Araştırmanın Modeli

Okul yöneticilerinin öğretmenlere göre örgütsel yenilik düzeylerinin ve öğretmenlerin örgütsel bağlılık düzeylerinin çeşitli değişkenlere göre incelenmesinin ve ikisinin arasındaki ilişkinin incelenmesinin amaçlandığı bu araştırma ilişkisel-tarama modelinde yapılmıştır.

Evren ve Örneklem

Bu araştırmanın evreni 2017-2018 eğitim-öğretim yılında Muğla il merkezi ve ilçelerinde ilkökul, ortaokul ve liselerde görev yapan 12.056 öğretmenden oluşmaktadır. Örneklemen belirlenmesinde küme örnekleme tekniği kullanılmıştır. Evreni temsil eden örneklem sayısını hesaplanırken Şahin'in (2014, s.127) $\alpha=0,05$ için hazırlamış olduğu ideal örneklem büyüklüklerini gösteren tablodan faydalanılmıştır. Örneklem büyüklüğü %95 güven düzeyi için en az 378 olarak hesaplanmıştır. Bu araştırmada 418 katılımcıya ulaşılmış ve bu katılımcıların görüşleri değerlendirmeye alınmıştır.

Veri Toplama Araçları

Bu araştırmada kullanılan ölçek üç bölünden oluşmaktadır. Birinci bölümde katılımcıların demografik bilgileri istenmiştir. İkinci bölümde okul yöneticilerinin örgütsel yenilik düzeylerini belirlemek amacıyla öğretmenlere "Eğitim Örgütleri İçin Yenilik Yönetimi Ölçeği" uygulanmıştır. Bu ölçek Bülbül (2012b) tarafından geliştirilmiştir. Ölçek dört boyut ve 32 maddeden oluşmaktadır. Cronbach Alfa iç tutarlılık güvenilirlik katsayısı ise .96 olarak bulunmuştur. Bu ölçeğin birinci boyutu *girdi yönetimi* (5 madde) ($\alpha=0,91$), ikinci boyutu *yenilik*

stratejileri (6 madde) ($\alpha=0,92$), üçüncü boyutu *örgütsel kültür ve yapı* (6 madde) ($\alpha=0,94$) ve dördüncü boyutu *proje yönetimi* (15 madde) ($\alpha=0,97$)’dir. Bu araştırmada ise Cronbach Alfa iç tutarlılık güvenirlik katsayısı .98 olarak hesaplanmıştır. Üçüncü bölümde öğretmenlerin örgütsel bağlılık düzeylerini belirlemek amacıyla “Örgütsel Bağlılık Ölçeği” kullanılmıştır. Bu ölçek Balay (2000) tarafından geliştirilmiştir. Bu araştırmada ölçeğin birinci boyutu *uyum* (8 madde) ($\alpha=.84$), ikinci boyutu *özdeşleşme* (8 madde) ($\alpha=.88$) ve üçüncü boyutu *içselleştirme* (11 madde) ($\alpha=.92$)’dir. Bu araştırmada Cronbach Alfa iç tutarlılık güvenirlik katsayısı .81 olarak hesaplanmıştır.

Verilerin Analizi

Araştırmadan elde edilen verilerin dağılımının normalliği çarpıklık ve basıklık katsayılarına bakılarak test edilmiştir. Çarpıklık katsayılarının tüm değişkenlerde -0.37 ile +0.74 arasında değiştiği; basıklık katsayılarının ise 0,10 ile 0,76 arasında değiştiği görülmüştür. Bu değerler +1.5 ile -1.5 aralığında olduğu için dağılım normal kabul edilmiştir (Büyükoztürk, 2015; Tabachnick ve Fidell, 2013).

Örgütsel Bağlılık düzeyini belirlemek için kullanılan ölçek 3 boyuttan oluşmuş olup, birinci boyutunda bulunan maddeler ters kodlanmıştır. Katılımcılara ait kişisel bilgiler yüzde ve frekanslarına bakılarak analiz edilmiştir. Ortalamalara ilişkin karşılaştırmalarda t-testi, ANOVA analizlerinden yararlanılmıştır. ANOVA analizlerinde ortaya çıkan farklılıkların yorumlanması için Tukey veya Games-Howell testleri kullanılmıştır. Bunun için verilerin homojenlik testi yapılmıştır. Bu test sonucunda homojen dağılım varsayımını sağlayan değişkenlerde Tukey testi, bu varsayımı sağlamayan değişkenlerde ise Games-Howell testi yapılmıştır (Tabachnick ve Fidell, 2013). Ölçeklerden elde edilen verilerin ortalamalarını değerlendirebilmek için (4/5) formülüne göre sınırlar belirlenmiştir. Bu sınırlar, (1,00-1,80) hiç, (1,81-2,60) az, (2,61-3,40) orta, (3,41-4,20) çok ve (4,21-5,00) tam şeklindedir. Regresyon analizi için kullanılan değerler ise (0-0.3) düşük, (0.3-0.7) orta, (0.7-1.0) yüksek şeklindedir.

Bulgular

Bu araştırmanın ilk amacı, öğretmenlere göre okul yöneticilerinin örgütsel yenilik düzeylerinin belirlenmesidir. Araştırmaya katılan öğretmenlerin görüşlerine göre okul yöneticilerinin yenilik yönetimi davranışının boyutlarına ilişkin ortalamalar Tablo 1’de verilmiştir.

Ölçekler	Boyutlar	\bar{X}	S
Yenilik Yönetimi	Girdi Yönetimi	3.80	.87
	Yenilik Stratejileri	3.86	.79
	Örgütsel Kültür ve Yapı	3.89	.85
	Proje Yönetimi	3.85	.78

Tablo 1. Okul Yöneticilerinin Yenilik Yönetimi Davranışının Boyutlarına İlişkin Ortalamalar

Araştırmanın ikinci amacı, öğretmenlerin örgütsel bağlılık düzeylerinin belirlenmesidir. Öğretmenlerin örgütsel bağlılık davranışının boyutlarına ilişkin ortalamalar Tablo 2’de verilmiştir.

Ölçekler	Boyutlar	\bar{X}	S
Örgütsel Bağlılık	Uyum	1.96	1.13
	Özdeşleşme	3.47	.78
	İçselleştirme	3.72	.68

Tablo 2. Öğretmenlerin Örgütsel Bağlılık Davranışının Boyutlarına İlişkin Ortalamalar

Araştırmanın üçüncü amacı öğretmenlerin görüşlerine göre okul yöneticilerinin örgütsel yenilik davranışının öğretmenlerin demografik değişkenlerine göre incelenmesidir. Öğretmenlerin cinsiyetine göre okul yöneticilerinin yenilik yönetimi davranışının ortalamalarının girdi yönetimi boyutunda erkekler için ($\bar{x}=3.74$), kadınlar için ($\bar{x}=3.84$); yenilik stratejileri boyutunda erkekler için ($\bar{x}=3.81$), kadınlar için ($\bar{x}=3.90$); örgütsel kültür ve yapı boyutunda erkekler için ($\bar{x}=3.86$), kadınlar için ($\bar{x}=3.92$); proje yönetimi boyutunda erkekler ve kadınlar için ($\bar{x}=3.85$) olduğu görülmektedir. Hiçbir boyutta okul yöneticilerinin genel örgütsel yenilik düzeylerinde öğretmenlerin cinsiyetlerine göre anlamlı bir farklılık görülmemektedir.

Alan değişkenine göre incelendiğinde, öğretmenlere göre okul yöneticilerinin yenilik yönetimi davranışının boyutları; girdi yönetimi [$F(3, 390)=1.31, p>0.05$], yenilik stratejileri [$F(3, 390)=0.94, p>0.05$], örgütsel kültür ve yapı [$F(3, 390)=1.26, p>0.05$] ve proje yönetimi [$F(3, 390)=1.43, p>0.05$] düzeylerinde öğretmenlerin alanlarına

göre anlamlı bir farklılık görülmemektedir. Öğretmenlere göre, okul yöneticilerinin yenilik yönetimi davranışına genel çerçevede bakıldığında yine öğretmenlerin alanlarına göre anlamlı bir fark görülmemektedir [$F(3, 390)=1.10, p>0.05$]. Bu sonuçlara göre, öğretmenlerin alan değişkeninin, okul yöneticilerinin yenilik yönetimi davranışının algılanmasında önemli bir değişken olmadığı ifade edilebilir.

Okul türü değişkenine göre incelendiğinde, öğretmenlere göre okul yöneticilerinin yenilik yönetimi davranışının boyutları; girdi yönetimi [$F(2, 410)=1.95, p>0.05$], yenilik stratejileri [$F(2, 410)=0.43, p>0.05$], örgütsel kültür ve yapı [$F(2, 410)=1.29, p>0.05$] ve proje yönetimi [$F(2, 410)=1.60, p>0.05$] düzeylerinde öğretmenlerin çalıştığı okul türüne göre anlamlı bir farklılık görülmemektedir. Öğretmenlere göre, okul yöneticilerinin yenilik yönetimi davranışına genel çerçevede bakıldığında yine öğretmenlerin çalıştığı okul türüne göre anlamlı bir fark görülmemektedir [$F(2, 410)=0.60, p>0.05$]. Bu sonuçlara göre, öğretmenlerin okul türü değişkeni, okul yöneticilerinin yenilik yönetimi davranışını algılamasında önemli bir değişken olmadığı ifade edilebilir.

Kıdem yılı değişkenine göre incelendiğinde, Yenilik stratejileri boyutunda [$F(4, 408)=2.88, p<0.05$] anlamlı farklılık görülmektedir. Bu testin sonuçlarına göre yenilik stratejileri boyutunda kıdemleri 0-5 yıl ve 21 yıl ve üzeri olan öğretmen grupları arasında fark görülmektedir. Buna göre kıdemi 0-5 yıl arasında olan öğretmenlerin yenilik stratejileri algı düzeyleri, kıdemi 21 yıl ve üzeri olan öğretmenlerin algı düzeyinden daha yüksektir.

Öğretmenlere göre okul yöneticilerinin yenilik yönetimi davranışının boyutları; girdi yönetimi [$t(412)= .77, p>0.05$], yenilik stratejileri [$t(412)= 1.41, p>0.05$], örgütsel kültür ve yapı [$t(412)= 0.14, p>0.05$] ve proje yönetimi [$t(412)= 1.80, p>0.05$] düzeylerinde öğretmenlerin eğitim durumlarına göre anlamlı bir farklılık görülmemektedir. Öğretmenlere göre, okul yöneticilerinin yenilik yönetimi davranışına genel çerçevede bakıldığında yine öğretmenlerin eğitim durumuna göre anlamlı bir fark görülmemektedir [$t(412)= 1.53, p>0.05$]. Bu sonuçlara göre, öğretmenlerin eğitim durumu değişkeninin, okul yöneticilerinin yenilik yönetimi davranışının algılanmasında önemli bir değişken olmadığı ifade edilebilir.

Araştırmanın dördüncü amacı öğretmenlerin örgütsel bağlılık düzeylerinin demografik değişkenlere göre incelenmesidir. Cinsiyet değişkenine göre sadece örgütsel bağlılık davranışının uyum [$t(407)=2.07, p>0.04$] boyutunda anlamlı düzeyde farklılık görülmektedir. Araştırmanın sonucuna göre kadınların uyum davranışının erkeklere göre daha fazla olduğu söylenebilir.

Alan değişkenine göre incelendiğinde, sadece uyum boyutunda [$F(3, 385)=3.88, p<0.05$] farklılık görülmektedir. Uyum boyutundaki bu fark sınıf ve meslek öğretmeni grupları arasındadır. Buna göre sınıf öğretmenlerinin uyum düzeyleri, meslek öğretmenlerinin uyum düzeyinden daha yüksektir.

Okul türü değişkenine göre incelendiğinde, yine sadece uyum [$F(2, 405)=9.47, p<0.05$] boyutunda farklılık görülmektedir. Uyum boyutunda ilkökul ile lise öğretmeni ve ortaokul ile lise öğretmeni grupları arasında anlamlı fark görülmektedir. Buna göre ilkökul ve ortaokul öğretmenlerinin uyum algı düzeyleri, lise öğretmenlerinin algı düzeyinden daha yüksektir.

Kıdem yılı değişkenine göre incelendiğinde, sadece uyum [$F(4, 403)=4.50, p<0.05$] boyutunda anlamlı farklılık görülmektedir. Uyum boyutunda 0-5 yıl arası ile 6-10 yıl arası, 0-5 yıl arası ile 21 yıl ve üzeri ve 11-15 yıl arası ile 21 yıl ve üzeri kıdeme sahip öğretmen grupları arasında anlamlı fark görülmektedir. Buna göre 0 ile 5 yıl arası kıdeme sahip öğretmenlerin örgütsel bağlılık algı düzeyi hem 6 ile 10 yıl arası hem de 21 yıl ve üzeri kıdeme sahip öğretmenlerin algı düzeyinden daha yüksektir. Ayrıca 11 ile 15 yıl arası kıdeme sahip öğretmenlerin örgütsel bağlılık algı düzeyi de 21 yıl ve üzeri kıdeme sahip öğretmenlerin algı düzeyinden daha yüksektir. Öğretmenlerin örgütsel bağlılık davranışına genel çerçevede bakıldığında yine öğretmenlerin kıdem yılına göre anlamlı fark görülmektedir. [$F(4, 403)=3.10, p<0.05$]. Bu farklılığın hangi gruplar arasında olduğunu saptamak için yapılan testin sonuçlarına göre örgütsel bağlılık davranışı için 0 ile 5 yıl arası ve 6 ile 10 yıl arası kıdeme sahip öğretmenler arasında anlamlı fark görülmektedir. Buna göre 0 ile 5 yıl arası kıdeme sahip öğretmenlerin örgütsel bağlılık algı düzeyi, 6 ile 10 yıl arası kıdeme sahip öğretmenlerin algı düzeyinden daha yüksektir.

Eğitim durumu değişkenine göre incelendiğinde, öğretmenlerin örgütsel bağlılık davranışının boyutları; uyum [$t(407)= .05, p>0.05$], özdeşleşme [$t(407)= 0.23, p>0.05$] ve içselleştirme [$t(407)= 0.88, p>0.05$] düzeylerinde öğretmenlerin eğitim durumlarına göre anlamlı bir farklılık görülmemektedir. Bu sonuçlara göre öğretmenlerin eğitim durumu değişkeninin yine öğretmenlerin örgütsel bağlılık davranışını algılanmasında önemli bir değişken olmadığı ifade edilebilir.

Bu araştırmanın beşinci amacı okul yöneticilerinin örgütsel yenilik düzeylerinin öğretmenlerin örgütsel bağlılık düzeylerini yordayıp yordamadığını belirlemektir.

Tablo 3'te, okul yöneticilerinin yenilik yönetimi davranışının boyutları girdi yönetimi, yenilik stratejileri, örgütsel kültür ve yapı ve proje yönetimine göre öğretmenlerin uyum düzeyinin yordanmasına ilişkin regresyon analizi sonuçları verilmiştir.

Değişken	B	Standart Hata	Beta	t	p	İkili r	Kısmi r
Sabit	2.66	.18		15.14	.00		
Girdi Yön.	.07	.07	.08	1.01	.31	.33	.05
Yen. Str.	.00	.10	.00	.01	1.00	.34	.00
Örg. Kül.	.25	.10	.29	2.59	.01	.39	.13
Proj. Yön.	.04	.10	.04	.41	.69	.36	.02
R= .39 R ² = .15 F ₍₄₋₄₀₈₎ = 18.42 p≤ .05							

Tablo 3. *Uyum Düzeyinin Yordanmasına İlişkin Regresyon Analizi Sonuçları*

Tablo 3'te yordayıcı değişkenlerle yordanan değişken arasındaki ikili ve kısmi korelasyonlar incelendiğinde, girdi yönetimi ile uyum arasında pozitif orta düzeyde ($r=.33$) bir ilişkinin olduğunu, ancak diğer değişkenler kontrol edildiğinde iki değişken arasındaki korelasyonun ($r=.05$) olarak hesaplandığı görülmektedir. Yenilik stratejileri ile uyum arasında pozitif orta düzeyde ($r=.34$) bir ilişkinin olduğu, ancak diğer değişkenler kontrol edildiğinde iki değişken arasındaki korelasyonun ($r=.00$) olarak hesaplandığı görülmektedir. Örgütsel kültür ve yapı ile uyum arasında pozitif orta düzeyde ($r=.39$) bir ilişkinin olduğu, ancak diğer değişkenler kontrol edildiğinde iki değişken arasındaki korelasyonun ($r=.13$) olarak hesaplandığı görülmektedir. Proje yönetimi ile uyum arasında pozitif orta düzeyde ($r=.36$) bir ilişkinin olduğu, ancak diğer değişkenler kontrol edildiğinde iki değişken arasındaki korelasyonun ($r=.02$) olarak hesaplandığı görülmektedir.

Girdi yönetimi, yenilik stratejileri, örgütsel kültür ve yapı ve proje yönetimi boyutları birlikte öğretmenlerin uyum puanları ile orta düzeyde ve anlamlı bir ilişki vermektedir ($R=.39$, $R^2=.15$, $F=18.42$, $p<.01$). Adı geçen boyutlar birlikte uyum boyutunun toplam varyansının yaklaşık % 15'ini açıklamaktadır.

Standardize edilmiş regresyon katsayısına β değerine göre yordayıcı değişkenlerin öğretmenlerin uyum boyutu üzerindeki göreceli önem sırası; örgütsel kültür ve yapı, girdi yönetimi, proje yönetimi ve yenilik stratejisidir.

Regresyon katsayılarının anlamlılığına ilişkin t testi sonuçları incelendiğinde Yenilik yönetimi boyutlarından sadece örgüt kültürü boyutu öğretmenlerin uyum boyutunun önemli bir yordayıcısı olduğu görülmektedir. Diğer boyutlar önemli bir etkiye sahip değildir. Elde edilen bulgulara göre uyum boyutunun yordanmasına ilişkin regresyon eşitliği aşağıda verilmiştir:

$$\text{Uyum} = 2.66 + (\text{Girdi Yön.} \times .07) + (\text{Yen. Str.} \times .00) + (\text{Örg. Kül.} \times .25) + (\text{Proj. Yön.} \times .04)$$

Tablo 4'te Okul yöneticilerinin yenilik yönetimi davranışının boyutları girdi yönetimi, yenilik stratejileri, örgütsel kültür ve yapı ve proje yönetimine göre öğretmenlerin özdeşleşme düzeyinin yordanmasına ilişkin regresyon analizi sonuçları verilmiştir.

Değişken	B	Standart Hata	Beta	t	p	İkili r	Kısmi r
Sabit	1.43	.17		8.27	.00		
Girdi Yön.	.12	.07	.13	1.81	.07	.45	.09
Yen. Str.	-.05	.10	-.05	-.52	.60	.46	-.03
Örg. Kül.	.30	.09	.32	3.16	.00	.52	.15
Proj. Yön.	.16	.10	.16	1.62	.11	.50	.08
R= .53 R ² = .29 F ₍₄₋₄₀₈₎ = 40.70 p≤ .05							

Tablo 4. *Özdeşleşme Düzeyinin Yordanmasına İlişkin Regresyon Analizi Sonuçları*

Tablo 4'te, yordayıcı değişkenlerle yordanan değişken arasındaki ikili ve kısmi korelasyonlar incelendiğinde, girdi yönetimi ile özdeşleşme arasında pozitif orta düzeyde ($r=.45$) bir ilişkinin olduğu, ancak diğer değişkenler kontrol edildiğinde iki değişken arasındaki korelasyonun ($r=.09$) olarak hesaplandığı görülmektedir. Yenilik stratejileri ile özdeşleşme arasında pozitif orta düzeyde ($r=.46$) bir ilişkinin olduğu, ancak diğer değişkenler kontrol edildiğinde iki değişken arasındaki korelasyonun ($r=-.03$) olarak hesaplandığı görülmektedir. Örgütsel kültür ve yapı ile özdeşleşme arasında pozitif orta düzeyde ($r=.52$) bir ilişkinin olduğu, ancak diğer değişkenler kontrol edildiğinde iki değişken arasındaki korelasyonun ($r=.15$) olarak hesaplandığı görülmektedir. Proje yönetimi ile özdeşleşme

arasında pozitif orta düzeyde ($r=.50$) bir ilişkinin olduğu, ancak diğer değişkenler kontrol edildiğinde iki değişken arasındaki korelasyonun ($r=.08$) olarak hesaplandığı görülmektedir.

Girdi yönetimi, yenilik stratejileri, örgütsel kültür ve yapı ve proje yönetimi boyutları birlikte öğretmenlerin özdeşleşme puanları ile orta düzeyde ve anlamlı bir ilişki vermektedir ($R=.53$ $R^2=.29$ $F=40.70$ $p<.01$). Adı geçen boyutlar birlikte özdeşleşme boyutunun toplam varyansının yaklaşık %29'unu açıklamaktadır.

Standardize edilmiş regresyon katsayısına β değerine göre yordayıcı değişkenlerin öğretmenlerin özdeşleşme boyutu üzerindeki göreceli önem sırası; örgütsel kültür ve yapı, proje yönetimi, girdi yönetimi ve yenilik stratejisi'dir. Regresyon katsayılarının anlamlılığına ilişkin t testi sonuçları incelendiğinde yenilik yönetimi boyutlarından sadece örgüt kültürü boyutu öğretmenlerin özdeşleşme boyutunun önemli bir yordayıcısı olduğu görülmektedir. Diğer boyutlar önemli bir etkiye sahip değildir. Elde edilen bulgulara göre özdeşleşme boyutunun yordanmasına ilişkin regresyon eşitliği aşağıda verilmiştir:

$$\text{Özdeşleşme} = 1.43 + (\text{Girdi Yön.} \times .12) + (\text{Yen. Str.} \times -.05) + (\text{Örg. Kül.} \times .32) + (\text{Proj. Yön.} \times .16)$$

Tablo 5'te okul yöneticilerinin yenilik yönetimi davranışının boyutları girdi yönetimi, yenilik stratejileri, örgütsel kültür ve yapı ve proje yönetimine göre öğretmenlerin içselleştirme düzeyinin yordanmasına ilişkin regresyon analizi sonuçları verilmiştir.

Değişken	B	Standart Hata	Beta	t	p	İkili r	Kısmi r
Sabit	2.35	.16		14.43	.00		
Girdi Yön.	.04	.06	.05	.55	.58	.34	.03
Yen. Str.	.15	.09	.18	1.73	.09	.38	.09
Örg. Kül.	.08	.09	.10	.88	.38	.37	.04
Proj. Yön.	.09	.09	.10	.94	.35	.37	.05

$$R = .39 \quad R^2 = .16 \quad F_{(4,408)} = 18.80 \quad p \leq .05$$

Tablo 5. İçselleştirme Düzeyinin Yordanmasına İlişkin Regresyon Analizi Sonuçları

Tablo 5'te, yordayıcı değişkenlerle yordanan değişken arasındaki ikili ve kısmi korelasyonlar incelendiğinde, girdi yönetimi ile içselleştirme arasında pozitif orta düzeyde ($r=.34$) bir ilişkinin olduğu, ancak diğer değişkenler kontrol edildiğinde iki değişken arasındaki korelasyonun ($r=.03$) olarak hesaplandığı görülmektedir. Yenilik stratejileri ile içselleştirme arasında pozitif orta düzeyde ($r=.38$) bir ilişkinin olduğunu, ancak diğer değişkenler kontrol edildiğinde iki değişken arasındaki korelasyonun ($r=.09$) olarak hesaplandığı görülmektedir. Örgütsel kültür ve yapı ile içselleştirme arasında pozitif orta düzeyde ($r=.37$) bir ilişkinin olduğunu, ancak diğer değişkenler kontrol edildiğinde iki değişken arasındaki korelasyonun ($r=.04$) olarak hesaplandığı görülmektedir. Proje yönetimi ile içselleştirme arasında pozitif orta düzeyde ($r=.37$) bir ilişkinin olduğunu, ancak diğer değişkenler kontrol edildiğinde iki değişken arasındaki korelasyonun ($r=.05$) olarak hesaplandığı görülmektedir.

Girdi yönetimi, yenilik stratejileri, örgütsel kültür ve proje yönetimi boyutları birlikte öğretmenlerin içselleştirme puanları ile orta düzeyde ve anlamlı bir ilişki vermektedir ($R=.39$, $R^2=.16$, $F=18.80$, $p<.01$). Adı geçen boyutlar birlikte içselleştirme boyutunun toplam varyansının yaklaşık %16'sını açıklamaktadır.

Standardize edilmiş regresyon katsayısına β değerine göre yordayıcı değişkenlerin öğretmenlerin içselleştirme boyutu üzerindeki göreceli önem sırası; yenilik stratejisi, proje yönetimi, örgütsel kültür ve yapı ve girdi yönetimidir.

Regresyon katsayılarının anlamlılığına ilişkin t testi sonuçları incelendiğinde Yenilik yönetimi boyutlarının hiç birisi önemli bir etkiye sahip değildir. Elde edilen bulgulara göre içselleştirme boyutunun yordanmasına ilişkin regresyon eşitliği aşağıda verilmiştir:

$$\text{İçselleştirme} = 2.35 + (\text{Girdi Yön.} \times .04) + (\text{Yen. Str.} \times .15) + (\text{Örg. Kül.} \times .08) + (\text{Proj. Yön.} \times .09)$$

Tartışma ve Sonuç

Bu araştırmada ilköğretim, ortaokul ve liselerde görev yapan okul yöneticilerinin örgütsel yenilik düzeyleri ve öğretmenlerin örgütsel bağlılık düzeylerinin incelenmesi hedeflenmiştir. Araştırmaya katılan öğretmenlerin görüşlerine göre yenilik yönetimi konusunda okul yöneticileri en fazla örgütsel kültür ve yapıya önem vermekte ve kültür ve yapının korunması yönünde davranışlar sergilemektedir. Bunu sırasıyla yenilik stratejilerine, proje yönetimine ve girdi yönetimine verilen önem izlemektedir. Göl ve Bülbül'ün (2012) araştırmasında bu sıralama yenilik stratejileri, örgütsel kültür ve yapı, proje yönetimi ve girdi yönetimi şeklinde çıkmıştır. Argon, İsmetoğlu ve İşeri'nin (2014) araştırmasında ise örgütsel kültür ve yapı, proje yönetimi, yenilik stratejileri ve girdi yönetimi

şeklinde çıkmıştır. Sonuçlar bu araştırmanın sonuçlarıyla paralellik göstermektedir. Üç araştırmada da ortalamalar birbirine yakındır. Girdi yönetimine verilen önem üç araştırmada da diğerlerine göre daha düşüktür. Örgütsel kültür ve yapıya verilen önem ise tüm araştırma sonuçlarında en yüksektir. Bu durum, okul yöneticilerinin örgüt kültürü ve yapısına verdiği önemi göstermektedir. Okul yöneticileriyle ilgili çıkan bu sonuç son derece anlamlıdır, çünkü öncelikle örgüt kültürü oluşturmak ve oluşturulan yapıyı korumak yenilik yapmak için temel oluşturma olarak kabul edilebilir. Örgüt kültürü özgür düşüncenin hâkim olduğu ve yaratıcı fikirlerin desteklendiği bir yapıya sahip olursa, o örgüt içinde örgütten kaynaklı yenilik engelleri azaltılmış olur. Yenilik ve yenilikçiliğin diğer boyutlarına da böyle bir örgüt ikliminde daha fazla önem verilebilir.

Araştırmaya katılan öğretmenlerin örgütsel bağlılıkları en fazla içselleştirme davranışı şeklinde gelişmektedir. Bunu sırasıyla özdeşleşme ve uyum davranışları izlemektedir. Kılıç'ın (2011) ve Ergen'in (2015), araştırmalarında da bu sıra içselleştirme, özdeşleşme ve uyum şeklindedir. İçselleştirme davranışı diğerlerine göre daha üst düzey bir bağlılık şeklidir. En fazla içselleştirme davranışının olması ve ortalamasının bu ölçüğe göre "çok" değerinde olması öğretmenlerin örgütlerine olan bağlılığının genel olarak iyi düzeyde olduğunu göstermektedir. Uyum bağlılığı ise sıranın en sonundadır. Uyum bağlılığı diğerlerine göre daha yüzeysel bir bağlılık özelliği taşımaktadır. Öğretmenlerin örgütlerine üst düzeyde bağlanması beklenir, çünkü öğretmenlik fedakârlık gerektiren bir meslektir. Bu şekilde çıkan bağlılık örgütün iklimini olumlu yönde etkileyebilir ve öğretmenin öğrencileri için daha faydalı olmasını sağlayabilir.

Öğretmenlerin okul yöneticilerinin yenilik yönetimi hakkındaki görüşlerinde kıdem yılı değişkenine göre anlamlı fark görülmektedir, ancak cinsiyet, alan, okul türü, eğitim durumu değişkenine göre anlamlı düzeyde fark görülmemektedir.

Öğretmenlerin okul yöneticilerinin yenilik yönetimi hakkındaki görüşlerinde cinsiyet değişkenine göre anlamlı düzeyde fark görülmemiştir. Göl ve Bülbül'ün (2012), Argon, İsmetoğlu ve İşeri'nin (2014), Bülbül'ün (2012a), Karataş, Gök ve Özçetin'in (2015), araştırmalarında da okul yöneticilerinin yenilik yönetimi hakkındaki görüşlerinde cinsiyet değişkenine göre anlamlı düzeyde fark görülmemiştir. Bu yapılan araştırmalardan çıkan sonuçlar da bizim araştırmamızda çıkan sonucu destekler niteliktedir. Kadın ve erkek öğretmenlerin yöneticilerinin uyguladığı yenilik yönetimi davranışı hakkındaki görüşlerinin anlamlı düzeyde farklılaşmaması, öğretmenlerin aynı ortamlarda vakit geçirmelerinden ve buna bağlı olarak aynı durumlar karşısında benzer düşüncelere sahip olmalarından ya da düşüncelerinin birbirinden etkilenmesinden kaynaklanabilir. Kadın-erkek karma şekilde çalışılan benzer çalışma ortamlarında çalışan kişilerden alınacak sonucun da benzer olması zaten beklenen bir durumdur.

Öğretmenlerin okul yöneticilerinin yenilik yönetimi hakkındaki görüşlerinde alan değişkenine göre anlamlı düzeyde fark görülmemektedir. Göl ve Bülbül'ün (2012) araştırmasında ise yenilik yönetimi davranışının boyutu proje yönetimi davranışında öğretmenlerin alan değişkenine göre anlamlı düzeyde fark çıkmıştır. Bu fark sınıf öğretmenleri ile branş öğretmenleri arasındadır. Araştırmanın sonucuna göre sınıf öğretmenleri yöneticilerini proje yönetimi konusunda branş öğretmenlerine göre daha yeterli görmekteydiler. Göl ve Bülbül'ün (2012) araştırmasıyla bu araştırmanın sonucunun farklı çıkması 2012-2013 eğitim öğretim yılı itibarıyla 4+4+4 sisteminin uygulanmaya başlanması ve yönetici görevlendirme kriterlerinin değişmesi olabilir. 4+4+4 sistemi öncesinde ilkokullar ilköğretim sistemi içinde iken okul olarak yeni proje yapma ve projelere katılma ihtimalleri daha yüksekti ve sınıf öğretmenleri kendi öğrenci profilini göz önünde bulundurarak ortaokulla birlikte yapılan yenilik projelerini büyük projeler ve yenilikler olarak görebilmekteydi. Yeni sistemde ilkokullar ve ortaokulların ayrılmasıyla ilkokul bünyesinde yaşı küçük olan öğrenciler kaldı. Yapılan yenilikler de ilkokul bazında olduğu için yenilik yönetimi konusunda ilkokul öğretmenlerinin görüşleri de branş öğretmenlerinininkine benzer hale gelmiş olabilir.

Öğretmenlerin okul yöneticilerinin yenilik yönetimi hakkındaki görüşlerinde okul türü değişkenine göre anlamlı düzeyde fark görülmemektedir. Karataş, Gök, ve Özçetin'in (2015) öğretmen algılarına göre okul yöneticilerinin yenilik yönetimi davranışı araştırmasında ise okul türü değişkenine göre girdi yönetimi boyutunda anlamlı düzeyde fark çıkmıştır. Bu fark lise öğretmenleriyle ortaokul öğretmenleri arasındadır. Araştırmaya göre lise öğretmenlerinin okul yöneticilerinin girdi yönetimi davranışı hakkındaki algıları ortaokul öğretmenlerine göre daha yüksektir. Bu yönüyle Karataş, Gök, ve Özçetin'in (2015) araştırması bu araştırmanın sonucunu desteklememektedir.

Öğretmenlerin okul yöneticilerinin yenilik yönetimi hakkındaki görüşlerinde kıdem yılı değişkenine göre yenilik stratejileri boyutunda anlamlı fark görülmektedir. 0 ile 5 yıl arası kıdem yılına sahip öğretmenler 21 yıl ve üzeri görev süresine sahip öğretmenlere göre okul yöneticilerinin yenilik stratejileri geliştirme ve uygulama davranışını daha fazla sergilediğini düşünmektedir. Kıdem yılı arttıkça öğretmenler yenilikleri kabullenmekte

zorlanabilmektedir. Bundan dolayı da kıdem yılı fazla olan öğretmenler yapılan yenilik stratejileriyle kıdem yılı az olan genç öğretmenlere göre daha az ilgilenmektedir. Argon, İsmetoğlu ve İşeri'nin (2014), Karataş, Gök ve Özçetin'in (2015), Göl ve Bülbül'ün (2012) araştırmalarında ise öğretmenlerin kıdem yılı değişkenine göre okul yöneticilerinin yenilik yönetimi davranışı hakkındaki görüşlerinde hiçbir boyutta anlamlı düzeyde fark görülmemiştir. Araştırma sonuçları bu araştırmanın sonucunu desteklememektedir. Bunun nedeni, yine son iki üç yıl içinde öğretmen atamaları bazında yapılan değişiklikler ve eğitim sisteminde yapılan değişiklikler olabilir. Son iki yıldır öğretmen atamaları mülakat sistemiyle yapılmaktadır. Öğretmenlerin ilk beş yıllık deneyimi sözleşmeli kadroda olacaktır ve sonrasında performanslarına göre daimi kadroya geçeceklerdir. Bundan dolayı 0-5 yıl arası deneyime sahip öğretmenler bu beş yıllık süreçte kendilerini bir sınavdaymış gibi düşünerek tüm yenilikçi stratejileri takip ederken. 21 yıl ve üzeri deneyime sahip öğretmenler ise yenilikçi tutumlarla çok ilgilenmeyerek sadece eski alıştığı sisteme odaklanıyor olabilir.

Öğretmenlerin okul yöneticilerinin yenilik yönetimi hakkındaki görüşlerinde eğitim durumu değişkenine göre anlamlı düzeyde fark görülmemektedir. Öğretmenlerin eğitim durumları okul yöneticilerinin yenilik yönetimi davranışı hakkındaki görüşlerini etkilememektedir. Karataş, Gök ve Özçetin'in (2015) öğretmen algılarına göre okul yöneticilerinin yenilik yönetimi davranışı araştırmasında da hiçbir boyutta öğretmenlerin eğitim durumu değişkenine göre anlamlı düzeyde fark görülmemiştir. Bu yönüyle Karataş, Gök ve Özçetin'in (2015) araştırması da araştırmanın sonucunu desteklemektedir.

Öğretmenlerin örgütsel bağlılık algılarında cinsiyet, alan, okul türü, kıdem yılı değişkenine göre anlamlı fark görülmektedir ancak eğitim durumu değişkenine göre anlamlı düzeyde fark görülmemektedir.

Öğretmenlerin örgütsel bağlılık algılarında cinsiyet değişkenine göre uyum boyutunda anlamlı düzeyde fark görülmektedir. Örgütsel bağlılık davranışında kadınlar erkeklerle göre daha fazla uyum davranışı sergilemektedir. Kılıç'ın (2011) araştırmasında da cinsiyete göre anlamlı düzeyde fark saptanmıştır. Ancak Kılıç'ın (2011) araştırmasında fark özdeşleşme boyutundadır. Araştırmanın sonucuna göre erkeklerin özdeşleşme davranışları kadınlarınkine göre daha fazladır. Bu durum Kılıç (2011) tarafından kadınların bağlılık konusunda okula değil daha çok evine dönük olmasından kaynaklandığı şeklinde yorumlanmıştır. Ancak Yılmaz ve Özcan'ın (2017), Ergen'in (2015), Kılıçarslan'ın (2013), Gören'in (2012) ve Selvitopu ve Şahin'in (2013) araştırmalarında cinsiyet değişkenine göre örgütsel bağlılık davranışının hiçbir boyutunda anlamlı düzeyde fark çıkmamıştır.

Öğretmenlerin örgütsel bağlılık algılarında alan değişkenine göre uyum boyutunda anlamlı düzeyde fark görülmektedir. Bu fark sınıf öğretmenleri ile meslek öğretmenleri arasındadır. Örgütsel bağlılık davranışında sınıf öğretmenleri meslek öğretmenlerine göre daha fazla uyum davranışı sergilemektedir. Yılmaz ve Özcan'ın (2017) araştırmasında da alan değişkenine göre anlamlı fark çıkmıştır. Bu fark içselleştirme boyutunda ve sınıf öğretmenleriyle branş öğretmenleri arasındadır. Sınıf öğretmenlerinin içselleştirme davranışı puanı branş öğretmenlerine göre anlamlı düzeyde daha yüksektir. Bu fark farklı boyutlarda olsa da genel olarak sınıf öğretmenlerinin bağlılığının meslek öğretmenlerine göre daha yüksek olduğu söylenebilir. Kılıçarslan'ın (2013) ($p<0,005$) anlamlılık düzeyinde yaptığı araştırmada alan değişkenine göre uyum ve özdeşleşme davranışlarında anlamlı farklar görülmüştür. Bu farklar uyum boyutunda fen bilimleri alan öğretmenleriyle sınıf öğretmenleri ve meslek alan öğretmenleri arasındadır. Araştırmanın sonucuna göre fen alanı öğretmenlerinin uyum davranışı düzeyi sırasıyla meslek alan öğretmenleriyle sınıf öğretmenlerinden daha yüksektir. Özdeşleşme boyutunda ise fen bilimleri alan öğretmenleriyle sınıf öğretmenleri ve sosyal bilimler alan öğretmenleri arasında anlamlı düzeyde fark vardır. Araştırmanın sonucuna göre fen bilimleri alan öğretmenlerinin özdeşleşme düzeyleri hem sınıf öğretmenlerinin hem de sosyal bilimler alan öğretmenlerinden daha düşüktür. Ergen'in (2015) araştırmasında da öğretmenlerin alan değişkenine göre özdeşleşme boyutunda anlamlı düzeyde fark görülmüştür. Bu fark sınıf öğretmenleriyle branş öğretmenleri arasındadır. Araştırmanın sonucuna göre branş öğretmenleri sınıf öğretmenlerine göre daha fazla özdeşleşme davranışı sergilemektedir. Gören'in (2012) araştırmasında da alan değişkenine göre anlamlı fark çıkmıştır. Bu fark sınıf öğretmenleriyle sosyal bilimler alan öğretmenleri arasındadır. Ancak Kılıç'ın (2011) araştırmasında alan değişkenine göre anlamlı düzeyde fark çıkmamıştır.

Öğretmenlerin genel örgütsel bağlılık algılarında okul türü değişkenine göre anlamlı düzeyde fark görülmektedir. Bu fark ilköğretim öğretmenleriyle lise öğretmenleri arasındadır. İlköğretim öğretmenleri lise öğretmenlerine göre daha fazla bağlılık davranışı sergilemektedir. Bunu nedeni olarak ilköğretim öğretmenlerinin aynı okulda aynı sınıfın öğrencileriyle haftanın 5 günü beraber vakit geçirmesi olabilir. Lise öğretmenleri ise hafta içinde sürekli farklı sınıflarda derse girerek ve bazen görevlendirildikleri başka okullara da giderek haftayı geçirdikleri için okullarına daha az bağlılık duyabilirler, çünkü örgütsel bağlılığın oluşması için gereken faktörler içinde çalışanın örgütte geçirdiği süre önemli bir faktördür.

Öğretmenlerin örgütsel bağlılık algılarında okul türü değişkenine göre uyum boyutunda anlamlı düzeyde fark görülmektedir. Bu fark ilkököl ile lise öğretmenleri ve ortaokul ile lise öğretmenleri arasındadır. Sırasıyla ilkököl ve ortaokul öğretmenleri lise öğretmenine göre daha fazla uyum davranışı sergilemektedir. Kılıçarslan'ın (2013) ($p<0,005$) anlamlılık düzeyinde yaptığı araştırmada okul türü değişkenine göre uyum ve içselleştirme boyutlarında anlamlı fark çıkmazken, özdeşleşme boyutunda anlamlı düzeyde fark çıkmıştır. Bu fark ilkököl ve ortaokul öğretmenleri arasındadır. Bu araştırmanın sonucuna göre ilkököl öğretmenleri ortaokul öğretmenlerine göre daha fazla özdeşleşme davranışı sergilemektedir. Ergen'in (2015) araştırmasında da okul türü değişkenine göre özdeşleşme davranışında anlamlı fark çıkmıştır. Bu fark ise ilkököl ile lise öğretmenleri arasındadır. Araştırmaya göre lise öğretmenleri ilkököl öğretmenlerine göre daha fazla özdeşleşme davranışı sergilemektedir. Selvitopu ve Şahin'in (2013) araştırmasında da okul türü değişkenine göre anlamlı düzeyde fark görülmüştür. Ancak bu fark liseler bazında çıkmıştır. Araştırmanın sonucuna göre genel lise öğretmenlerinin örgütsel bağlılıkları meslek lisesi öğretmenlerinin örgütsel bağlılıklarına göre anlamlı düzeyde yüksektir.

Öğretmenlerin genel örgütsel bağlılık algılarında kıdem yılı değişkenine göre anlamlı düzeyde fark görülmektedir. Bu fark 0 ile 5 yıl arası kıdem yılına sahip öğretmenlerle 6 ile 10 yıl arası kıdem yılına sahip öğretmenler arasındadır. 0 ile 5 yıl arası kıdem yılına sahip öğretmenler, 6 ile 10 yıl arası kıdem yılına sahip öğretmenlere göre daha fazla bağlılık davranışı sergilemektedir.

Öğretmenlerin örgütsel bağlılık algılarında kıdem yılı değişkenine göre uyum boyutunda anlamlı düzeyde fark görülmektedir. Bu farklar 0 ile 5 yıl arası kıdem yılına sahip öğretmenlerle 6 ile 10 yıl arası kıdem yılına sahip öğretmenler, 0 ile 5 yıl arası kıdem yılına sahip öğretmenlerle 21 yıl ve üzeri kıdem yılına sahip öğretmenler ve 11 ile 15 yıl arası kıdem yılına sahip öğretmenlerle 21 yıl ve üzeri kıdem yılına sahip öğretmenler arasındadır. 0 ile 5 yıl arası kıdem yılına sahip öğretmenler, sırasıyla 6 ile 10 yıl arası kıdem yılına sahip öğretmenlere ve 21 yıl ve üzeri kıdem yılına sahip öğretmenlere göre daha fazla uyum davranışı sergilemektedir. 11 ile 15 yıl arası kıdem yılına sahip öğretmenler, 21 yıl ve üzeri kıdem yılına sahip öğretmenlere göre daha fazla uyum davranışı sergilemektedir. Yılmaz ve Özcan'ın (2017) araştırmasında ise özdeşleşme ve içselleştirme alt boyutlarında anlamlı düzeyde fark görülmüştür. Bu farklar 6-10 yıl arası kıdeme sahip öğretmenler ile 21 yıl ve üzeri kıdeme sahip öğretmenler arasında çıkmıştır. Araştırmanın sonucuna göre 21 yıl ve üzeri kıdeme sahip öğretmenler 6-10 yıl arası kıdeme sahip öğretmenlerden anlamlı düzeyde daha fazla özdeşleşme ve içselleştirme davranışı sergilemektedir. Yılmaz ve Özcan'ın (2017) araştırmasından çıkan veriler ile bu araştırmanın verileri karşılaştırıldığında uyum davranışının kıdem yılı düştükçe arttığı kıdem yılı çıktıkça azaldığı, özdeşleşme ve içselleştirme davranışlarının ise kıdem yılı düştükçe azaldığı kıdem yılı çıktıkça arttığı sonucu çıkarılabilir. Kılıçarslan'ın (2013) araştırmasında kıdem yılı değişkenine göre özdeşleşme ve içselleştirme boyutunda anlamlı fark çıkmazken uyum boyutunda anlamlı düzeyde fark görülmüştür. Bu fark 16 yıl ve üzeri kıdem yılına sahip öğretmenlerle 0-5 yıl arası, 6-10 yıl arası ve 10-15 yıl arası kıdeme sahip öğretmenler arasındadır. Bu araştırmada 16 yıl ve üzeri kıdeme sahip öğretmenlerin uyum davranışı düzeyi sırasıyla 10-15 yıl arası, 6-10 yıl arası, 0-5 yıl arası kıdeme sahip öğretmenlerden daha fazla çıkmıştır. Ergen'in (2015) araştırmasında örgütsel bağlılık davranışının tüm boyutlarında öğretmenlerin kıdem yılı değişkenine göre anlamlı fark görülmüştür. Bu farklar, uyum boyutunda 1-5 yıl arası kıdeme sahip öğretmenler ile 5-10 yıl arası kıdeme sahip öğretmenler arasındadır ve araştırma sonucuna göre 6-10 yıl arası kıdeme sahip öğretmenler 1-5 yıl arası kıdeme sahip öğretmenlere göre daha fazla uyum davranışı sergilemektedir. Özdeşleşme boyutunda ise 6-10 yıl arası kıdeme sahip öğretmenler ile 11-15 yıl arası ve 16 yıl ve üzeri kıdeme sahip öğretmenler arasındadır. Araştırma sonucuna göre 6-10 yıl arası kıdeme sahip öğretmenlerin özdeşleşme davranışı sırasıyla 11-15 yıl arası ve 16 yıl ve üzeri kıdeme sahip öğretmenlerden anlamlı düzeyde daha düşüktür. Bu yönüyle özdeşleşme boyutunda çıkan sonuç Yılmaz ve Özcan'ın (2017) araştırmasıyla benzerlik göstermektedir. İçselleştirme boyutunda ise fark 6-10 yıl arası kıdeme sahip öğretmenler ile 11-15 yıl arası kıdeme sahip öğretmenler arasındadır. Araştırma sonucuna göre 11-15 yıl arası kıdeme sahip öğretmenler 6-10 yıl arası kıdeme sahip öğretmenlere göre daha fazla içselleştirme davranışı sergilemektedir.

Selvitopu ve Şahin'in (2013) yaptığı örgütsel bağlılık araştırmasında da öğretmenlerin kıdem yılı değişkenine göre anlamlı fark görülmüştür. Bu fark 1-5 yıl arası kıdeme sahip öğretmenler ile 16-20 yıl arası kıdeme sahip öğretmenler, 21-25 yıl arası kıdeme sahip öğretmenler ve 26 yıl ve üzeri kıdeme sahip öğretmenler arasındadır. Araştırmanın sonucuna göre 1-5 yıl arası kıdeme sahip öğretmenlerin bağlılık düzeyleri sırasıyla 16-20 yıl arası, 21-25 yıl arası ve 26 yıl ve üzeri kıdeme sahip öğretmenlerden daha düşüktür. Selvitopu ve Şahin'in (2013) araştırmasının sonucu ile bu araştırmanın sonucu paralellik göstermemektedir. Gören'in (2012) araştırmasında da kıdem yılına göre örgütsel bağlılık davranışında anlamlı farklar vardır. Bu farklar 1-10 yıl arası kıdeme sahip öğretmenler ile 21-30 ve 31-40 yıl arası kıdeme sahip öğretmenler ve 11-20 yıl arası kıdeme sahip öğretmenler ile 21-30 ve 31-40 yıl arası kıdeme sahip öğretmenler arasında çıkmıştır.

Öğretmenlerin örgütsel bağlılık algılarında eğitim durumu değişkenine göre anlamlı düzeyde fark görülmemektedir. Ergen'in (2015), Kılıçarslan'ın (2013), Yılmaz ve Özcan'ın (2017) araştırmalarında da bu araştırmada olduğu gibi eğitim durumu değişkenine göre örgütsel bağlılık davranışının hiçbir boyutunda anlamlı düzeyde fark çıkmamıştır. Bu sonuçlara göre öğretmenlerin örgütsel bağlılığını eğitim durumlarının etkilemediği söylenebilir.

Öğretmenlerin görüşlerine göre okul yöneticilerinin yenilik yönetimi davranışı ile öğretmenlerin örgütsel bağlılıkları arasındaki ilişki incelenmiştir. Araştırma sonucunda öğretmenlerin görüşlerine göre okul yöneticilerinin örgütsel yenilik davranışının boyutları olan girdi yönetimi, yenilik stratejileri, örgütsel kültür ve yapı ve proje yönetimi boyutları ile öğretmenlerin örgütsel bağlılık davranışının uyum boyutu arasında orta düzeyde ve anlamlı bir ilişki bulunmaktadır. Yenilik yönetimi davranışının boyutları uyum davranışına ilişkin toplam varyansın %15'ini açıklamaktadır.

Buna göre öğretmenlerin örgütsel bağlılık davranışının uyum boyutunun yordanmasında okul müdürlerinin sergilemiş olduğu yenilik davranışları önemli düzeyde etkili olmaktadır. Bu bağlamda bu regresyon denklemine göre okul müdürleri ne kadar çok yenilik davranışı sergilerse öğretmenlerin örgütsel bağlılık davranışının uyum boyutu artış gösterir.

Öğretmenlerin görüşlerine göre okul yöneticilerinin örgütsel yenilik davranışının boyutları olan girdi yönetimi, yenilik stratejileri, örgütsel kültür ve yapı ve proje yönetimi boyutları ile öğretmenlerin örgütsel bağlılık davranışının özdeşleşme boyutu arasında orta düzeyde ve anlamlı bir ilişki bulunmaktadır. Yenilik yönetimi davranışının boyutları özdeşleşme davranışına ilişkin toplam varyansın %29'unu açıklamaktadır.

Buna göre öğretmenlerin örgütsel bağlılık davranışının özdeşleşme boyutunun yordanmasında okul müdürlerinin sergilemiş olduğu yenilik davranışları önemli düzeyde etkili olmaktadır. Bu bağlamda bu regresyon denklemine göre okul müdürlerinin sergileyeceği örgütsel kültür ve yapı, proje yönetimi ve girdi yönetimi boyutlarındaki yenilik davranışları öğretmenlerin örgütsel bağlılık davranışının özdeşleşme boyutunda artışa neden olurken yenilik stratejileri davranışının artışı ise özdeşleşmenin azalmasına neden olmaktadır.

Öğretmenlerin görüşlerine göre okul yöneticilerinin örgütsel yenilik davranışının boyutları olan girdi yönetimi, yenilik stratejileri, örgütsel kültür ve yapı ve proje yönetimi boyutları ile öğretmenlerin örgütsel bağlılık davranışının içselleştirme boyutu arasında orta düzeyde ve anlamlı bir ilişki bulunmaktadır. Yenilik yönetimi davranışının boyutları içselleştirme davranışına ilişkin toplam varyansın %16'sını açıklamaktadır.

Buna göre öğretmenlerin örgütsel bağlılık davranışının içselleştirme boyutunun yordanmasında okul müdürlerinin sergilemiş olduğu yenilik davranışları önemli düzeyde etkili olmaktadır. Bu bağlamda bu regresyon denklemine göre okul müdürleri ne kadar çok yenilik davranışı sergilerse öğretmenlerin örgütsel bağlılık davranışının içselleştirme boyutu artış gösterir.

Alanyazında öğretmenlerin örgütsel bağlılıkları üzerine çok sayıda araştırma ve çalışma vardır. Ancak okul yöneticilerinin örgütsel yenilik düzeyleri hakkında yapılmış az sayıda çalışma vardır. Okul yöneticilerinin örgütsel yenilik düzeyleri ile öğretmenlerin örgütsel bağlılıkları arasındaki ilişki hakkında ise hiçbir çalışmaya rastlanmamıştır. Bu çalışmanın sonuçlarına ve literatürdeki genel bilgilere göre okul yöneticilerinin yenilik yönetimi davranışı ile öğretmenlerin örgütsel bağlılıkları arasındaki ilişki değerlendirilecek olursa, yenilik yönetimi davranışının boyutlarının uyum davranışıyla orta düzeyde ilişkiye sahip olması anlamlıdır. Yenilik yönetiminin içinde sürekli bir değişim ve yenileşme vardır. Bu değişim ve yenileşme de eskiyle yeninin sürekli olarak uyumlu hale getirilmesi için çaba ve çalışmayı gerektirir. Eğitimin ana merkezinde insan faktörünün olması dolayısıyla eğitimde yapılan yenilikler de çok radikal bir yapıda olamamaktadır. Yeniliğin uyumlaştırılması sürecinde zaten sistem içinde olan öğretmenin de uyumsuzluk yaşaması normaldir. Her yenilikte olduğu gibi öğretmen de yeni düzene karşı önce uyumsuzluk yaşayacak ve sonrasında sisteme ve yeni düzene alışacaktır. Bu bağlantı takip edildiğinde bir süre sonra yapılan yeniliğin çeşidine ve büyüklüğüne göre öğretmenin uyum davranışını tahmin etmek mümkün olabilir.

Öğretmenlerin uyum boyutunda olduğu gibi özdeşleşme boyutunda da sergileyeceği davranışlar benzer olacaktır. Özdeşleşme boyutu uyum davranışına göre bir aşama ileri bir bağlılıktır. Okul yöneticilerinin örgüt içinde yapılan yeniliklerde örgütün bir parçası olan öğretmenin de görüşlerine önem vermesi ve öğretmenin de önerilerini göz önünde bulundurarak yapılacak yeniliği şekillendirmesi, öğretmenin sistemle daha çok özdeşleşmesini sağlayabilir. Öğretmen kendini daha çok örgüte bağlı hissedebilir. Yordayıcılık açısından bakıldığında, uyum ve özdeşleşme davranışını yenilik yönetiminin boyutlarından örgütsel kültür ve yapı diğerlerine göre daha fazla

yordayıcıdır. Bu durum uyum ve özdeşleşmenin daha çok tanıma ve alışmayı gerektirmesinden dolayı, alışılmış geleneksel olanla yeninin çatışmasından kaynaklı olabilir.

Okul yöneticilerinin yenilik yönetimi davranışı ile öğretmenlerin içselleştirme davranışı arasındaki ilişki de yine yöneticilerin öğretmeni yenilik sürecine ne kadar dâhil ettiğiyle ilgilidir. Yenilik sürecinde ve yapılan yenilikte öğretmenin kendinden birşeyler görmesi öğretmenin bu yeniliğe daha çok katkı sağlamasına neden olabilir. Bundan dolayı yenilik yönetiminin yenilik stratejisi ve proje yönetimi boyutlarının diğer boyutlara göre içselleştirmeyi daha fazla yordayıcı bir yapıya sahip olması anlamlıdır. Yenilik stratejisi ve proje yönetimi daha çok uygulamaya dönük boyutlardır ve öğretmeni bu uygulama sürecine dâhil etmek içselleştirme davranışının boyutunu daha da arttırabilir.

Milli Eğitim Bakanlığına bağlı okullarda çalışan yöneticilerinin yenilik yönetimi konusunda kendilerini sürekli geliştirmeleri ve güncel gelişmelerden ve konulardan geri kalmamaları için yenilik konularında hizmetiçi eğitimlere katılmaları kurumları ve örgüt içindeki durumları açısından faydalı olabilir. Okul yöneticileri öğretmenlerin örgütsel bağlılıklarını arttırmak için öğretmenleri de yeni yapılacak işlerle ilgili karar alma sürecine dâhil edebilir ve öğretmenlere özgür düşünme ortamları sağlayabilirler. Okul yöneticileri öğretmenlere de yenilik yapma sürecinde görev ve sorumluluk verip onların yeniliği benimsemesini sağlayarak öğretmenlerin örgütlerine olan bağlılıklarını arttırabilirler. Bu araştırmanın evreni Muğla ilindeki okullarda görev yapan öğretmenlerden oluşmaktadır. Farklı illerde ve kurumlarda da buna benzer araştırmalar yapılabilir.

Kaynakça

- Argon, T., İsmetoğlu, M., ve İşeri, B. (2014). Okul yöneticilerinin değerlere göre yönetimleri ile yenilik yönetimlerine yönelik öğretmen görüşleri. *Eğitim ve Öğretim Araştırmaları Dergisi*, 3(4), 111-119.
- Atik, S., ve Üstüner, M. (2014). İlköğretim okullarının örgüt tipi ile öğretmenlerin örgütsel bağlılığı arasındaki ilişki. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 15(2), 133-154.
- Balay, R. (2000). *Özel ve resmi liselerde yönetici ve öğretmenlerin örgütsel bağlılığı (Ankara ili örneği)*, (Yayımlanmamış Doktora Tezi). Ankara Üniversitesi: Ankara.
- Bozkurt, Ö. (2015). Sosyal hizmet işyerlerinde yenilik yönetimi. *Süleyman Demirel Üniversitesi Vizyoner Dergisi*, özel sayı, 89-106.
- Buchanan-II, B. (1974). Building organizational commitment: The socialization of managers in work organizations. *Administrative Science Quarterly*, 19(4), 533-546.
- Bülbül, T. (2012a). Okul yöneticilerinin yenilik yönetimine ilişkin yeterlik inançları. *Trakya Üniversitesi Sosyal Bilimler Dergisi*, 14(1), 45-68.
- Bülbül, T. (2012b). Okullarda yenilik yönetimi ölçeğinin ölçeğinin geliştirilmesi: Geçerlik ve güvenirlik çalışması. *Educational Sciences: Theory & Practice*, 1(12), 157-175.
- Büyüköztürk, Ş. (2015). *Sosyal bilimler için veri analizi el kitabı* (21. baskı). Ankara: Pegem Akademi.
- Ergen, S. (2015). *Öğretmenlerin örgütsel sinizm düzeyleri ile örgütsel bağlılıkları arasındaki ilişki*, (Yayımlanmamış Yüksek Lisans Tezi). Gazi Üniversitesi: Ankara.
- Göl, E., ve Bülbül, T. (2012). İlköğretim okulu yöneticilerinin yenilik yönetimi yeterliliklerine ilişkin öğretmen algıları. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 8(2), 97-109.
- Gönen, Z. (2016). *Öğretmenlerin örgütsel bağlılık düzeyleri ile karar verme süreci arasındaki ilişki*, (Yayımlanmamış Yüksek Lisans Tezi). Atatürk Üniversitesi: Erzurum.
- Gören, T. (2012). *İlköğretim kurumlarında görev yapan yönetici ve öğretmenlerin örgütsel bağlılık düzeyleri*, (Yayımlanmamış Yüksek Lisans Tezi). Adnan Menderes Üniversitesi: Aydın.
- Karataş, S., Gök, R., ve Özçetin, S. (2015). Okul yöneticilerinin yenilik yönetimi yeterliliklerine ilişkin öğretmen algıları. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 33, 167-185.
- Kılıç, Ş. (2011). *İlköğretim okulu öğretmenlerinin örgütsel sinizm ve örgütsel bağlılık düzeyleri arasındaki ilişki*, (Yayımlanmamış Yüksek Lisans Tezi). Hacettepe Üniversitesi: Ankara.
- Kılıçarslan, S. (2013). *Okul yöneticilerinin liderlik stilleri ile öğretmenlerin örgütsel bağlılık düzeyleri arasındaki ilişkinin incelenmesi*, (Yayımlanmamış Yüksek Lisans Tezi). Okan Üniversitesi: İstanbul.
- Öğüt, A., Aygen, S., ve Demirel, M. T. (2007). Personel güçlendirme inovasyonu hızlandırır mı? Antalya ili beş yıldızlı konaklama işletmelerine yönelik görgül bir çalışma. *Selçuk Üniversitesi İ.İ.B.F Dergisi Yerel Ekonomiler, Özel Seri*, 163-172.
- Selvitopu, A., ve Şahin, H. (2013). Ortaöğretim öğretmenlerinin örgütsel adalet algıları ile örgütsel bağlılıkları arasındaki ilişki. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 14(2), 171-189.
- Şahin, A. (2009). Mersinde faaliyet gösteren küçük ve orta büyüklükteki işletmelerin yenilik faaliyetlerinin ölçülmesi. *Doğuş Üniversitesi Dergisi*, 10(2), 259-271.
- Şahin, B. (2014). Bilimsel araştırma yöntemleri. A. Tanrıoğen, *Bilimsel araştırma yöntemleri* (4. baskı, s. 127). Ankara: Anı Yayıncılık.

- Şişman, M. (1995). Örgüt kavramının kültürel açıdan çözümlemesi ve eğitim örgütleri. *Eğitim Yönetimi*, 1(1), 79-94.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6. baskı). New York, United States of America: Pearson Education.
- Töremen, F. (2002). Eğitim örgütlerinde değişimin engel ve nedenleri. *Fırat Üniversitesi Sosyal Bilimler Dergisi*, 12(1), 185-202.
- Yavuz, Ç. (2010). İşletmelerde inovasyon-performans ilişkisinin incelenmesine dönük bir çalışma. *Girişimcilik ve Kalkınma Dergisi*, 5(2), 143-173.
- Yılmaz, E., ve Özcan, A. (2017). İlköğretim kurumlarında görev yapan öğretmenlerin örgütsel bağlılıklarının çeşitli değişkenler açısından incelenmesi. *1. Uluslararası Sosyal Bilimler ve Eğitim Araştırmalar Sempozyumu*, (s. 477-487). Antalya.
- Zannad, H., & Rouet, V. (2003). Organizational commitment in innovative companies. *XII. Conference de l'Assosiation Internationale de Management Strategique*. Les Cotes de Carthage.
- Zerenler, M., ve Celep, E. (2011). Örgütlerde inovasyon kültürü ve örgütsel bağlılık ilişkisi: Konya otomotiv yan sanayinde bir araştırma. *XI. Üretim Araştırmaları Sempozyumu*, (s. 180-189). İstanbul.

¹ Bu çalışmada kullanılan veriler Emrah DÖNMEZ tarafından hazırlanan Okul Yöneticilerinin Örgütsel Yenilik Düzeyi ve Öğretmenlerin Örgütsel Bağlılık Düzeyleri Arasındaki İlişkinin İncelenmesi (Muğla İli Örneği) adlı yüksek lisans tezinde kullanılan verilerdir. Ayrıca bu çalışma Muğla Sıtkı Koçman Üniversitesi Bilimsel Araştırma Projeleri Koordinasyon Birimi tarafından Yüksek lisans tez projesi olarak desteklenmiştir.

Okulların Liderlik Kapasitesi ve Öğretmenlerin Örgütsel Sapma Davranışları Arasındaki İlişki¹

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Özet

Bu araştırmanın amacı öğretmenlerin görüşlerine göre örgütsel sapma ile okulların liderlik kapasitesi arasındaki ilişkinin belirlenmesidir. Çalışma tarama modelinde desenlenmiştir. Araştırma verileri 2017–2018 Eğitim-Öğretim yılında Muğla ilinde toplanmıştır. Çalışmanın örneklemini devlet okullarında çalışan 418 öğretmen oluşturmaktadır. Çalışmada Okullarda Örgütsel Sapma Ölçeği ve Okullarda Liderlik Kapasitesi Ölçeği kullanılmıştır. Bulgular öğretmenlerin görüşlerine göre örgütsel sapma ile okulların liderlik kapasitesi arasında negatif orta düzeyde anlamlı bir ilişki olduğunu göstermektedir. Örgütsel sapma davranışlarını azaltmak için okulların liderlik kapasitesinin geliştirilmesi önerilebilir.

Giriş

Örgütlerde, çalışanların sergilediği, zarar verme amacı taşıyan ve kasıtlı olan eylemler sapma davranışları olarak ifade edilir. Örgütsel sapma örgüt kurallarına ve beklentilerine uyumsuzluk olarak tanımlanır (Avcı, 2008, 32). Yıkma, kırıp dökme, harap etme, bozma olarak tanımlanan tahripçilik (TDK, 2017) vandalizm, saldırganlık gibi benzer isimlerle adlandırılmaktadır. Çalışanların sapma davranışı kasıtlı olarak örgüt normlarını ihlal ederek örgütün, çalışanların ya da her ikisinin sağlığını tehdit eden davranışlardır (Robinson ve Bennet, 1995, 555). Çalışanın üyesi bulunduğu örgütün değerlerine ve beklentilerine uygun olmayan davranışları sapma davranışı (uyumsuz davranış, anti-sosyal davranış, işlevsiz davranış, kötü davranış, işyeri sapma davranışı, zararlı davranış) olarak ifade edilmiştir (İyigün, 2011, 12). Sapma davranışı örgüte direkt mali zarar veren sabotaj, hırsızlık gibi davranışlar olabileceği gibi müşteri kaybı, örgütün ismine zarar verme, üretimi azaltma gibi dolaylı yoldan zarar veren davranışlarda olabilir (Gruys, 1999, 2). Son 20 yılda yapılan çalışmalar örgütsel sapma davranışlarının hem örgüt, hemde bireyler üzerinde olumsuz sonuçlar doğurduğunu göstermektedir. Literatürde yer alan deneysel ve teorik olarak çalışmaların bu kanıyı destekler nitelikte olduğu görülmektedir (Yalap, 2016, 45). Sapma davranışları ile başa çıkmak zor ve maliyetlidir (Bennet ve Robinson, 2000, 349). Örgütün bütünlüğüne zarar verir (Appelbaum, Iaconi ve Matousek, 2007, 588). Hem örgütsel hem de kişiler arası boyutta çalışanların işten ayrılma niyetleri üzerinde etkiye sahip olduğu saptanmıştır (Ayazlar ve Güzel, 2013, 17). Bu davranışların sadece finansal etkisi olmadığı, aynı zamanda sosyal ve psikolojik etkilerinin de olduğu görülmektedir (Avcı, 2008, 47; Bodankin ve Tziner, 2009, 549). Her türlü sapma davranışı tüm örgütün hedeflerine ulaşmasını olumsuz etkiler ve örgütsel bağlılığın azalmasına neden olur. Ayrıca sadece çalışanların başarısını ve verimliliğini etkilemekle kalmayıp örgütün geleceğini de tehdit eder (Demir ve Tütüncü, 2010, 73).

Bir ülkenin kalkınmasında en büyük sorumluluğa sahip olan okullarda da bu tür sapma davranışlarıyla karşılaşmaktadır. Bu davranışlar eğitimin kalitesi açısından büyük bir problem oluşturmaktadır (Köse, 2013, 3). Okulların öğrencilerine istenmeyen davranışlardan temizlenmiş bir çevre sunmakla yükümlü olması nedeniyle bu tür davranışların okullarda meydana gelmesi ayrı bir önem kazanmaktadır (Özen, Gülaçtı ve Çıkılı, 2004, 48). Aksu (2016, 594) çalışmasında öğretmenlerin algıladıkları sapma davranışlarının düşük düzeyde olduğunu ama yine de daha da azaltılması gerektiğini ifade etmiştir. Eğitim örgütlerinde meydana gelen olaylar toplumun şekillenmesinde önemlidir. Okullardaki olumsuzluklar bireyin gelişiminde ve toplumla ilişkisinde kısa vadede kendini göstermese bile uzun vadede toplumsal bozulmaya yol açabilir (Türkkaş Anasız, 2016, 32).

Bu çalışmanın ikinci değişkeni liderlik kapasitesidir. Liderlik (Bass, 1990; Yukl, 2010 ve Bennis, 1999) bireyin, tanımlanmış başarıya yada örgütsel amaçlara ulaşmak için diğer grup üyelerini etkilediği süreçtir (Güçlü, 2016, 7). Okullarda okul müdürlerinin tek başına lider olduğunu düşünmek yerine okulun tüm üyeleri arasında liderlik kapasitesi geliştirilmeye çalışılmalıdır (Lambert, 2002, 37). Liderlik kapasitesi bir kişiden öte tüm kurumun işbirliği içinde paylaşılan vizyon ve sorumluluğun olmasını gerektirir (Lambert, 1998, 5).

Liderin düşük düzeyde etik davranış göstermesisapma davranışlarını artıran etmenlerden biridir (Gils, Quaquebeke, Knippenberg, Dijke ve Cremer, 2014, 193). Çünkü çalışanların sapma davranışları kötü yönetim davranışlarından etkilenir (Lian, Ferris ve Brown, 2011, 41). Dunlop ve Lee (2004, 69-76) dedikodu, iş arkadaşlarını aşağılama gibi önemsiz davranışlardan hırsızlık, sabotaj gibi ciddi sorunlara kadar büyüyebileceği, tüm örgütün işlevini önemli derecede etkilediğini, örgütün etkililiğini azaltarak görünmeyen maliyet yarattığını ve üretimi azalttığını belirtmiştir.

Okul müdürünün liderliği okulun başarısı ile güçlü bir şekilde bağlantılıdır (Bass, 2000, 34). Etkili okul konusunda son yıllarda yapılan çalışmalar okul başarısında eğitime-öğretme, değişimi başlatma ve problem çözme gibi konuların anahtar noktası olan okul müdürünün önemli etkisini vurgulamaya devam etmektedir (Portin ve Shen, 1999, 96). Okul liderliği, öğrenme kalitesinin bir göstergesi olarak dikkate alındığında, okulların elde ettiği eğitimsel sonuçlar içerisinde önemli düzeyde rol oynamaktadır. Okul liderliğini geliştirmenin birçok faydası vardır. Bunlardan en önemlileri; öğretmenlerin güdülenmesini arttırmak, okul iklimini ve okul çevresini etkisi altına almak, öğretmen liderliğini güçlendirerek okulun liderlik kapasitesini geliştirmektir (Özçetin, 2013, 1).

Türkiye’de okullarda örgütsel sapma davranışı ile ilgili yapılan araştırmalar sınırlı sayıdadır. Okullarda yapılan araştırmalar arasında öğretmenlerin örgütsel sapma davranışı ve okul müdürlerinin liderlik tarzları ile ilgili birkaç araştırmaya rastlanmıştır. Bu araştırmalar arasında farklı okul türlerinde öğretmenlerin örgütsel sapma davranışı ve okulların liderlik kapasitesi ile ilgili araştırmalar henüz yapılmamıştır. Bu araştırmanın farkı, okul liderliğini liderlik kapasitesi olarak ele almasıdır. Ayrıca, sapma davranışları açısından, farklı okul türleri arasında bir farklılığın olup olmadığı da bu araştırmanın ortaya koyacağı bir başka önemli noktadır. Bu araştırmanın alandaki bu boşlukları doldurması düşünülmektedir.

Bu çalışmada, okulların liderlik kapasitesi ile öğretmenlerin örgütsel sapma davranışı düzeyleri arasındaki ilişkinin incelenmesi amaçlanmıştır. Bu genel amaç çerçevesinde aşağıdaki sorulara yanıt aranmıştır;

- 1- Öğretmenlerin örgütsel sapma davranış düzeyi nasıldır?
- 2- Öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyi nasıldır?
- 3- Örgütsel sapma davranış düzeyi öğretmenlerin demografik değişkenlerine göre anlamlı şekilde farklılık göstermekte midir?
- 4- Okulların liderlik kapasitesi düzeylerinin, öğretmenlerin demografik değişkenlerine göre anlamlı şekilde farklılık göstermekte midir?
- 5- Okulların liderlik kapasitesi düzeyi, öğretmenlerin örgütsel sapma davranış düzeyini anlamlı şekilde yordamakta mıdır?

Yöntem

Araştırmanın Modeli

Bu araştırma tarama modelinde desenlenmiştir. Katılımcıların görüşleri betimlenip, çeşitli değişkenlere göre karşılaştırılmış ve aradaki ilişki belirlenmeye çalışılmıştır.

Evren Ve Örneklem

Araştırmanın evrenini 2017 - 2018 eğitim öğretim yılında Muğla ili genelindeki ilk, orta ve ortaöğretim okulları oluşturmaktadır. Muğla ilinde 299 ilkök, 208 ortaokul ve 112 ortaöğretim olmak üzere 619 okul bulunmaktadır. İlkokullarda 3.136, ortaokullarda 3.587 ve ortaöğretimde 3.140 olmak üzere toplam 10.133 öğretmen görev yapmaktadır. Evren büyüklüğü göz önünde bulundurularak örneklem büyüklüğü hesaplanmıştır. Bu hesaplamada örneklem büyüklüğü 370 olarak saptanmıştır. Bu amaçla 436 katılımcıya ulaşılmış ancak toplanan veriler incelendiğinde bunların 418’i değerlendirmeye uygun olduğu görülmüştür.

Veri Toplama Araçları

Bu çalışmada kullanılan veri toplama aracı üç bölümden oluşmaktadır. Birinci bölümde katılımcıları demografik bilgileri istenmiştir. İkinci bölümde Köse ve Aksu’nun (2013) geliştirdiği “Okullarda Örgütsel Sapma” ölçeği kullanılmıştır. Bu ölçek; *bireysel boyut* (3 madde), *örgütsel boyut* (9 madde) ve *etik boyut* (8 madde) olmak üzere 3 boyuttan oluşan 20 maddelik bir ölçme aracıdır. Ölçeğin genel güvenilirliği ise .93’tür (Köse ve Aksu, 386). Yapılan bu çalışmada ölçeğin Cronbach Alpha güvenilirlik katsayısı .93 olduğu saptanmıştır. Veri toplam aracının üçüncü bölümünde Lambert (2003) tarafından geliştirilen (Leadership Capacity School Survey - LCSS) "Okullarda Liderlik Kapasitesi Ölçeği-OLKÖ" kullanılmıştır. Bu ölçek Kılınç, Büyüköztürk ve Altun tarafından Türkçeye uyarlanmıştır (Kılınç, Büyüköztürk ve Altun, 2014, 23). Ölçek, *dağıtımçı liderlik boyutu* (7 madde), *paylaşılan okul vizyonu boyutu* (9 madde), *iş birliği ve ortak sorumluluk boyutu* (6 madde) ve *algılanan öğrenci başarısı boyutu* (8 madde) olmak üzere 4 boyut ve 30 maddelik bir ölçektir. Ölçeğin Cronbach Alpha güvenilirlik katsayısı .97’dir (Kılınç ve diğerleri 2014, 37). Yapılan bu çalışmada Cronbach Alpha güvenilirlik katsayısı .97 olduğu saptanmıştır.

Verilerin Analizi

Toplanan verilerin ilk incelenmesinde verilerin normal dağılıp dağılmadığı test edilmiştir. Bu test tüm boyutlar için gerçekleştirilmiş ve bulunan Skewness ve kurtosis değerleri verilerin normal dağıldığını göstermiştir. Buna göre liderlik kapasitesi ile ilgili verilerde Skewness 0,63 ve kurtosis 0,42, örgütsel sapma ile ilgili verilerde

Skewness 0,94 ve kurtosis 0,99 olarak saptanmıştır. Tabachnick ve Fidell'e (2013)göre, bu değerlerin -1,5 ile +1.5 arasında bulunması verilerin normal dağılımını göstermektedir.

Verilerin analizinde öğretmenlerin örgütsel sapma davranışları ve okulların liderlik kapasitesi ile ilgili görüşlerinin belirlenmesinde betimsel istatistikler; katılımcıların görüşlerinin karşılaştırılması için t-testi ve ANOVA analizleri kullanılmıştır. ANOVA testinde gruplar arasındaki farklılığın hangi gruplar arasında varolduğunu saptamak için Post-Hoc testlerden yararlanılmıştır. Buna göre gruplar arasındaki varyansların eşitliği sağlandığında Tukey testi ve bu eşitlik sağlanmadığında ise Dunnett's C testi uygulanmıştır. Okulların liderlik kapasitesi ile öğretmenlerin örgütsel sapma davranış düzeyleri arasındaki ilişki ise Regresyon analizi ile belirlenmeye çalışılmıştır. Korelasyon katsayısının mutlak değer olarak, 0.70–1.00 arasında olması “yüksek”; 0.69–0.30 arasında olması “orta”; 0.29–0.01 arasında olması ise “düşük” düzeyde ilişki, 0.00 olması ise ilişkinin olmaması olarak tanımlanmıştır (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz ve Demirel, 2016, 109).

Bulgular

Bu araştırmanın ilk amacı, öğretmenler tarafından algılanan sapma davranışlarının düzeyinin belirlenmesidir. Araştırmaya katılan öğretmenlerin algıladıkları sapma davranış düzeyleri *bireysel boyut* ($\bar{x}=1.81$, $s=.67$), *örgütsel boyut* ($\bar{x}=1.83$, $s=.66$), *etik boyut* ($\bar{x}=1.35$, $s=.41$) olduğu saptanmıştır. Örgütsel sapma ölçeğinin genel ortalaması ise ($\bar{x}=1.63$, $s=.49$) olarak saptanmıştır. Buna göre okullarda bulunan örgütsel sapma davranış düzeyinin düşük düzeyde olduğu ifade edilebilir.

Bu araştırmanın ikinci amacı, öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyinin belirlenmesidir. Araştırmaya katılan öğretmenlerin görüşlerine göre *dağıtımci liderlik boyutu* ($\bar{x}=2.88$, $s=.67$), *paylaşılan okul vizyonu boyutu* ($\bar{x}=2.90$, $s=.66$), *işbirliği ve ortak sorumluluk boyutu* ($\bar{x}=2.97$, $s=.66$) ve *algılanan öğrenci başarısı boyutu* ($\bar{x}=3.03$, $s=.63$) olduğu saptanmıştır. Liderlik Kapasitesi ölçeğinin genel ortalaması ise ($\bar{x}=2.95$, $s=.60$) olarak saptanmıştır.

Bu araştırmanın üçüncü amacı öğretmen görüşlerine göre, örgütsel sapma davranış düzeyinin öğretmenlerin demografik değişkenlerine göre incelenmesidir. Yapılan analizlerde, kadın öğretmenlerin görüşlerine göre sergilenen sapma davranışlarının ($\bar{x}=1.60$, $s=.47$) düzeyinde ve erkek öğretmenlerin görüşlerine göre sergilenen sapma davranışlarının ($\bar{x}=1.67$, $s=.52$) düzeyinde olduğu görülmüştür. Okullarda sergilenen sapma davranış düzeylerine ilişkin öğretmen görüşleri tüm ölçekte ve alt boyutlarda cinsiyete göre anlamlı bir şekilde farklılık göstermemektedir.

Branşa göre incelendiğinde, iki boyutta anlamlı farklılık saptanmıştır. Buna göre örgütsel sapma –*bireysel boyut* düzeyleri arasında öğretmenlerin branşları bakımından anlamlı bir farkın olduğu görülmektedir [$F_{(2-407)}= 4.15$, $p<.05$]. Yapılan analizlerde meslek öğretmenlerin sahip olduğu örgütsel sapma –*bireysel boyut* düzeyi sınıf öğretmenlerine göre daha yüksek olduğu saptanmıştır. Bunun yanı sıra Örgütsel sapma –*örgütsel boyut* düzeyleri arasında da öğretmenlerin branşları bakımından anlamlı bir farkın olduğu görülmektedir [$F_{(2-398)}= 3.96$, $p<.05$]. Yapılan analizlerde, sınıf öğretmenlerin sahip olduğu örgütsel sapma –*örgütsel boyut* düzeyi branş öğretmenlerine ve meslek dersi öğretmenlerine göre daha düşük olduğu saptanmıştır. Örgütsel sapma- *etik boyut*ta ve tüm ölçekte branş bakımından anlamlı bir fark saptanmamıştır [$F_{(2-402)}= 0.05$, $p>.05$].

Yaşa göre incelendiğinde, Örgütsel sapma-*bireysel boyut* [$F_{(3-403)}= 1.38$, $p>.05$] ve *etik boyut* [$F_{(3-398)}= 1.66$, $p>.05$] düzeyleri arasında öğretmenlerin yaşları bakımından anlamlı bir farkın olmadığı görülmektedir. Örgütsel sapma –*örgütsel boyut* [$F_{(3-394)}= 2.81$, $p<.05$] ve ölçek genelindeki [$F_{(3-386)}= 2.90$, $p<.05$] algı düzeyleri arasında ise öğretmenlerin yaşları bakımından anlamlı bir farkın olduğu görülmektedir. Buna göre 33-42 arası yaşa arası öğretmenlerin sahip olduğu örgütsel sapma –*örgütsel boyut* düzeyi, 43-52 arası yaş arası öğretmenlere göre daha düşük olduğu saptanmıştır. Başka bir ifadeyle 43-52 arası yaş arası öğretmenlerin sahip olduğu örgütsel sapma algı düzeyi 33-42 arası yaşa arası öğretmenlere göre anlamlı bir şekilde daha yüksektir. Bu bağlamda öğretmen görüşlerine göre okullarda genel olarak sergilenen örgütsel sapma davranışlarında yaş değişkeninin önemli bir değişken olduğu ifade edilebilir.

Kıdeme göre incelendiğinde, Örgütsel sapma-*bireysel boyut* düzeyleri [$F_{(2-401)}= 1.04$, $p>.05$], Örgütsel sapma-*örgütsel boyut* davranış düzeyleri [$F_{(2-392)}= .79$, $p>.05$], örgütsel sapma-*etik boyut* davranış düzeyleri [$F_{(2-396)}= .69$, $p>.05$] ve örgütsel sapma davranış düzeyleri [$F_{(2-384)}= 1.24$, $p>.05$] olarak belirlenmiştir. Öğretmenlerin kıdemleri bakımından anlamlı bir farkın olmadığı görülmektedir. Bu bağlamda öğretmen görüşlerine göre okullarda genel olarak sergilenen örgütsel sapma davranışlarında kıdem değişkeninin önemli bir değişken olmadığı ifade edilebilir.

Okuldaki görev yapma süresine göre incelendiğinde, Örgütsel sapma-*bireysel boyutta* [$F_{(3-393)}=1.91$, $p>.05$], Örgütsel sapma-*örgütsel boyutta* [$F_{(3-384)}=.56$, $p>.05$], Örgütsel sapma-*etik boyutta* [$F_{(3-389)}=1.75$, $p>.05$] ve tüm ölçekte [$F_{(3-376)}=1.02$, $p>.05$] olarak belirlenmiştir. Öğretmenlerin okuldaki görev yapma süresine bakımından anlamlı bir farkın olmadığı görülmektedir.

Okul türüne göre incelendiğinde, Örgütsel sapma-*etik boyut* davranış düzeyleri arasında okul türüne göre anlamlı bir farkın olmadığı görülmektedir [$F_{(3-402)}=.87$, $p>.05$]. Örgütsel sapma-*bireysel boyut* davranış düzeyleri arasında ise anlamlı bir farkın olduğu görülmektedir [$F_{(3-407)}= 3.01$, $p<.05$]. Yapılan analizlerde ilkökulda görev yapan öğretmenlerin sahip olduğu örgütsel sapma-*bireysel boyut* davranışları algı düzeyi, Anadolu lisesi ve meslek lisesinde görev yapan öğretmenlere göre daha düşük olduğu saptanmıştır. Ayrıca Meslek lisesinde görev yapan öğretmenlerinsahip olduğu örgütsel sapma-*bireysel boyut* davranışları algı düzeyi, ilkökul ve ortaokulda görev yapan öğretmenlere göre daha yüksek olduğu saptanmıştır. Örgütsel sapma-*örgütsel boyut* davranış düzeyleri arasında da anlamlı bir farkın olduğu görülmektedir [$F_{(3-398)}= 6.07$, $p<.05$]. Yapılan analizlerde Anadolu lisesinde görev yapan öğretmenlerinsahip olduğu örgütsel sapma-*örgütsel boyut* davranışları algı düzeyi, İlkokul ve Ortaokulda görev yapan öğretmenlere göre daha yüksek olduğu saptanmıştır. Ölçek genelinde ise örgütsel sapma davranış düzeyleri arasında okul türü bakımından anlamlı bir farkın olduğu görülmektedir [$F_{(3-390)}= 4.32$, $p<.05$]. Yapılan analizlerde Anadolu lisesinde görev yapan öğretmenlerinsahip olduğu örgütsel sapma davranışları algı düzeyi, İlkokul ve Ortaokulda görev yapan öğretmenlere göre daha yüksek olduğu saptanmıştır. Başka bir ifadeyle İlkokul ve Ortaokulda görev yapan öğretmenlerin sahip olduğu örgütsel sapma algı düzeyi Anadolu lisesinde görev yapan öğretmenlere göre anlamlı bir şekilde daha düşüktür. Bu bağlamda öğretmen görüşlerine göre okullarda genel olarak sergilenen örgütsel sapmadavranışlarında okul türü değişkeninin önemli bir değişken olduğu ifade edilebilir.

Okulun yerleşim yerine göre anlamlı bir farkın olmadığı görülmüştür [$t_{(392)}=.32$, $p>.05$]. İlçe merkezinde bulunan okullarda görev yapan öğretmenlerin görüşlerine göre sergilenen sapma davranışlarının ($\bar{x}=1.63$, $s=.49$) düzeyinde ve köy/mahallede bulunan okullarda görev yapan öğretmenlerin görüşlerine göre sergilenen sapma davranışlarının ($\bar{x}=1.65$, $s=.47$) düzeyinde olduğu görülmüştür. Okulun yerleşim yerine göre okullarda sergilenen sapma davranış düzeylerine ilişkin öğretmen görüşleri tüm ölçekte ve alt boyutlarda anlamlı bir şekilde farklılık göstermemektedir.

Eğitim düzeyine göre incelendiğinde iki boyutta anlamlı farklılık saptanmıştır. Örgütsel sapma-*bireysel boyutta* anlamlı bir farkın olduğu görülmüştür [$t_{(405)}=2.43$, $p<.05$]. Önlisans/Lisans düzeyinde eğitim gören öğretmenlerin görüşlerine göre sergilenen sapma davranışlarının ($\bar{x}=1.78$, $s=.64$) düzeyinde ve Yüksek Lisans düzeyinde eğitim gören öğretmenlerin görüşlerine göre sergilenen sapma davranışlarının ($\bar{x}=2.04$, $s=.83$) düzeyinde olduğu görülmüştür. Buna göre Yüksek lisans mezunu öğretmenlerin algıladıkları sapma davranış düzeyi önlisans/lisans mezunu öğretmenlerin algıladıkları sapma düzeyinden daha yüksektir. Örgütsel sapma-*etik boyutta* da öğretmenlerin eğitim düzeyine göre anlamlı bir farkın olduğu görülmüştür [$t_{(400)}=2.01$, $p<.05$]. Önlisans/Lisans düzeyinde eğitim gören öğretmenlerin görüşlerine göre sergilenen sapma davranışlarının ($\bar{x}=1.36$, $s=.41$) düzeyinde ve Yüksek Lisans düzeyinde eğitim gören öğretmenlerin görüşlerine göre sergilenen sapma davranışlarının ($\bar{x}=1.23$, $s=.36$) düzeyinde olduğu görülmüştür. Buna göre önlisans/lisans mezunu öğretmenlerin algıladıkları sapma davranış düzeyiYüksek lisans mezunu öğretmenlerin algıladıkları sapma düzeyinden daha yüksektir. Örgütsel sapma-*Örgütsel Boyutta* [$t_{(397)}=1.68$, $p>.05$] ve tüm ölçekte [$t_{(389)}=.44$, $p>.05$] öğretmenlerin eğitim düzeyine göre anlamlı bir farkın olmadığı görülmüştür. Buna göre okullarda sergilenen sapma davranış düzeylerine ilişkin öğretmen görüşleri *bireysel boyutta* ve *etik boyutta* eğitim düzeyine göre anlamlı bir şekilde farklılık gösterirken *örgütsel boyutta* ve tüm ölçekte anlamlı bir farklılık göstermemektedir.

Bu araştırmanın dördüncü amacı öğretmen görüşlerine göre okulların liderlik kapasitesi düzeylerinin demografik değişkenlerine göre incelenmesidir. Cinsiyete göre *dağıtımçı liderlik boyutunda* anlamlı bir farkın olmadığı görülmüştür [$t_{(385)}= 1.54$, $p>.05$]. *Paylaşılan okul vizyonu boyutunda* [$t_{(399)}=2.95$, $p<.05$], *işbirliği ve ortak sorumluluk boyutunda* [$t_{(406)}=2.40$, $p<.05$], *algılanan öğrenci başarısı boyutunda* [$t_{(400)}=2.52$, $p<.05$] ve ölçek genelinde [$t_{(368)}=2.27$, $p<.05$] olarak belirlenmiş ve anlamlı bir farkın olduğu saptanmıştır. Kadın öğretmenlerin algıladıkları okulların liderlik kapasitesi düzeyi erkek öğretmenlerin algıladıkları okulların liderlik kapasitesi düzeyinden daha yüksektir. Başka bir ifadeyle öğretmenlerin cinsiyet değişkeni, okulların algılanan liderlik kapasitesi üzerinde *dağıtımçı liderlik boyutu* dışındaönemli bir değişkendir.

Branşa göre incelendiğinde, liderlik kapasitesi *dağıtımçı liderlik boyutu* [$F_{(2-383)}= 2.15$, $p>.05$], *paylaşılan okul vizyonu boyutu* [$F_{(2-397)}= 1.80$, $p>.05$], *işbirliği ve ortak sorumluluk boyutu* [$F_{(2-405)}= 1.23$, $p>.05$], *algılanan öğrenci başarısı boyutu* [$F_{(2-398)}= 1.49$, $p>.05$] ve ölçek genelinde [$F_{(2-367)}= 2.30$, $p>.05$] olarak belirlenmiştir. Bu bağlamda öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyleri arasında branşın önemli bir değişken olmadığı ifade edilebilir.

Yaşa göre incelendiğinde, *dağıtımçı liderlik boyutu* [$F_{(3-379)}=2.06, p>.05$], *paylaşılan okul vizyonu boyutu* [$F_{(3-394)}=.59, p>.05$], *işbirliği ve ortak sorumluluk boyutu* [$F_{(3-401)}=1.01, p>.05$], *algılanan öğrenci başarısı boyutu* [$F_{(3-395)}=.85, p>.05$] ve ölçek genelinde [$F_{(3-364)}=.97, p>.05$] olarak saptanmıştır. Bu bağlamda öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyleri arasında yaşın önemli bir değişken olmadığı ifade edilebilir.

Kıdeme göre incelendiğinde, *dağıtımçı liderlik boyutu* [$F_{(2-378)}=.64, p>.05$], *paylaşılan okul vizyonu boyutu* [$F_{(2-393)}=.03, p>.05$], *işbirliği ve ortak sorumluluk boyutu* [$F_{(2-400)}=1.27, p>.05$], *algılanan öğrenci başarısı boyutu* [$F_{(2-394)}=.85, p>.05$] ve ölçek genelinde [$F_{(2-363)}=.28, p>.05$] olarak belirlenmiştir. Bu bağlamda öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyleri arasında kıdem değişkeninin önemli bir değişken olmadığı ifade edilebilir.

Okuldaki görev süresine göre incelendiğinde, *dağıtımçı liderlik boyutu* [$F_{(3-371)}=.95, p>.05$], *paylaşılan okul vizyonu boyutu* [$F_{(3-386)}=.42, p>.05$], *işbirliği ve ortak sorumluluk boyutu* [$F_{(3-392)}=.92, p>.05$], *algılanan öğrenci başarısı boyutu* [$F_{(3-386)}=.97, p>.05$] ve ölçek genelinde [$F_{(3-357)}=.80, p>.05$] olarak saptanmıştır. Bu bağlamda öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyleri arasında okuldaki görev süresi değişkeninin önemli bir değişken olmadığı ifade edilebilir.

Okul türüne göre incelendiğinde, bir boyutta fark saptanmıştır. Liderlik kapasitesi -*dağıtımçı liderlik boyut* düzeyleri arasında öğretmenlerin görev yaptığı okul türü bakımından anlamlı bir farkın olduğu görülmektedir [$F_{(3-383)}=3.15, p<.05$]. Yapılan analizlerde ilkokulda görev yapan öğretmenlerin sahip olduğu liderlik kapasitesi -*dağıtımçı liderlik boyut* davranışları algı düzeyi, Anadolu lisesinde görev yapan öğretmenlere göre daha yüksek olduğu saptanmıştır. Bu bağlamda öğretmen görüşlerine göre okulların liderlik kapasitesi-*dağıtımçı liderlik boyut* düzeyleri arasında okul türü değişkeninin önemli bir değişken olduğu ifade edilebilir. *Paylaşılan okul vizyonu boyutu* [$F_{(3-397)}=2.54, p>.05$], *işbirliği ve ortak sorumluluk boyutu* [$F_{(3-404)}=1.72, p>.05$], *algılanan öğrenci başarısı boyutu* [$F_{(3-398)}=2.38, p>.05$] ve ölçek genelinde [$F_{(3-366)}=.2.05, p>.05$] olarak saptanmıştır. Bu bağlamda öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyleri arasında okul türü değişkeninin önemli bir değişken olmadığı ifade edilebilir.

Okulun bulunduğu yerleşim yerine göre *dağıtımçı liderlik boyutu* [$t_{(385)}=.10, p>.05$], *paylaşılan okul vizyonu boyutu* [$t_{(399)}=1.22, p>.05$] ve ölçek genelinde [$t_{(368)}=1.63, p>.05$] olarak saptanmıştır. Buna göre anlamlı bir farkın görülmediği belirlenmiştir. Diğer yandan *işbirliği ve ortak sorumluluk boyutu* [$t_{(406)}=2.20, p<.05$] ve *algılanan öğrenci başarısı boyutunda* [$t_{(400)}=2.74, p<.05$] olduğu saptanmıştır. Okulun yerleşim yerine göre anlamlı bir farkın olduğu belirlenmiştir. Köy/mahallede bulunan okullarda görev yapan öğretmenlerin algıladıkları okulların liderlik kapasitesinin düzeyi ilçe merkezinde bulunan okullarda görev yapan öğretmenlerin algıladıkları liderlik kapasitesi düzeyinden daha yüksektir.

Eğitim düzeyine göre incelendiğinde, *dağıtımçı liderlik boyutu* [$t_{(381)}=1.47, p>.05$], *paylaşılan okul vizyonu boyutu* [$t_{(395)}=.18, p>.05$], *işbirliği ve ortak sorumluluk boyutu* [$t_{(403)}=.45, p>.05$], *algılanan öğrenci başarısı boyutu* [$t_{(397)}=.85, p>.05$] ve tüm ölçekte [$t_{(365)}=.51, p>.05$] olarak belirlenmiştir. Buna göre okulların liderlik kapasitesi düzeylerine ilişkin öğretmen görüşleri tüm ölçekte ve alt boyutlarında öğretmenlerin eğitim düzeyine göre anlamlı bir şekilde farklılık göstermemektedir.

Bu araştırmanın beşinci amacı öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyinin öğretmenlerin örgütsel sapma davranış düzeyini yordayıp yordamadığını belirlemektir.

Tablo 1’de Okullardaki liderlik kapasitesinin öğretmenlerin örgütsel sapma düzeyini – *bireysel boyutunu* yordamasına ilişkin çoklu regresyon analizi sonuçlarına yer verilmiştir.

Değişken	B	Standart hata	β	t	p	İkili r	Kısmi r
Sabit	3.281	.164		20.017	.000		
<i>Dağıtımçı Liderlik</i>	-.418	.090	-.407	-4.646	.000	-.47	-.24
<i>PaylaşılanOkul Vizyonu</i>	.049	.114	.046	.430	.667	-.40	.02
<i>İşbirliği veOrtakSorumluluk</i>	-.128	.105	-.121	-1.215	.225	-.40	-.06
<i>Algılanan Öğrenci Başarısı</i>	-.012	.108	-.011	-.108	.914	-.38	-.00
R=.472	R ² = .222	F ₍₄₋₃₆₁₎ =25,802	p=.000				

Tablo 1.Örgütsel sapma-bireysel boyutunu yordamasına ilişkin regresyon analizi sonuçları

Tablo 1’de, örgütsel sapma - bireysel boyutu ile liderlik kapasitesinin *dağıtımçı liderlik boyutu* arasında ($r=-.47$), *paylaşılan okul vizyonu boyutu* arasında ($r=-.40$), *işbirliği ve ortak sorumluluk boyutu* arasında ($r=-.40$) ve *algılanan öğrenci başarısı boyutu* arasında ($r=-.38$) ters yönlü ve orta düzeyde ilişkiler olduğu görülmektedir. Diğer değişkenler kontrol edildiğinde de Örgütsel sapma-bireysel boyutu ile liderlik kapasitesinin *dağıtımçı liderlik boyutu* arasında ($r=-.24$), *işbirliği ve ortak sorumluluk* ($r=-.06$) ve *algılanan öğrenci başarısı* ($r=-.00$) boyutları arasında ters yönlü ve düşük düzeyde ilişki bulunmaktadır. Ancak *paylaşılan okul vizyonu boyutu* ($r=.02$) ile pozitif yönde ve düşük düzeyde ilişki bulunmaktadır.

Liderlik kapasitesinin boyutları tümü birlikte, öğretmenlerin Örgütsel sapma-bireysel boyutu düzeyleri ile orta düzeyde ve anlamlı bir ilişki vermektedir ($R=.472$, $R^2=.222$, $p<.01$). Bu boyutların tümü birlikte Örgütsel sapma-bireysel boyutunu toplam varyansın yaklaşık % 22’sini açıklamaktadır.

Standardize edilmiş regresyon katsayısına (β) göre yordayıcı değişkenlerin öğretmenlerin Örgütsel sapma-bireysel boyutu üzerindeki göreceli önem sırası; *dağıtımçı liderlik*, *işbirliği ve ortak sorumluluk*, *paylaşılan okul vizyonu* ve *algılanan öğrenci başarısı* şeklindedir.

Regresyon katsayılarının anlamlılığına ilişkin t-testi sonuçları incelendiğinde sadece *dağıtımçı liderlik boyutunun* örgütsel sapma-bireysel boyut üzerinde önemli yordayıcı olduğu görülmektedir. Diğer boyutlar önemli bir etkiye sahip değildirler.

Elde edilen bulgulara göre Örgütsel sapma-bireysel boyutunun yordanmasına ilişkin regresyon eşitliğinin matematiksel modeli aşağıda verilmiştir:

Örgütsel Sapma-bireysel boyut = $3.281 - .418$ *dağıtımçı liderlik* + $.049$ *paylaşılan okul vizyonu* - $.128$ *işbirliği ve ortak sorumluluk* - $.012$ *algılanan öğrenci başarısı*

Tablo 2’te Okullardaki liderlik kapasitesinin öğretmenlerin örgütsel sapma düzeyini – *örgütsel boyutunu* yordanmasına ilişkin çoklu regresyon analizi sonuçlarına yer verilmiştir.

Değişken	B	Standart hata	β	t	p	İkili r	Kısmi r
Sabit	3.323	.148		22.471	.000		
<i>Dağıtımçı Liderlik</i>	-.351	.085	-.366	-4.146	.000	-.50	-.22
<i>PaylaşılanOkul Vizyonu</i>	-.034	.106	-.035	-.320	.749	-.46	-.02
<i>İşbirliği veOrtak Sorumluluk</i>	-.152	.098	-.155	-1.557	.120	-.45	-.08
<i>Algılanan Öğrenci Başarısı</i>	.015	.100	.014	.147	.883	-.43	.01
R=.513	R²=	F(4-	p=.000				
	.264	353)=31.585					

Tablo 2. Örgütsel sapma-örgütsel boyutunu yordanmasına ilişkin regresyon analizi sonuçları

Tablo 2’te, Örgütsel sapma – *örgütsel boyutu* ile liderlik kapasitesinin *dağıtımçı liderlik boyutu* arasında ($r=-.50$), *paylaşılan okul vizyonu boyutu* arasında ($r=-.46$), *işbirliği ve ortak sorumluluk boyutu* arasında ($r=-.45$) ve *algılanan öğrenci başarısı boyutu* arasında ($r=-.43$) ters yönlü ve orta düzeyde ilişkiler olduğu görülmektedir.

Diğer değişkenler kontrol edildiğinde de Örgütsel sapma-örgütsel boyutu ile liderlik kapasitesinin *dağıtımçı liderlik boyutu* arasında ($r=-.22$), *paylaşılan okul vizyonu* ($r=-.02$) ve *işbirliği ve ortak sorumluluk* ($r=-.08$) boyutları arasında ters yönlü ve düşük düzeyde ilişki bulunmaktadır. Ancak *algılanan öğrenci başarısı boyutu* ($r=.01$) ile pozitif yönde ve düşük düzeyde ilişki bulunmaktadır.

Liderlik kapasitesinin boyutları tümü birlikte, öğretmenlerin Örgütsel sapma-örgütsel boyutu düzeyleri ile orta düzeyde ve anlamlı bir ilişki vermektedir ($R=.513$, $R^2=.264$, $p<.01$). Bu boyutların tümü birlikte Örgütsel sapma-örgütsel boyutunu toplam varyansın yaklaşık % 26’sını açıklamaktadır.

Standardize edilmiş regresyon katsayısına (β) göre yordayıcı değişkenlerin öğretmenlerin Örgütsel sapma-örgütsel boyutu üzerindeki göreceli önem sırası; *dağıtımçı liderlik*, *işbirliği ve ortak sorumluluk*, *paylaşılan okul vizyonu* ve *algılanan öğrenci başarısı* şeklindedir.

Regresyon katsayılarının anlamlılığına ilişkin t-testi sonuçları incelendiğinde sadece *dağıtımçı liderlik boyutunun* örgütsel sapma-örgütsel boyut üzerinde önemli yordayıcı olduğu görülmektedir. Diğer boyutlar önemli bir etkiye sahip değildirler.

Elde edilen bulgulara göre Örgütsel sapma-bireysel boyutunun yordanmasına ilişkin regresyon eşitliğinin matematiksel modeli aşağıda verilmiştir:

Örgütsel Sapma- örgütsel boyut = 3.323 -.351 *dağıtımçı liderlik* -.034 *paylaşılan okul vizyonu* -.152 *işbirliği ve ortak sorumluluk* +.015 *algılanan öğrenci başarısı*

Tablo 3'te Okullardaki liderlik kapasitesinin öğretmenlerin örgütsel sapma düzeyini – *etik boyutunu* yordamasına ilişkin çoklu regresyon analizi sonuçlarına yer verilmiştir.

Değişken	B	Standart hata	β	t	p	İkili r	Kısmi r
Sabit	1.819	.105		17.402	.000		
<i>Dağıtımçı Liderlik</i>	-.068	.060	-.113	-1.139	.255	-.22	-.06
<i>Paylaşılan Okul Vizyonu</i>	.012	.076	.020	.163	.870	-.21	.01
<i>İşbirliği ve Ortak Sorumluluk</i>	-.004	.069	-.007	-.064	.949	-.21	-.003
<i>Algılanan Öğrenci Başarısı</i>	-.098	.070	-.153	-1.389	.166	-.23	-.07
R=.238	R ² =	F _(4, 359) =5.410	p=.000				

Tablo 3. Örgütsel sapma-etik boyutunu yordamasına ilişkin regresyon analizi sonuçları

Tablo 3'te, Örgütsel sapma - *etik boyutu* ile liderlik kapasitesinin *dağıtımçı liderlik boyutu* arasında ($r=-.22$), *paylaşılan okul vizyonu boyutu* arasında ($r=-.21$), *işbirliği ve ortak sorumluluk boyutu* arasında ($r=-.21$) ve *algılanan öğrenci başarısı boyutu* arasında ($r=-.23$) ters yönlü ve düşük düzeyde ilişkiler olduğu görülmektedir. Diğer değişkenler kontrol edildiğinde de Örgütsel sapma-etik boyutu ile liderlik kapasitesinin *dağıtımçı liderlik boyutu* arasında ($r=-.06$), *işbirliği ve ortak sorumluluk* ($r=-.003$) ve *algılanan öğrenci başarısı* ($r=-.07$) boyutları arasında ters yönlü ve düşük düzeyde ilişki bulunmaktadır. Ancak *paylaşılan okul vizyonu* boyutu ($r=.01$) ile pozitif yönde ve düşük düzeyde ilişki bulunmaktadır.

Liderlik kapasitesinin boyutları tümü birlikte, öğretmenlerin Örgütsel sapma-etik boyutu düzeyleri ile düşük düzeyde ve anlamlı bir ilişki vermektedir ($R=.238$, $R^2=.057$, $p<.01$). Bu boyutların tümü birlikte Örgütsel sapma-etik boyutunu toplam varyansın yaklaşık % 1'ini açıklamaktadır.

Standardize edilmiş regresyon katsayısına (β) göre yordayıcı değişkenlerin öğretmenlerin Örgütsel sapma-etik boyutu üzerindeki göreceli önem sırası; *algılanan öğrenci başarısı*, *dağıtımçı liderlik*, *paylaşılan okul vizyonu* ve *işbirliği ve ortak sorumluluk* şeklindedir.

Regresyon katsayılarının anlamlılığına ilişkin t-testi sonuçları incelendiğinde tüm boyutların örgütsel sapma- *etik boyut* üzerinde önemli yordayıcı olmadığı görülmektedir.

Elde edilen bulgulara göre Örgütsel sapma-etik boyutunun yordanmasına ilişkin regresyon eşitliğinin matematiksel modeli aşağıda verilmiştir:

Örgütsel sapma-etik boyut= 1.819 -.068*dağıtımçı liderlik* +.012*paylaşılan okul vizyonu* -.004*işbirliği ve ortak sorumluluk*-.098*algılanan öğrenci başarısı*

Tartışma ve Sonuç

Öğretmen görüşlerine göre örgütsel sapma davranış düzeyine ait bulgular incelendiğinde;

Öğretmenlerin algıladıkları sapma davranışları, *bireysel* ve *örgütsel* alt boyutlarında “nadiren” görülürken *etik* alt boyutunda ve ölçek genelinde ise “Hiçbir zaman” düzeyinde görülmektedir. Örgütsel alt boyut $\bar{x} = 1,93$ ile en yüksek düzeye, *bireysel boyut* $\bar{x} = 1,81$, *etik* alt boyutu ise $\bar{x} = 1.35$ ile en düşük değerlendirmeye sahiptir. Başka bir ifadeyle, katılımcı öğretmenlerin *bireysel* ve *örgütsel boyutta* yer alan örgütsel sapma davranışlarıyla çok az karşılaştıkları, *etik boyutta* yer alan davranışlarla hemen hemen hiç karşılaşmadıkları söylenebilir. Bu çalışmada elde edilen bulgular, Avcı (2008, 145), Argon ve Ekinci (2016,136), İyigün (2011, 125), Köse (2013, 67) ve Aksu (2016, 593)'nın yaptığı çalışmalar ile benzerlik göstermektedir. Ancak Aksu (2016, 593)'nın çalışmasında öğretmenlerin algıladıkları sapma davranış düzeyi en az *etik* ($x = 1.55$) görülmesi benzer bir durum iken, *bireysel boyutta örgütsel boyuttan* daha çok görülmesi Apaydın ve Şirin (2016, 63) ve Akdoğan ve Fettahlıoğlu (2015,48)'nın çalışmalarındaki gibi farklılık göstermektedir.

Okullarda Örgütsel Sapma ölçeği madde ortalamalarına bakıldığında en yüksek ortalamaya sahip olan maddeler Örgütsel boyutta yer alan “Okulun olumsuzlukları hakkında başkalarıyla konuşurlar.” ($\bar{x}=2,12$, $s=1,04$) ve “Çalışma arkadaşları hakkında dedikodu yaparlar.” ($\bar{x}=2,00$, $s=1,05$) maddeleridir. En yüksek ortalamaya sahip ölçek maddelerinin bile ortalamalarının bile çok yüksek olmadığı söylenebilir. Bu bulgu, Köse (2013) tarafından yapılan çalışma aynı iki maddedir. Türktaş Anasız (2016, 52), Demir (2009,158), Chirasha ve Mahapa (2012, 419)'nın da çalışmalarında dedikodu davranışının örgütlerde en yaygın davranış olduğunu ifade etmeleri

benzerdir. Okullarda Örgütsel Sapma ölçeği madde ortalamalarına bakıldığında en düşük ortalamaya sahip olan madde *Etik boyutta* yer alan “Uyuşturucu kullanırlar.” ($\bar{x}=1,29$, $s=.58$) maddesidir. Bu bulgu, Köse (2013) tarafından yapılan çalışması ile benzerlik göstermektedir.

Öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyine ait bulgular incelendiğinde; Öğretmen görüşlerine göre OLKÖ’de en yüksek ortalamaya sahip olan maddenin “Sınıf içi uygulamaları (öğretimi ve ölçme değerlendirme) tüm öğrencilerin öğrenmesi için planlarız.” ($\bar{x}=3.16$, $s=.74$) maddesi olduğu görülmüştür. Bunun sebebi öğretmenlik mesleğini yapan herkesin ilk amacının öğrencilerin öğrenmesi olduğu söylenebilir. Öğretme süreci ve yapılan ölçme-değerlendirmede gibi tüm sınıf içi uygulamaların öncelikli ve son amacı öğrencinin öğrenmesi, öğrenme düzeyinin belirlenmesi ve geliştirilmesidir. En düşük ortalamaya sahip olan madde ise *dağıtımci liderlik boyutu* “Hepimiz birbirimize liderlik etme fırsatı yaratacak şekilde hareket ediyoruz.” ($\bar{x}=2.73$, $s=.89$) maddesidir. Doğan (2016)’ın çalışmasında da aynı maddeler en yüksek ve en düşük ortalamaya sahiptir. Öğretmen görüşlerine göre OLKÖ’de en yüksek ortalamaya sahip olan ikinci madde “İhtiyaç duyulduğunda işleri gerçekleştirmek için yeni komisyonlar oluştururuz.” ($\bar{x}=3.13$, $s=.78$) maddesi olarak görülmektedir. Bunun sebebinin zümre toplantıları, şube öğretmenler kurulu gibi oluşumların zorunlu olarak yapılması olabilir. Bu süreçler tüm öğretmenler tarafından mutlaka gerçekleştirilir ve resmi olarak tebliğ edilip işin sonucu yazılı olarak bildirilir. Ölçek genelinde en düşük ortalamaya sahip olan madde “Hepimiz birbirimize liderlik etme fırsatı yaratacak şekilde hareket ediyoruz.” ($\bar{x}=2.73$, $s=.89$) maddesidir. Ölçek genelinde en düşük ortalamaya sahip olan ikinci madde ise “Yönetimle ilgili işlerde yetkiyi paylaşıyoruz.” ($\bar{x}=2.76$, $s=.91$) maddesidir. En düşük ortalamaya sahip iki maddenin en düşük boyut ortalamasına sahip *dağıtımci liderlik boyutunda* olması liderlik denince akla ilk gelen kişinin okul müdürleri olması olabilir. Okul müdürleri yapılan iş ve işlemlerde yönetimi tek elinde bulundurarak karar vermede en yetkili kişilerdir. Öğretmenlerin görüşleri alınsa bile esas olan okul müdürünün kararıdır. Lambert (2002)’a göre liderlik kavramı genellikle bir kişi ya da bir pozisyonla eşdeğer tutulur. Oysaki yetki ve sorumluluk tüm okul olarak paylaşılmalıdır. Öğretmen liderliği okul gelişimini sürdürmeye yardımcı olur.

Katılımcıların görüşlerine göre ölçeğin alt boyutlarına ilişkin ortalamalarının sırasıyla *algılanan öğrenci başarısı boyutu* ($\bar{x}=3.03$, $s=.63$), *işbirliği ve ortak sorumluluk boyutu* ($\bar{x}=2.97$, $s=.66$), *paylaşılan okul vizyonu boyutu* ($\bar{x}=2.90$, $s=.66$), *dağıtımci liderlik boyutu* ($\bar{x}=2.88$, $s=.67$) olduğu görülmektedir. *Algılanan öğrenci başarısı boyutunun* en yüksek ortalamaya sahip olması öğretmenlik mesleğinin temel amaçlarıyla uyumaktadır. Katılımcıların dağıtımci liderliğe yönelik görüşlerinin görece olarak düşük düzeyde olmasının nedenlerinden birinin, okullarda geleneksel otokratik liderlik anlayışının hâlâ büyük oranda geçerliliğini ve güncelliğini koruyor olması olduğu söylenebilir (Kılınç, 2013, 149). Liderlik kavramına yönelik tanımlama yapması istenilen katılımcıların çoğu liderliği topluluk içerisinde kurulan otorite, yetki olarak ifade etmişlerdir (Doğan, 2016, 69). Geleneksel hiyerarşik düzene ve tek adam yaklaşımlarının aksine, liderliği paylaşmak, güven kaynaklı işbirliğinin diğerlerinin uzmanlıklarına saygı duymaya ve başarı için ortak dayanışmaya bağlıdır (Özçetin, 2013, 54). Kılınç (2013)’ın çalışmasında ölçeğin alt boyutlarına ilişkin ortalamalarının aynı sırayla ve yakın ortalamayla *algılanan öğrenci başarısı boyutu* ($\bar{x}=3.01$), *işbirliği ve ortak sorumluluk boyutu* ($\bar{x}=2.93$), *paylaşılan okul vizyonu boyutu* ($\bar{x}=2.79$), *dağıtımci liderlik boyutu* ($\bar{x}=2.72$) olduğu görülmektedir. Doğan (2016)’ın çalışmasında da ölçeğin alt boyutlarının sırasının aynı olması benzer bir bulgudur. Ölçeğin genel ortalaması ($\bar{x}=2.95$, $s=.60$) da Kılınç (2013) tarafından yapılan çalışma ortalamasıyla ($\bar{x}=2.86$) benzerlik göstermektedir.

Öğretmen görüşlerine göre okullarda örgütsel sapma davranış düzeylerine ait bulguların çeşitli değişkenlere göre değerlendirilmesine ilişkin bulgular incelendiğinde;

Elde edilen verilere göre okullarda sergilenen sapma davranış düzeylerine ilişkin öğretmen görüşleri tüm ölçekte ve alt boyutlarda cinsiyete göre anlamlı bir şekilde farklılık göstermemektedir. Ayrıca erkek öğretmenlerin algıladıkları sapma davranış düzeyi tüm ölçekte ve alt boyutlarda kadın öğretmenlerin algıladıkları sapma davranış düzeylerinden daha yüksektir olduğu saptanmıştır. Bu çalışmada elde edilen bulgular, Köse (2013, 70)’nin çalışması ile benzerlik göstermektedir. Ayrıca erkek öğretmenlerin algıladıkları sapma davranış düzeyi de tüm ölçekte ve alt boyutlarda kadın öğretmenlerin algıladıkları sapma davranış düzeylerinden daha yüksek olması bulgusu da benzerdir. İyigün (2011, 125), Balay ve Sağlam (2008, 1) ve Kalağan ve Güzeller (2010, 89) de katılımcıların cinsiyetlerine göre anlamlı bir farklılık olmadığını belirtmiştir. Doğan ve Uğurlu (2014, 498) ve Bayın ve Yeşilaydın (2014, 95)’in çalışmalarında da cinsiyete göre anlamlı bir şekilde farklılık göstermeme bulgusu örtüşmektedir. Ancak kadın katılımcıların algıladıkları sapma davranış düzeyi erkek katılımcıların algıladıkları sapma davranış düzeylerinden daha yüksek olması bulgusu farklılık göstermektedir. Sezici (2015, 14) ve Yalap (2016, 78) tarafından yapılan çalışmalarda elde edilen bulgularda erkek katılımcıların kadın katılımcılardan daha yüksek düzeyde olması bulgusu benzerdir. Ancak bu çalışmalarda örgütsel sapma cinsiyete

göre anlamlı şekilde farklılık göstermektedir. Yurt dışında yapılan çalışmalarda, Hollinger ve Clark (1982, 341) cinsiyet göre bir farklılık olmadığı bulgusu ve Anwar, Sarwar, Awan ve Arif (2011, 196)'ın erkek öğretmenlerin kadın öğretmenlere göre daha çok sapma davranışı sergilendiğinin belirtilmesi örtüşmektedir. Chirasha ve Mahapa (2012, 419) kadınların algılarının daha yüksek olduğunu belirtmesi farklılık gösterirken bunun sebebinin kadınların da dedikodu yapan grupta olduklarını belirtmişlerdir.

Örgütsel sapma –*bireysel boyut* düzeyleri arasında öğretmenlerin branşları bakımından anlamlı bir farkın olduğu görülmektedir. Meslek öğretmenlerinin sahip olduğu örgütsel sapma –*bireysel boyut* düzeyi sınıf öğretmenlerine göre daha yüksek olduğu saptanmıştır. Örgütsel sapma –*örgütsel boyut* düzeyleri arasında da öğretmenlerin branşları bakımından anlamlı bir farkın olduğu görülmektedir. Sınıf öğretmenlerinin sahip olduğu örgütsel sapma –*örgütsel boyut* düzeyi branş öğretmenlerine ve meslek dersi öğretmenlerine göre daha düşük olduğu saptanmıştır. Sınıf öğretmenlerinin algı düzeyinin daha düşük olma sebebi daha küçük yaş grubu öğrencilerle çalışmaları için öğrenciye ve okula daha bağlı olmaları söylenebilir. Örgütsel sapma-*etik boyut* ve ölçek genelinde ise öğretmenlerin branşları bakımından anlamlı bir farkın olmadığı görülmektedir. Bu bulgular, Köse (2013)'nin çalışması ile Örgütsel sapma-*etik boyut* ve ölçek genelinde öğretmenlerin branşları bakımından anlamlı bir farkın olmaması benzerlik gösterirken *bireysel boyut* ve *örgütsel boyut* düzeyleri arasında anlamlı bir farkın olması bulgusu ile çelişmektedir. Kalağan ve Güzeller (2010, 89)'in çalışmasında ise okullarda sapma olarak nitelendirilebilecek davranışlarla ilgili öğretmenlerin branşlarına göre anlamlı bir farklılığın olduğu bulgusuyla benzerdir. Balay ve Sağlam (2008, 1)'in çalışmasında anlamlı farklılığının olmadığı bulgusu ile çelişmektedir.

Örgütsel sapma-*bireysel boyut* ve *etik boyut* düzeyleri arasında öğretmenlerin yaşları bakımından anlamlı bir farkın olmadığı saptanmıştır. *Örgütsel boyut* ve ölçek genelinde ise öğretmenlerin yaşları bakımından anlamlı bir farkın olduğu görülmektedir. 33-42 arası yaşa arası öğretmenlerin algı düzeyi, 43-52 arası yaş arası öğretmenlere göre daha düşük olduğu saptanmıştır. Bayın ve Yeşilaydın (2014, 95) yaşa göre anlamlı bir şekilde farklılık göstermediğini ifade etmiştir. Ayrıca hem genel örgütsel sapma ($1,91 \pm 0,70$) hem örgüte yönelik sapma ($1,98 \pm 0,84$) hem de bireyler arası sapma ($1,84 \pm 0,69$) ortalamalarının tüm yaş grupları arasında en yüksek 40 yaş ve üzeri katılımcılara ait olması bulgusu da bu çalışmadaki farklılığın görüldüğü yaş grubuna benzerdir. Balay ve Sağlam (2008, 1), Yalap (2016, 79), Kalağan ve Güzeller (2010,90), İyigün (2011,166), Hollinger ve Clark (1982, 341)'da katılımcıların yaşına göre anlamlı bir farklılık olmadığını saptamıştır. Gruys ve Sackett (2003,36), Appelbaum ve Deguire ve Lay (2005, 45), Lau, Au ve Ho (2003,39) ise yaş arttıkça çalışanların daha az sapma davranışı gösterdiğini ifade etmişlerdir.

Elde edilen verilere göre okullarda sergilenen sapma davranış düzeylerine ilişkin öğretmen görüşleri tüm ölçekte ve alt boyutlarda kıdeme göre anlamlı bir şekilde farklılık göstermemektedir. Bu bulgu, Bayın ve Yeşilaydın (2014, 95), Doğan ve Uğurlu (2014, 499), İyigün (2011, 172) ve Köse (2013)'nin çalışması ile benzerlik göstermektedir. Ancak Kalağan ve Güzeller (2010, 90) ve Gruys ve Sackett (2003, 36)'ın çalışmaları ile çelişmektedir. Bu çalışmalarda mesleki kıdemleri az olan öğretmenlerin algılarının daha yüksek olduğu belirtilmiştir.

Elde edilen verilere göre okullarda sergilenen sapma davranış düzeylerine ilişkin öğretmen görüşleri tüm ölçekte ve alt boyutlarda okuldaki görev süresine göre anlamlı bir şekilde farklılık göstermemektedir. Bu bulgu Balay ve Sağlam (2008, 1), Yalap (2016, 79) ve İyigün (2011, 170) tarafından çalışma ile benzerlik göstermektedir. Sezici (2015,14) ise çalışmasında üretkenlik karşıtı iş davranışları boyutlarından saboteetme boyutunda, staj süresi değişkenine bağlı istatistiksel olarak anlamlı bir farklılık saptamıştır. Sabote etme boyutuna göre 60-89 gün staj yapan bireylerin ($X=1.21$), 30-59 gün staj yapan bireylere ($X=1.05$) ve 90gün üstü staj yapan bireylere ($X=1.10$) göre daha yüksek bir değere sahip olduklarını belirtmiştir.

Örgütsel sapma-*etik boyut* düzeyleri arasında okul türüne göre anlamlı bir farkın olmadığı saptanmıştır. Örgütsel sapma-*bireysel boyut* düzeyleri arasında ise okul türü bakımından anlamlı bir farkın olduğu görülmektedir. İlkokulda görev yapan öğretmenlerin algı düzeyi, Anadolu lisesi ve meslek lisesinde görev yapan öğretmenlere göre daha düşük olduğu saptanmıştır. Ayrıca Meslek lisesinde görev yapan öğretmenlerin sahip olduğu örgütsel sapma-*bireysel boyut* davranışları algı düzeyi, ilkokul ve ortaokulda görev yapan öğretmenlere göre daha yüksek olduğu saptanmıştır. Örgütsel sapma-*örgütsel boyut* düzeyleri arasında da anlamlı bir farkın olduğu görülmektedir. Anadolu lisesinde görev yapan öğretmenlerin sahip olduğu örgütsel sapma-*örgütsel boyut* davranışları algı düzeyi, İlkokul ve Ortaokulda görev yapan öğretmenlere göre daha yüksektir. Ölçek genelinde de okul türü bakımından anlamlı bir farkın olduğu görülmektedir. Anadolu lisesinde görev yapan öğretmenlerin sahip olduğu örgütsel sapma davranışları algı düzeyi, İlkokul ve Ortaokulda görev yapan öğretmenlere göre daha yüksek olduğu saptanmıştır. Bu bulgu Kalağan ve Güzeller (2010, 92)'in çalışması ile benzerlik göstermektedir. Çalışmalarında okul türlerine göre anlamlı şekilde farklılık görüldüğünü [$X^2(8)=31.64$; $p<0.01$] belirtmişlerdir. İlköğretimde görev yapan öğretmenlerinin kız meslek lisesi öğretmenlerinden daha düşük örgütsel sinizm düzeyine sahip olduğu

bulunmuştur. Diğer yandan bu bulgu Bayın ve Yeşilaydın (2014, 95)'ın çalışmasında görev yapılan birime göre anlamlı bir şekilde farklılık göstermediğini ifadesi ile çelişmektedir.

Tüm ölçekte ve alt boyutlarda okulun yerleşim yerine göre anlamlı bir şekilde farklılık görülmemektedir. Köy/mahallede bulunan okullarda görev yapan öğretmenlerin algıladıkları sapma davranış düzeyi ilçe merkezinde görev yapan öğretmenlerin algıladıkları sapma davranış düzeyinden tüm alt boyutlarda ve ölçek genelinde daha yüksektir. Köy/mahalle okullarında çalışan öğretmen sayısı daha az olduğu için birbirlerini gözlemleme ve sergilenen örgütsel sapma davranışını fark etme ihtimali yüksek olduğu için algıladıkları düzey de yüksek olabilir.

Bireysel boyuta ilişkin veriler incelendiğinde, öğretmenlerin eğitim düzeyine göre anlamlı bir farkın olduğu görülmüştür. Yüksek lisans mezunu öğretmenlerin algıladıkları sapma davranış düzeyi önlisans/lisans mezunu öğretmenlerin algıladıkları sapma düzeyinden daha yüksektir. *Etik Boyuta* ilişkin veriler incelendiğinde de, öğretmenlerin eğitim düzeyine göre anlamlı bir farkın olduğu görülmüştür. Önlisans/lisans mezunu öğretmenlerin algıladıkları sapma davranış düzeyi Yüksek lisans mezunu öğretmenlerin algıladıkları sapma düzeyinden daha yüksektir. *Örgütsel boyuta* ve ölçek geneline ilişkin veriler incelendiğinde, öğretmenlerin eğitim düzeyine göre anlamlı bir farkın olmadığı görülmüştür. Bu verilere göre okullarda sergilenen sapma davranış düzeylerine ilişkin öğretmen görüşleri *bireysel boyutta* ve *etik boyutta* eğitim düzeyine göre anlamlı bir şekilde farklılık gösterirken *örgütsel boyutta* ve tüm ölçekte anlamlı bir farklılık göstermemektedir. Bayın ve Yeşilaydın (2014, 95), İyigün (2011, 166), Yalap (2016, 81), Köse (2013)'nin çalışmalarında okullarda sergilenen sapma davranış düzeylerine ilişkin öğretmen görüşlerinin eğitim düzeyi değişkenine göre anlamlı farklılığın görülmediğini belirtmiştir. Kalağan ve Güzeller (2010, 91) ise eğitim durumları arasında yapılan tek yönlü varyans analizi sonucunda gruplar arasında istatistiksel açıdan anlamlı bir fark gözlemlendiğini belirtmiştir [$F_{(2,322)}=2.77$; $p<0,1$]. Lisansüstü mezunlarının örgütsel sinizm düzeylerinin daha yüksek olduğu hesaplanmıştır. Balay ve Sağlam (2008, 1) ise öğretmenlerin sınıf içi olumsuz davranışlara ilişkin görüşleri onların eğitim düzeylerine göre anlamlı şekilde farklılık gösterdiğini belirtmiştir. Bu bağlamda, ön lisans düzeyinde eğitim almış öğretmenlerin sınıf içi olumsuz davranışlara ilişkin görüşleri, lisansüstü eğitim almış olanlardan daha yüksek bulunmuştur.

Öğretmen görüşlerine göre okulların liderlik kapasitesi düzeylerine ait bulguların çeşitli değişkenlere göre değerlendirilmesine ilişkin bulgular incelendiğinde;

Okulların liderlik kapasitesi düzeylerine ilişkin öğretmen görüşleri *dağıtımçı liderlik boyutunda* cinsiyete göre anlamlı bir şekilde farklılık göstermemektedir. Kılınç (2013, 108)'ın çalışmasında liderlik kapasitesi-*dağıtımçı liderlik* alt boyutuna ilişkin bulgu ve Korkmaz ve Gündüz (2011,124)'ün çalışmasındaki bulgularla örtüşmektedir. *Paylaşılan okul vizyonu boyutu, işbirliği ve ortak sorumluluk boyutu, algılanan öğrenci başarısı boyutu* ve tüm ölçek genelinde ise anlamlı bir şekilde farklılık göstermektedir. Kılınç (2013, 108)'ın çalışmasında liderlik kapasitesinin alt boyutlarına ilişkin görüşlerinin cinsiyet değişkenine göre anlamlı bir fark göstermediği [$(\lambda = 1.000, F_{(4, 2230)} = .27, p > .05)$] bulgusu ile çelişmektedir. Ayrıca Doğan ve Uğurlu (2014, 498) ve Doğan (2016, 65)'ın çalışmaları ile de farklılık göstermektedir. Bu çalışmada kadın öğretmenlerin algıladıkları okulların liderlik kapasitesinin düzeyi erkek öğretmenlerin algıladıkları okulların liderlik kapasitesi düzeyinden daha yüksek olduğu saptanmıştır. Ancak Doğan (2016, 65)'ın çalışmasında erkek katılımcıların puanları ortalamasının çok az oranda kadın öğretmenlerin puanından yüksek görüldüğünü belirtmiştir.

Öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyleri arasında ölçek genelinde ve tüm alt boyutlarda branşın önemli bir değişken olmadığı ifade edilebilir. Bu bulgu Korkmaz ve Gündüz (2011, 124) ve Doğan (2016) çalışmaları ile örtüşmektedir.

Öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyleri arasında ölçek genelinde ve tüm alt boyutlarda yaşın önemli bir değişken olmadığı ifade edilebilir. Bu bulgu Korkmaz ve Gündüz (2011,124)'ün çalışması ile benzer sonuç göstermektedir.

Öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyleri arasında ölçek genelinde ve tüm alt boyutlarda kıdemin önemli bir değişken olmadığı ifade edilebilir. Bu bulgu, Doğan (2016, 81), Doğan ve Uğurlu (2014, 499) ve Korkmaz ve Gündüz (2011,124)'ün çalışmaları ile benzerlik göstermektedir. Ancak Kılınç (2013, 154)'ın araştırma sonuçları ile farklılık göstermektedir. Çalışma öğretmenlerin liderlik kapasitesi ve alt boyutlarına ilişkin görüşlerinin kıdem değişkenine göre anlamlı şekilde farklılaştığını göstermektedir. Kıdem arttıkça, öğretmenler liderlik kapasitesinin alt boyutlarına ilişkin daha olumlu görüşlere sahip olmaktadır.

Öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyleri arasında ölçek genelinde ve tüm alt boyutlarda okuldaki çalışma süresinin önemli bir değişken olmadığı saptanmıştır. Bu bulgu Korkmaz ve Gündüz (2011, 124)'ün çalışması ile örtüşmektedir.

Okul türüne göre öğretmen görüşleri, okulların liderlik kapasitesi -*dağıtımçı liderlik boyutu* algı düzeyleri arasında anlamlı bir farklılık saptanmıştır. Anadolu lisesinde görev yapan öğretmenlerin sahip olduğu liderlik kapasitesi -*dağıtımçı liderlik boyut* algı düzeyi ilkökulda görev yapan öğretmenlere göre anlamlı bir şekilde daha düşüktür. *Paylaşılan okul vizyonu, İşbirliği ve ortak sorumluluk, algılanan öğrenci başarısı* alt boyutları ve ölçek genelinde ise okul türüne göre anlamlı bir farkın olmadığı saptanmıştır.

Okulların liderlik kapasitesi düzeylerine ilişkin öğretmen görüşleri *dağıtımçı liderlik, paylaşılan okul vizyonu* alt boyutlar arasında ve tüm ölçekte okulun bulunduğu yerleşim yerine göre anlamlı bir şekilde farklılık göstermezken *işbirliği ve ortak sorumluluk boyutu ve algılanan öğrenci başarısı boyutunda* anlamlı bir şekilde farklılık göstermektedir. Köy/mahallede görev yapan öğretmenlerin İlçe merkezinde görev yapanlardan tüm ölçek ve alt boyutta daha yüksek ortalamaya sahip olduğu görülmüştür. Erdoğan (2012) küçük okullarda okulun ortak amaç ve değerlerinin paylaşılma düzeyi büyük okullara göre daha fazla olduğunu ifade etmiştir. Okulların liderlik kapasitesi düzeylerine ilişkin öğretmen görüşleri tüm ölçekte ve alt boyutlarında öğretmenlerin eğitim düzeyine göre anlamlı bir şekilde farklılık göstermemektedir. Bu bulgu Korkmaz ve Gündüz (2011, 124)'ün çalışması ile örtüşmektedir.

Öğretmen görüşlerine göre okulların liderlik kapasitesi düzeyinin öğretmenlerin örgütsel sapma davranış düzeyini yordamasına ilişkin bulgular incelendiğinde;

Örgütsel sapma-bireysel boyutu ve örgütsel boyutu ile liderlik kapasitesinin alt boyutları ile ters yönlü ve orta düzeyde anlamlı ilişkiler olduğu görülmektedir. Etik boyut ile de ters yönlü düşük düzeyde ve anlamlı ilişkiler olduğu görülmektedir. Bu bulgu alanyazındaki çalışmalarla benzerlik göstermektedir. Aksu (2016, 594) çalışmasında bireysel sapma davranışları ile dönüşümcü liderlik ($r=-,426$) ve işlemci liderlik ($r=-,349$) arasında orta düzey negatif ilişki, laissez-faire liderlik tarzı ($r=,206$) arasında düşük düzeyde pozitif ilişki bulunduğunu ifade etmiştir. Etik sapma davranışları ile dönüşümcü liderlik ($r=-,255$) ve işlemci liderlik ($r=-,237$) arasında da düşük düzey negatif ilişki, laissez-faire liderlik tarzı ($r=,182$) arasında düşük düzeyde pozitif ilişki olduğu saptanmıştır. Doğan ve Uğurlu (2014, 499) da okul yöneticilerinin etik liderlik davranışları ile öğretmenlerin örgütsel sinizm algıları arasındaki ilişki okul yöneticilerinin “etik liderlik” davranışları ile öğretmenlerin sinizme “toplam” ilişkin algıları arasında orta düzeyde, negatif ve anlamlı bir ilişki ($r=-,404$, $p<.01$) görüldüğünü belirtmiştir. Buna göre de öğretmen algılarına göre yöneticilerin etik liderlik davranışları arttıkça öğretmenlerin sinizmin “bilişsel”, “duyuşsal”, “davranışsal” boyutlarına ve sinizme “toplam” ilişkin algılarının azaldığını ifade etmiştir. Köse (2013, 89) de çalışmasında örgütsel sapma ile stratejik liderlik arasında yüksek, negatif, anlamlı bir ilişki bulunduğunu ($r=-,43$, $p<.01$) ifade etmiştir. Örgütsel sapma düzeyi ile stratejik liderlik düzeyi arasında $-.43$ düzeyinde anlamlı bir ilişki bulunduğunu ve buna göre ortaokul müdürlerinin stratejik liderlik davranışları arttıkça okullardaki örgütsel sapma davranışlarının azaldığını belirtmiştir.

Olumsuz sapma davranışları tüm örgütlerde olduğu gibi okullarda da istenmemektedir. Elde edilen bulgulara göre sapma davranışları düşük düzeyde de olsa okullarda görülmektedir. Mümkün olduğunca bu tür davranışları tamamen ortadan kaldırmak gerekmektedir. Sapma davranışlarını etkileyen birçok etmen bulunmaktadır. Bunlardan bir tanesi de okulların liderlik kapasitesidir. Okul müdürlerinin tek elinde olan bir yönetim anlayışı günümüz şartlarında değişmekte ve gelişmekte olan okulların ihtiyaçlarını karşılayamamaktadır. Okulların liderlik kapasitesi geliştirilmeli, yetki ve sorumluluklar paylaşılmalıdır. Okulların liderlik kapasitesinin geliştirilmesine katkı sağlamak için okul müdürlerine konu ile ilgili eğitimler verilebilir. Sapma davranışını etkileyebilecek farklı değişkenlerle de kıyaslamalar yapılabilir. Bu çalışma Muğla ilindeki devlet okullarında gerçekleştirilmiştir. Yeni çalışmalar özel okullarla da kıyaslayarak ve farklı illerde de yapılabilir.

Kaynakça

- Akdoğan, Z. & Fettahlioğlu, Ö. O. (2015). *Bilgi yönetimi ve örgütsel sapma davranışları arasındaki ilişkiye yönelik alan araştırması*. Social Studies Sciences Journal, 1(1), 42-51. doi:http://dx.doi.org/10.26449/sssj.1
- Aksu, A. (2016). Organizational deviance and multi-factor leadership. *Educational Research and Reviews*, 11(8), 589-597. doi:10.5897/ERR2016.2671
- Anwar, M. N., Sarwar, M., Awan, R. N. & Arif, M. I. (2011). Gender differences in workplace deviant behaviour of university teachers and modification techniques. *International Education Studies*, 14(1), 193-197. Retrieved from http://dx.doi.org/10.5539/ies.v4n1p193
- Apaydın, Ç. & Şirin, H. (2016). The relationship between organizational citizenship, group cohesiveness and workplace deviance behaviour of turkish teachers. *International Educational Studies Canadian Center of Science and Education*, 9(10), 58-69. Doi:10.5539/ies.v9n10p58
- Appelbaum, S.H., Deguire, K.J. & Lay, M. (2005). The relationship of ethical climate to deviant workplace behavior. *Corporate Governance*, 7(4), 43-56. doi:10.1108/147207007510616567

- Appelbaum, S.H., Iaconi, G.D. & Matousek, A. (2007). Positive and negative deviant workplace behaviors: causes, impacts and solutions. *Corporate Governance*, 7(5), 586-598. doi:10.1108/14720700710827176
- Argon, T. & Ekinci, S. (2016). Teachers' views on organizational deviance, psychological ownership and social innovation. *Universal Journal of Educational Research*, 4(12A), 133-139. doi:10.13189/ujer.2016.041317
- Avcı, N. (2008). *Konaklama işletmelerinde örgütsel öğrenme, iş tutumları ve örgütsel sapma arasındaki ilişkinin analizi*, (Yayımlanmamış Doktora Tezi). Dokuz Eylül Üniversitesi, Sosyal Bilimler Enstitüsü, İzmir.
- Ayazlar, G. & Güzel, B. (2013). Örgütsel adaletin otel çalışanlarının işten ayrılma niyeti ve işyerinde sapma davranışına etkisi. *Seyahat ve Otel İşletmeciliği Dergisi*, 10(3), 6-23. <http://dergipark.gov.tr/download/article-file/117435>
- Balay, R. & Sağlam, M. (2008). Sınıf içi olumsuz davranışlara ilişkin öğretmen görüşleri. *Yüzüncü Yıl Üniversitesi, Eğitim Fakültesi Dergisi*, 5(2), 1-24. <http://yyu.dergipark.gov.tr/yyuefd/issue/13714/166030>
- Bass, M. B. (2000). The future of leadership in learning organizations. *Journal Of Leadership Studies*, 7(3), 18-40. Retrieved from <https://doi.org/10.1177/107179190000700302>
- Bayın, G. & Yeşilaydın, G. T. (2014). Hemşirelerde örgütsel sapma davranışının analizi: bir üniversite hastanesi örneği. *İşletme Araştırmaları Dergisi*, 6(3), 81-107. doi:10.20491/isader.2014315941
- Bennet, R. J. & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal Of Applied Psychology*, 85(3), 349-360. doi:10.1037//0021-9010.85.3.349
- Bodankin, M. & Tziner, A. (2009). Constructive deviance, destructive deviance and personality: how do they interrelate? *Amfiteatru Economic Economic Interferences*, 9(26), 549-564. <https://ideas.repec.org/a/aes/amfeco/v11y2009i26p549-565.html>
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş. & Demirel, F. (2016). *Bilimsel araştırma yöntemleri*. 21. Baskı, Ankara: Pegem Akademi.
- Chirasha, V. & Mahapa, M. (2012). An analysis of the causes and impact of deviant behaviour in the workplace. *The Case of Secretaries in State Universities. Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*, 3(5), 415-421. Doi:10.1.1.300.4561
- Demir, M. (2009). *Konaklama işletmelerinde duygusal zeka, örgütsel sapma, çalışma yaşamı kalitesi ve işten ayrılma eğilimi arasındaki ilişkinin analizi*, (Yayımlanmamış Doktora tezi). Dokuz Eylül Üniversitesi, Sosyal Bilimler Enstitüsü: İzmir.
- Demir, M. & Tütüncü, Ö. (2010). Ağırlama işletmelerinde örgütsel sapma ile işten ayrılma eğilimi arasındaki ilişki. *Anatolia: Turizm Araştırmaları Dergisi*, 1(21), 64-74.
- Doğan, S. (2016). *İlköğretim okullarında liderlik kapasitesinin belirlenmesi; Bursa ili örneği*. (Yayımlanmamış Yüksek Lisans Tezi). Osmangazi Üniversitesi Eğitim Bilimleri Enstitüsü: Eskişehir.
- Doğan, S. & Uğurlu, C. T. (2014). Okul Yöneticilerinin Etik Liderlik Davranışları ile Öğretmenlerin Örgütsel Sinizm Algıları Arasındaki İlişki. *Gazi Üniversitesi Eğitim Fakültesi Dergisi*, 34(3): 489-516. doi:10.17152/gefad.00239.
- Dunlop, P. D. & Lee, K. (2004). Workplace deviance, organizational citizenship behavior, and business unit performance: the bad apples do spoil the whole barrel. *Journal Of Organizational Behavior*, 25(1), 67-80. doi:10.1002/job.243
- Erdoğan, Ç. (2012). *İlköğretim okulu müdürlerinin etik liderlik davranışları*. (Yayımlanmamış yüksek lisans tezi), Yıldız Teknik Üniversitesi, İstanbul
- Gils, S.V., Quaquebeke, N. S., Knippenberg, D. V., Dijke, M. V. & Cremer, D. (2014). Ethical leadership and follower organizational deviance: the moderating role of follower moral attentiveness. *The Leadership Quarterly*, 26, 190-203. Retrieved from <http://dx.doi.org/10.1016/j.leaqua.2014.08.005>
- Gruys, M. L. (1999). *The dimensionality of deviant employee behavior in the workplace industrial relations center. University of Minnesota, Office of Naval Research N00014-98-1-0872 Doctor of Philosophy in Human Resources and Industrial Relations in the Graduate School of the University of Minnesota*
- Gruys, M. L. & Sackett, P. R. (2003). Investigating the dimensionality of counterproductive work behavior. *International Journal of Selection and Assessment*, 11(1), 30-43. doi:10.1111/1468-2389.00224
- Güçlü, N. (2016). *Eğitim yönetiminde liderlik: teori, araştırma ve uygulama*. 1. Baskı, Ankara: Pegem Akademi.
- Hollinger, R. & Clark, J. (1982). Formal and informal social controls of employee deviance. *The Sociological Quarterly*, 23(3), 333-343.
- İyigün, Ö. (2011). *Psikolojik kontratın örgütsel sapma üzerindeki etkisinde kişilik özelliklerinin rolü ve bir araştırma*. (Yayımlanmamış Doktora Tezi). Marmara Üniversitesi, Sosyal Bilimler Enstitüsü: İstanbul.
- Kalağan, G. & Güzeller, C. O. (2010). Öğretmenlerin Örgütsel Sinizm Düzeylerinin İncelenmesi. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 27, 83-97. <http://egitimdergi.pamukkale.edu.tr>
- Kılınç, A. Ç. (2013). *İlköğretim okullarında liderlik kapasitesinin belirlenmesi*. (Yayımlanmamış Doktora Tezi). Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.

- Kılınç, A. Ç., Büyüköztürk, Ş. & Akbaba Altun, S. (2014). Okullarda liderlik kapasitesi ölçeğinin (OLKÖ) Türkçeye uyarlanması: geçerlik ve güvenirlik çalışması. *Kuram ve Uygulamada Eğitim Yönetimi*, 20(1), 23-46. doi:10.14527/kuey.2014.002
- Korkmaz, E. & Gündüz, H. B. (2011). İlköğretim Okulu Yöneticilerinin Dağıtımçı Liderlik Davranışlarını Gösterme Düzeyleri. *Kalem Eğitim ve İnsan Bilimleri Dergisi*, 1(1), 123 – 153.
- Köse, S. G. (2013). *Ortaokul öğretmenlerinin örgütsel sapma ve stratejik liderlik arasındaki ilişki üzerine algıları: İzmir ili örneği*. (Yayımlanmamış Yüksek Lisans Tezi). Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü: İzmir.
- Köse, S. G. & Aksu, A. (2013). Okullar için örgütsel sapma ölçeği. *NWSA- Education Sciences*, 1C0593, 8 (3), 375-389. <http://dx.doi.org/10.12739/NWSA.2013.8.3.1C0593>
- Lambert, L. (1998). *Building leadership capacity in schools*. Association for Supervision and Curriculum Development, Virginia, USA Retrieved from [https://books.google.com.tr/books?hl=tr&lr=&id=_QORel5eBwC&oi=fnd&pg=PR6&dq=Lambert,+L.+\(1998\).+Building+Leadership+Capacity+I+n+Schools.+Association+for+Supervision+and+Curriculum+Development](https://books.google.com.tr/books?hl=tr&lr=&id=_QORel5eBwC&oi=fnd&pg=PR6&dq=Lambert,+L.+(1998).+Building+Leadership+Capacity+I+n+Schools.+Association+for+Supervision+and+Curriculum+Development)
- Lambert, L. (2002). *A framework for shared leadership*. Beyond Instructional Leadership, 59(8),37-40. Retrieved from <http://library.mu.edu.tr/Erişim> Numarası:6675194
- Lau, V. C. S., Au W. T. & Ho, J. M. C. (2003). A qualitative and quantitative review of antecedents of counterproductive behavior in organizations. *Journal of Bussiness and Psychology*,18(1), s. 73-99. Doi: 0889-3268/03/0900-0073/0.
- Lian, H., Ferris, D. L. & Brown, D. J. (2011). Does taking the good with the bad makethings worse? how abusive supervision and leader–member Exchange interact to impact need satisfaction and organizational deviance. *Organizational Behaviorand Human DecisionProcesses*, 117, 41–52.
- Özçetin, S.(2013). *Öğretmen liderliğinin okulun liderlik kapasitesinin gelişimine etkisi: bir durum çalışması*. (Yayımlanmamış Yüksek Lisans Tezi). Akdeniz Üniversitesi Eğitim Bilimleri Enstitüsü: Antalya.
- Özen, Y.,Gülaçtı, F. & Çıkılı, Y. (2004). Saldırganlığın psikolojik-kültürel boyutu ve vandalizm. *Doğu Anadolu Araştırmaları*,3(1), 144–149.
- Portin, B. S. & Shen, J. (1999). The changing principalship: its current status, variability, and impact. *The Journal of Leadership Studies*, 5(3), 93-113. doi:10.1177/107179199900500309
- Robbinson, S. L. & Bennet, R.J. (1995). A typology of deviant workplace behaviors: a multidimensional scaling study. *Academy of Management Journal*, 38(2), 555-572. doi:10.2307/256693
- Sezici, E. (2015). Üretkenlik karşıtı iş davranışları üzerinde kişilik özelliklerininrolü. *International Journal Of Economic and Administrative Studies*, 7(14), 1-22.doi:<http://dx.doi.org/10.18092/ijeas.08440>
- Tabachnick, B. G. & Fidell, L. S. (2013). *Using multivariate statistics*. (6. Baskı). Boston: Pearson Education. TDK.<http://www.tdk.gov.tr/index.php?> 22.10.217
- Türkkaş Anasız, B. (2016). *Öğretim üyelerinin örgütsel sapma davranışlarının incelenmesi: Muğla Sıtkı Koçman Üniversitesi Eğitim Fakültesi örneği*. (Yayımlanmamış Yüksek Lisans Tezi). Muğla Sıtkı Koçman Üniversitesi, Eğitim Bilimleri Enstitüsü: Muğla.
- Yalap, O. (2016). *Çalışanların örgütsel adalet algılamalarının örgütsel sapma davranışları üzerinde etkisi: tekstil sektöründe bir araştırma*. (Yayımlanmamış Yüksek Lisans Tezi). Gaziosmanpaşa Üniversitesi, Sosyal Bilimler Enstitüsü: Tokat.

¹Bu çalışmada kullanılan veriler Fatma ÇOLAK tarafından hazırlanan Okulların Liderlik Kapasitesi ve Öğretmenlerin Örgütsel Sapma Davranışları Arasındaki İlişki adlı yüksek lisans tezinde kullanılan verilerdir. Ayrıca bu çalışma Muğla Sıtkı Koçman Üniversitesi Bilimsel Araştırma Projeleri Koordinasyon Birimi tarafından Yüksek lisans tez projesi olarak desteklenmiştir.

On The Complementarity Between Physical And Digital Models In Designing Origami-Inspired Structures

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Abstract

In terms of design education, origami has been adopted as an effective medium for morphological explorations. In origami-inspired design, numerous translations between the physical and digital models are unavoidable for the feedback loop. However, repeating the translation is highly time-consuming so that the feedback loop tends to slow down. This study proposes a complementary form-finding process between physical and digital models in the design of origami-inspired structures by combining 3D scanning, parametric modeling, and augmented reality technology. Generating digital models through 3D scanning substitutes for digital modeling with mouse and keyboard. After going through a series of performance analysis and optimization, digital models can be compared with the physical models with the aid of an AR tool. The process facilitates physical properties of physical and digital models complementarily. It was applied to the initial design stage of the pavilion.

Introduction

Origami, the art of paper folding, is the technique of creating three-dimensional objects from two-dimensional sheets (Megahed, 2017). Based on the geometric pattern relations, it has been used to develop various engineering and design applications. This wide range of applications, from expandable medical stents to folding satellite antenna, has been named as 'Origamics' demonstrating the interdisciplinary nature including mathematics, engineering, and biology (Steward, 2007). Quite a few architects have been inspired by its stability and flexibility. Its mesh network works as a structural system, and its folding mechanism provides architecture with responsiveness beyond a conventional concept of static space.

Origami-inspired design needs a transdisciplinary approach including mathematics and physics to solve the problem of structure, function, and aesthetics. In terms of design education, origami has been adopted as an effective medium for morphological explorations. By algorithms based on mathematical or physical principles, physical origamis can be represented as digital origamis for parametric design with geometrical accuracy. Although current descriptive geometrical modeling is emerging rapidly, there is a limitation of the representation of materiality in the virtual environment. Furthermore, physics simulation leads to heavy loads of computing resources and delay of calculating time, so the real-time interaction between a designer and the design medium is disturbed. The physical model can be used complementarily because it is very beneficial for feeling and touching in exploring principles of form, morphology, and structure. Designers can take a strategy using physical models for exploring initial ideas fast and then digital models for developing them (Oxman, 2008).

Compared with traditional paper-based design, a distinguishing feature of the digital design is that it allows for a form-finding process through numerous iterations between generation and simulation. In origami-inspired design, a number of translations between the physical and digital models are unavoidable for the feedback loop. However, repeating the translation is so time-consuming that the feedback loop slows down. In addition, the continuity of design media is not maintained because there is a big difference between the actions of folding papers and digital modeling with keyboard and mouse. As a result, designers cannot test various design alternatives during the early design phase. Thus, there is the need of the form-finding process maximizing the availability of physical models while reducing its representation-redundancy.

This paper aims at investigating a form-finding process characterized by the complementarity between physical and digital models in designing origami-inspired structures. Physical computing technologies such as 3D scanning and augmented reality enable the translation between physical and digital models without the designers' intervention. Generating digital models through 3D scanning means that the action of folding papers substitutes for digital modeling. After going through a series of performance analysis and optimization, digital models can be compared with the physical models through augmented reality.

In chapter 2, the concept of design media, digital design process, and tangible user interface are explained in the context of origami-inspired design. In chapter 3, the critical tools including 3D scanning, parametric modeling, augmented reality are utilized in the design process. Each application operates its process, but the data structure should be modified to ensure the continuity of dataflow. In chapter 4, the design process was applied to the pavilion design, and the educational effectiveness was observed and discussed.

In most cases, a point cloud from 3D scanning is directly converted into a mesh for representing a physical object. The mesh is too complicated to be controlled because it is composed of the excessive amount of points. This paper proposes a series of mesh editing process including mesh reduction, data sorting, and partitioning for generating a simple parametric mesh proper to form-finding.

This research focuses on the initial design stage to test the potentials of the various origami patterns. A physical model in this research means just an origami made of a piece of paper. Although the design process does not deal with scale models with specific building components, its digital models are represented as detailed models with the support of building information modeling.

Backgrounds

2.1 Design media: Origami

Without having the actual object at hand, the designer needs a medium to develop and represent his/her formative idea (Gänshirt, 2007). Design activity is highly effected by visuospatial modeling media, so the design ability to adopt a strategy depends on them (Cross, 1990). Design media have direct and essential impacts in the way architecture is conceived, developed and communicated (Bermudez & King, 2000).

Architectural design media are categorized by various standards: verbal vs. non-verbal (visual), physical vs. digital, or two-dimensional vs. three-dimensional. However, considering the three-dimensional and model-based method of designing (Garber, 2014), physical and digital models are duumvirate of the design process virtually constructing buildings.

Physical models had been the most effective traditional design media even before a perspective appeared in Renaissance. Physical models, which are handmade, manual, and material, is useful to understand the structural system, space, and form. Digital models, which are electronic, computer-aided, or virtual, support designers with higher levels of geometrical definition and abstraction. During the design process, designers do not use only one or the other but alternate both of them. Many media iterations help designers grasp the difference between physical and digital models and therefore lead to the maximum exploitation (Bermudez & King, 2000).

In origami-inspired design, origami can be represented not only as physical and but also as digital models. Physical origamis actively enhance hand-eye coordination, which in turn positively influences and develops a better sense of spatial perception (Megahed, 2017). In the earliest form of architectural education, Joseph Albers in Bauhaus used paper folding to help his students discover the relationships between materiality, geometry, and structure.

Recently due to the advance in parametric design and digital fabrication technologies, students can make use of interactive digital tools to solve various architectural design issues from structure to detail. Digital origamis are controlled by parameters and unfolded into planar figures for laser-cutting.

2.2 Digital design process

Advances in BIM (Building Information Modeling) transform the digital design process from the traditional paper-based design process. The role of digital models, which was limited to representation, now extends to generation and virtualization. The origami-inspired design also needs to adopt the concept of the digital design process from an educational standpoint. It means that it is vital to develop the curriculum and design media for students to understand the digital design process.

BIM supports performance-oriented design which building performance is a guiding design principle. From the early design stage, the multiple different performances are considered simultaneously by close collaboration among the stakeholders (Kolarevic, & Malkawi, 2005). When simulation and optimization are combined, form-finding is possible for the optimal alternative. The performance-oriented design helps designers overcome the limitation of traditional architectural design and delivery process: linear procedure and minimized time for design (Garber, 2014). Now architectural students require the capabilities to integrate various building performances through operating simulation programs or collaborating with experts.

2.3 Tangible User Interface

Most of CAAD (Computer Aided Architectural Design) programs rely on GUI (Graphic User Interface) which is a standard paradigm of HCI (Human-Computer Interaction) with a mouse-driven cursor and multiple windows. The “See, point, and click” interaction of GUI replaced for the “Remember and type” interaction of CUI (Command User Interface). Advanced modeling techniques such as polygon modeling and NURBS (Non-Uniform Rational B-Spline) extended the possibility of GUI as design media.

However, hand-eye coordination is tacit knowledge which is not easy to learn. Designers embody the operating principles inherent in individual modeling techniques and reorganize the body sensations through trials and errors (Park, 2009). Considering educational practices, it is hard to teach the theoretical backgrounds for digital design and techniques operating a certain software for a limited time. Furthermore, in designing origami-inspired structures, especially, the hand-eye coordination of GUI and folding papers are very different.

TUI (Tangible User Interface) has been researched to bridge the gap between physical and digital worlds. To

facilitate human haptic perceptions, physical objects or hand motions are used for substitutes of keyboards and mouse which are input devices of GUI. To enhance spatial cognition, AR (Augmented reality) mixes reality with virtual reality instead of just projecting on flat monitors. Since John Frazer's Universal Constructor in the early 1990s, TUI researchers have invented various tabletop applications for architecture, landscape, and urban planning.

The educational impact of TUIs as design media also has been investigated. Compared with GUI, TUI activates their spatial reasoning and collaboration far more because it reduces designers' cognitive load through seamless interactions between human and computer (Kim & Maher, 2008). However, no specific research has been undertaken on TUIs for origami-inspired design.

Methodology

The methodology works as a kind of design interface that allows designers to input physical origamis and obtain BIM with optimized shapes. It consists of a combination of 3D scanning, parametric modeling, and augmented reality as shown in [Figure 1]. To ensure the continuity of the data flow, it needs to be processed into the data format required by each process. The data formats used in this process are as follows: 1) 3D scanning: from point cloud to mesh 2) Parametric modeling: from complex mesh to simple parametric mesh and BIM 3) AR: mesh or BIM.

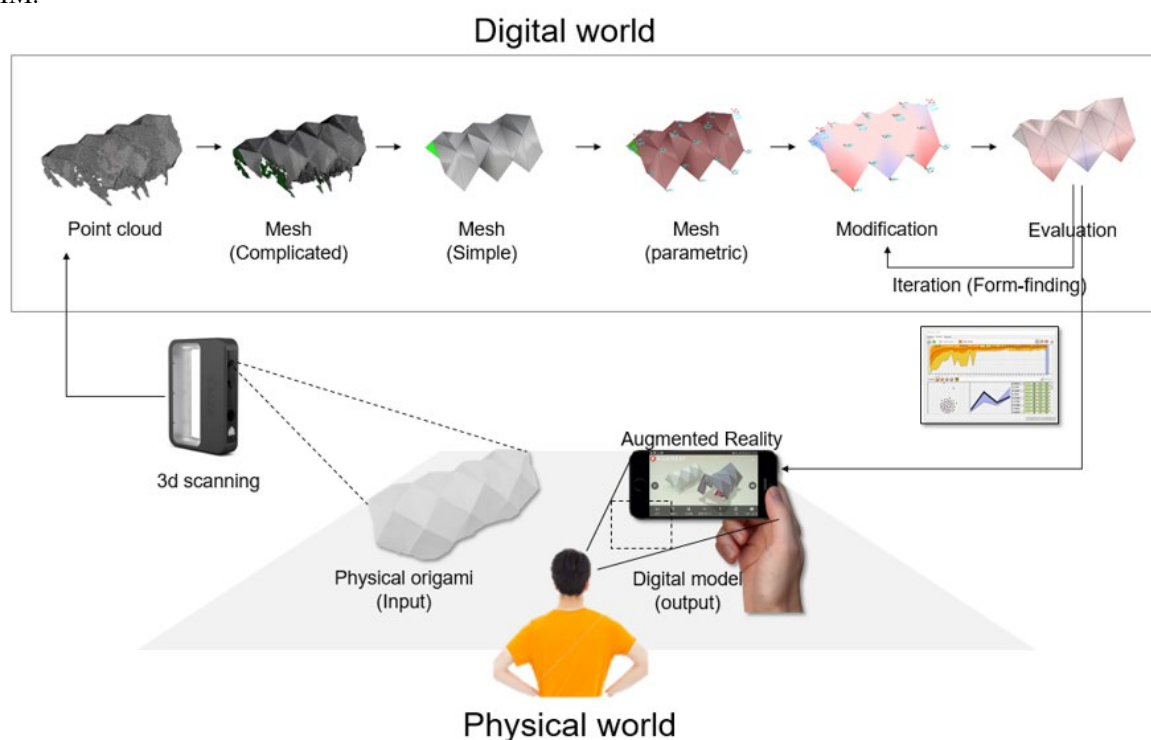


Figure 1: A dataflow diagram between physical and digital model

3.1 3D scanning: From physical to digital

The form of a physical origami, an initial input of the process, is digitized using a non-contact active scanner considering its weakness. It emits radiation or light, detects the reflection and generates a point cloud in virtual space. The form cannot be probed at once by one 3D scanner with a cone-like field of view, so multiple point clouds from different viewpoints are integrated.

3.2 Parametric modeling

A polygon mesh is generated from point clouds through Delaunay triangulation which is a mathematical way of joining a set of points to make a triangular mesh. It is scaled up to a real structure, and the unnecessary mesh faces are removed by manual selection. It is accurate to the form of the physical origami geometrically but has far more mesh faces than those of the physical origami. It needs to be simplified and parameterized to get simple parametric mesh proper to form-finding as shown in [Figure 2].

(1) Mesh simplification

Mesh reduction algorithm is used to simplify the complex mesh while preserving its overall shape. The mesh faces are reduced until the digital origami has the same number of mesh faces with the physical origami. However, this technique is applicable only to the origami which consists of triangle meshes.

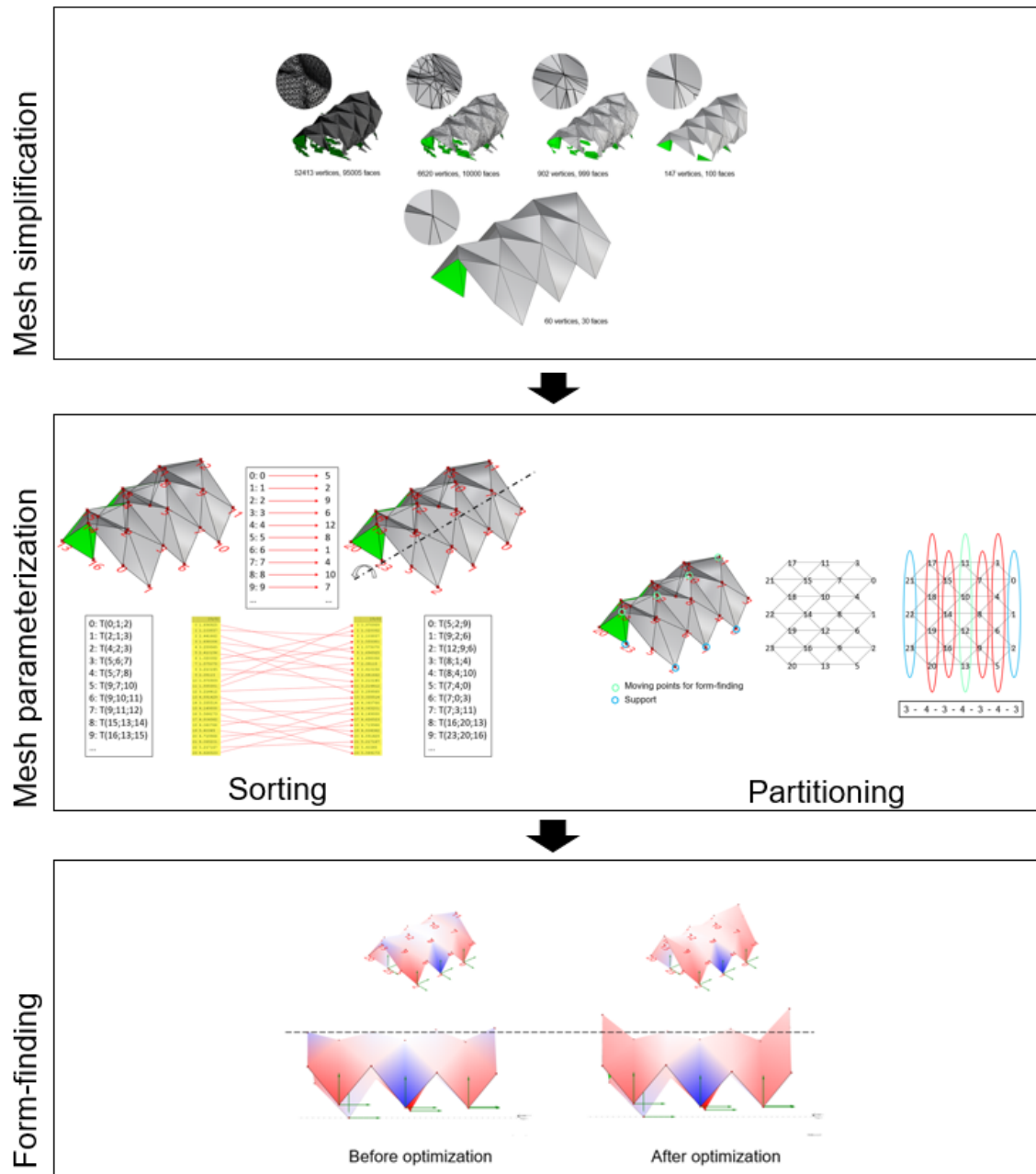


Figure 2: Parametric modeling process: Mesh simplification, parameterization, and form-finding

(2) Mesh parameterization

A polygon mesh is transformed by editing its mesh points. However, the data order of the mesh points is determined during the previous steps including 3D scanning and mesh simplification. For utilizing the mesh as a parametric model which is transformed by parameters, the data order of the mesh points should be rearranged and grouped regarding its structural system.

Using Stable sorting algorithm which maintains the relative order of records with equal keys (i.e., values), the data order is rearranged according to the numerical order of the location of mesh points. Each mesh needs its ranking way of the numerical order according to its topology. Every mesh face consists of a set of three vertices connected to others and represented like $T \{1, 7, 4\}$. They should be updated by reflecting the new data order of sorted points to maintain the same form of the mesh.

To classify the mesh points individually by their structural roles, the number of points corresponding to the origami pattern is input and used to partition the list into sub-lists. Some mesh points touching the ground serve as supports and others are selected as movable points for form-finding.

(3) Form-finding

Designers can find the optimal form from the numerous alternatives generated by changing the position of the mesh points or the properties of mesh faces. When mesh points, edges, and faces are replaced by specific building

components such as columns, beams, and windows, more detailed and various performances are analyzed as well as structural analysis.

3.3 Augmented reality: From digital to physical

Using AR application of a smartphone, the physical origami as an initial input is compared with the digital origami which offers more capabilities and realistic appearances in the same space. A designer moves and rotates the digital origami through moving tracking marker or touching screens.

Experiment

The methodology proposed in the previous chapter was applied to the initial design stage of the pavilion. The origamis used in the experiment were limited to triangle meshes and made of A4 paper. Three cases were used in the experiments as shown in [Figure 3].

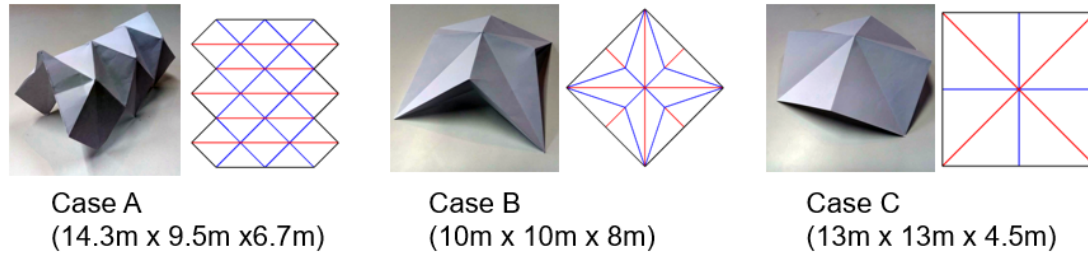


Figure 3: Three design cases used in the experiments

In the course of parameterizing the meshes, all three cases needed the different coordinate systems for sorting and grouping pattern regarding the structural systems. In case of A, the coordinates were reoriented to the polar coordinate system and (3-4-3-4-3-4-3) grouping pattern. In Case of B, the z coordinates of the mesh points were used and (4-4-1) grouping pattern. In Case of C, the z coordinates of the mesh points were used and (4-4-4-1) grouping pattern.

A key performance for form-finding was its structural stability. The purpose of the optimization was to minimize the displacement caused by the gravity, and the method was GA (Genetic Algorithm). The hardware devices and software programs used in each step are as shown in [Figure 4].

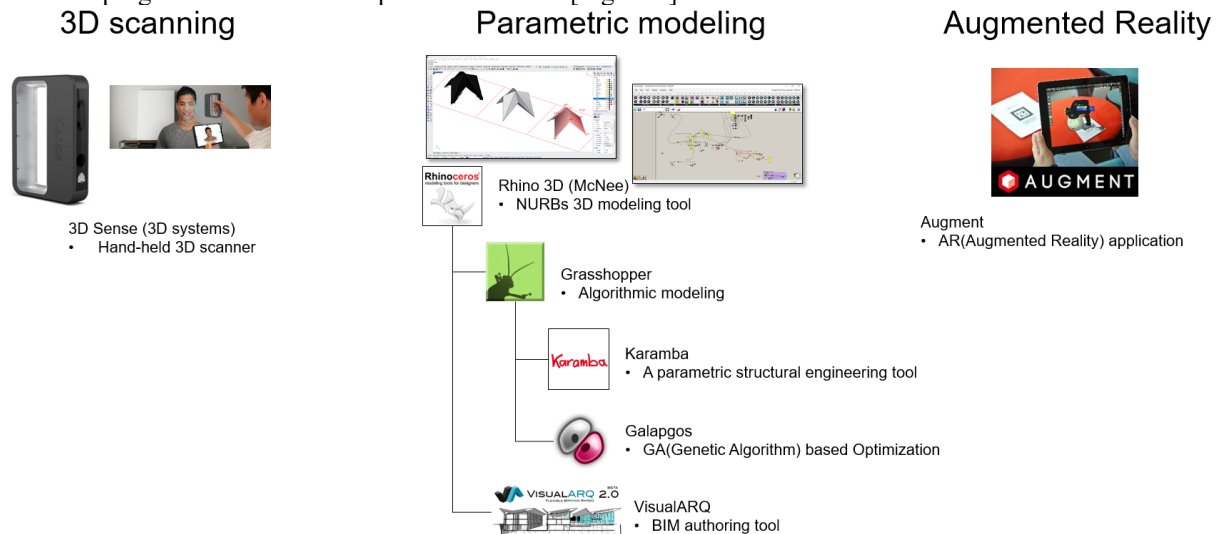


Figure 4: Hardware devices and software programs used in the experiments

Results

All the cases were structurally optimized and developed into the detailed building information models as shown in [Figure 5]. For form-finding, designers selected the moving points and their ranges considering their design intention and requirements. The maximum displacements of all the cases were reduced, but the reduced amounts varied from case to case.

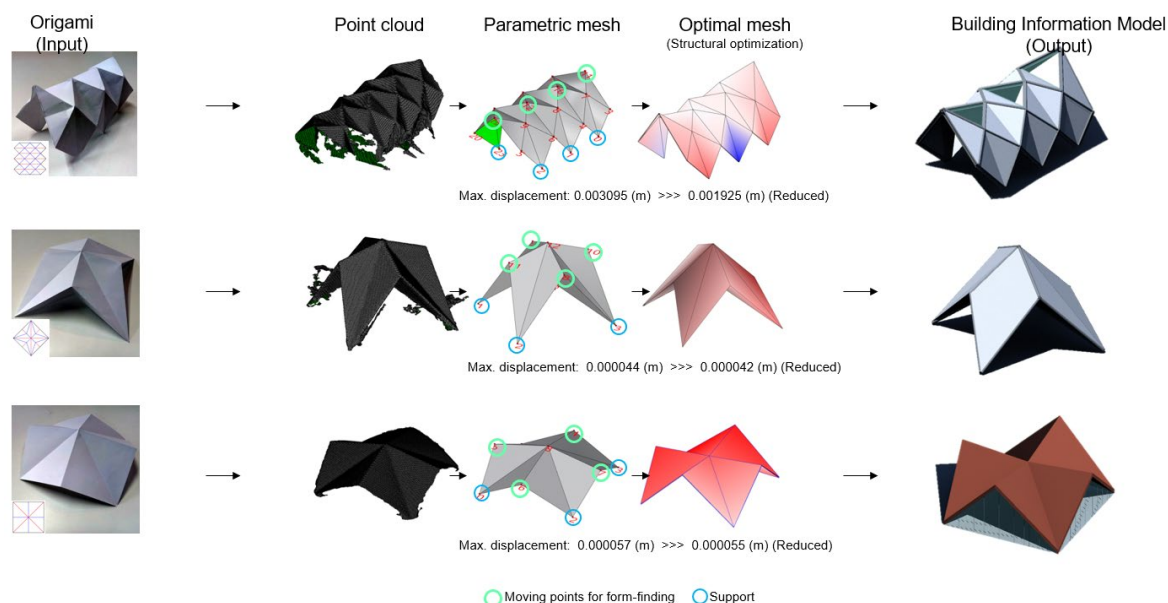


Figure 5: The results of the experiments

Findings

A physical origami is not strong enough to show its structural stability. However, it provides the topology of the structure which digital model can utilize for form-finding with virtual materiality. It is difficult to specify the direction and scope of optimization using only digital models without physical models. Physical origamis help designers understand the structural system of an origami and select points to optimize. In other words, a physical origami provides the topology of a structure, and a digital model can examine the structural possibilities on a building scale by reflecting virtual materiality.

Conclusion

This study proposes a complementary form-finding process between physical and digital models in the design of origami structures by combining 3D scanning, parametric modeling, and AR technology. The process facilitates physical properties of physical and digital models complementarily. Without designers' intervention, physical origamis were translated into digital origamis, optimized structurally and represented as specific building information models.

This paper has some limitations and necessitates future works. First, in terms of parametric modeling, the process needs to adopt the algorithm simplifying other polygon meshes. Second, in terms of performance-oriented design, the multi-criteria optimization including some environmental issues is the next step of this research. Third, in an educational sense, the methodology with real-time interactions is needed to research which designers learn tacit knowledge about the structural system.

Acknowledgement

This research was supported by Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Education (NRF-2016R1D1 A1B01013694).

References

- Bermudez, J., & King, K. (2000). Media interaction and design process: Establishing a knowledge base. *Automation in Construction*, 9(1), 37-56.
- Cross, N. (1990). The nature and nurture of design ability. *Design studies*, 11(3), 127-140.
- Gänshirt, C. (2007). *Tools for ideas: Introduction to architectural design*. Walter de Gruyter.
- Garber, R. (2014). *BIM Design: Realising the Creative Potential of Building Information Modelling*. John Wiley & Sons.
- Kim, M. J., & Maher, M. L. (2008). The impact of tangible user interfaces on spatial cognition during collaborative design. *Design Studies*, 29(3), 222-253.
- Kolarevic, B., & Malkawi, A. (2005). *Performative Architecture: Beyond Instrumentality*. Routledge.
- Megahed, N. A. (2017). Origami Folding and its Potential for Architecture Students. *The Design Journal*, 20(2), 279-297.
- Oxman, R. (2008). Digital architecture as a challenge for design pedagogy: theory, knowledge, models and medium. *Design Studies*, 29(2), 99-120.
- Park, H. (2009). *Interface-Chronology: human, design and technology*. Design flux.
- Stewart, I. (2007). Mathematics: some assembly needed. *Nature*, 448(7152), 419.

12 Eylül 1980 Askeri Darbe Döneminde Cumhuriyet, Hürriyet Ve Tercüman Gazetelerindeki Sansür / Oto-Sansür Uygulamaları

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Özet

Araştırmada, 12 Eylül 1980 - 6 Kasım 1983 arası istisna rejimi döneminde, iktidar ve medya arasındaki ilişki incelenirken, sansür uygulamalarıyla basındaki eğilimler ele alınarak, basın çalışanlarının 12 Eylül darbesini farklı yöntemlerle nasıl meşrulaştırdığı üzerinde durulmaktadır. Araştırma için dönemin üç gazetesi seçilmiştir. Bu gazetelerde çalışan ve özellikle o döneme tanıklık eden yazarlarla yapılan söyleşilerin karşılaştırmalı analizi ve seçilen iki “Örnek olayın” medyada konumlanmaları ile sansür ve oto-sansür durumu saptanmaktadır. Basın, askeri rejimin ideolojisine yakın tutum içinde darbe öncesi, demokratik yönetimin teminatı olan parlamento ve bağımsız bir hukuk düzeni içinde bürokrasinin işletilmesinden sorumlu politikacıları olumsuz göstererek, 12 Eylül darbesi gerekçelendirilmiştir. 12 Eylül yöneticileri, sıkıyönetim düzeni içinde, güçlerinin meşrulaştırmasını sağlayarak, Türkiye’deki “hukuk” sistemini tamamen ortadan kaldırmış, yerine kendi “istisna yasasını” kurmuşlardır. Komutanların, toplumsal yaşamda demokratik tartışmayı kısıtlayarak istisna hali içinde geliştirdikleri sansür uygulamalarının günümüze dek sürdüğünü gözlemlemek mümkündür.

Online Assignments In Mathematics Courses At University

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Abstract

Teaching mathematics courses has undergone substantial changes in the past decade. From blackboard and piece of chalk to use of I-clickers and online learning management systems, modern technology has made its way in teaching undergraduate mathematics courses. Subsequently, online assignments (OA) have become an integral part of the teaching process. Many researchers have studied pros and cons of OA if compared with standard handwritten assignments. In addition, administrators, faculty, and students have noted that both types have distinctive positive characteristics but the advantage is still not clear when used in mathematics intensive courses. In this study, the overview of advantages and disadvantages of OA based on the literature review and recent developments in the use of OA in the Department of Mathematics at SFU (Department) are presented along with a personal experience in teaching various undergraduate mathematics courses with online assignments utilizing the online resources from leading publishers.

The Study

In the past five years, the author has used OA based on the following online platforms: LonCapa (Michigan State University), WileyPlus (Wiley), WebAssign (Cengage), and MathXL (Pearson) when teaching various Calculus II and I courses as well as the Introductory Course on Ordinary Differential Equations.

A detailed literature review with analysis of pros and cons of OA can be found in Penner, Kreuze, Langsam, and Kreuze (2016), Junjic, Kent, and Menz (2012), and Malevich (2011).

Based on the author's personal experience and incorporating some of the findings from above literature review it appears that pros and cons of OA can be briefly summarized as follows.

Advantages of OA:

- OA save university funds if compared with marking handwritten assignments;

In the Fall semester each academic year about 3500 students are taking first and second year service mathematics courses taught in the Department. The cost of marking 10 assignments per student per semester (only limited number of problems are being marked!) can be estimated as exceeding \$20,000. While pedagogically sound, handwritten assignments are costly.

- All problems in OA are marked versus only 2 selected problems currently being marked in hand-written assignments for service courses in the Department;

Students get often frustrated as they spend many hours solving 15-20 assigned problems and putting down their reasonably well presented solutions on numerous pages while only two problems are typically being marked. Some credit is still given for completing the assignments (about 20% of the overall mark) though. OA allow marking all assigned problems what leads to a positive student feedback.

- OA questions are randomized;

"Pirate copies" of major textbook solution manuals are readily available on internet. Introducing OA may eliminate cheating as the coefficients in the equations vary and depending on available randomization (differs for various platforms) only limited number of students may get the identical values if any.

- All major publishers are moving towards online textbooks and accompanying OA;

Depending on the publisher, the cost of OA may be included in the package with online textbook (Wiley and Cengage), if not – the cost for a standalone OA can be negotiated between the institution and the publisher (Pearson). In addition, financial assistance is available from the publishers for low-income students, as we have discussed with them.

- OA are appealing to the students to make mathematics "less boring";

Many courses in other disciplines at SFU are now computer-based. On average, majority of students in mathematics service courses are not particularly interested in mathematics and find it boring. OA facilitate the use of technology and appeal to the students.

- Provide the instructor with quick analysis which concepts/techniques were or were not learned well by the class; Quick detailed feedback on class performance is extremely helpful in teaching large service classes (150-500 students). It allows the instructor address problematic parts of class material before it interferes with subsequent learning and major tests.
- Provide good drill practice to the students with immediate feedback; OA allow for instantaneous assessment as opposed to a standard weeklong turnaround in case of paper assignments when the students have already little interest. In addition, for training purposes, multiple attempts are quite useful.
- Help students manage their time better, take up responsibility; In the survey, many students have noted that OA supported them in developing better time management habits. In my classes, weekly OA were due at 10pm, when no help is available. Students had to learn to start the assignments in advance, to be able to use the instructor's or TA's help during the office hours.

Disadvantages of OA:

- Cost for the students;
Some sequences of courses may use the same (online) textbook and/or OA platform, e.g. Calculus I / II / III (MATH-151/152/251). When negotiating with the publishers, the Department is always ensuring that the access pass would cover all semesters required to complete the sequence plus at least one extra semester (in case of failure or personal matters). Still, some students may take longer to complete all courses covered by the deal with the publisher. Also, in case of standalone OA (no textbook) students encounter extra cost if compared with handwritten assignments.
- Require more time on instructor's side;
Currently, there are five different OA platforms used in the Department. Learning various platforms and operating OA in courses that are using different platforms simultaneously is a challenging task. In addition, dealing with student real and perceived complaints in numerous e-mails ("I solved it right but it does not accept my answer", "no internet", "servers were overloaded", etc.), changing their grades is extremely time consuming and can easily go over 20 hours per week.
- Imperfect coding:
 - Not enough randomizations, students still cheat by forming "study" groups and taking turns in submitting answers with multiple tries.
 - Programming bugs are not rare when a correct symbolic answer is not accepted without explanations.
 - Correct symbolic answer may not be recognized because of simplification or lack thereof, when for example, student answers of $1/\sqrt{2}$ or $\sec^2 \theta / (3 \sec^2 \theta)$ were recognized as wrong.
 - Minor mistakes in syntax (which differs for each platform and can be readily confused by the students if they are simultaneously taking courses with different platforms) are recognized as a wrong answer.
 - Often, only the final answer is marked, no partial marks are given.
This causes a lot frustration when a student has to carry out a page-long solution and makes a small typo along the road; paper assignment would have recognized it and given a high partial mark instead.
- Simplified pedagogical approach:
 - Mainly "drill and practice" type questions versus open-end problems.
 - Limited number of attempted "conceptual" type questions are watered down by excessive steps/explanations and templates. It may give students too much structure, thereby promoting rote learning and precluding learning of the concepts behind problem solving.
 - Many platforms offer hints and referral to exact place in the textbook or even offer a solved similar example what is good for studying/tutoring purpose but is not sufficient to be considered an assessment tool of acquired knowledge.
 - Many drill questions (e.g. when finding derivatives or evaluating integrals) can be often done using the graphing calculator, Wolfram Alpha, Maple/Mathematica/Mathlab, or other analytical mathematics software thus allowing cheating on these questions.
 - Excessive number of T/F and/or multiple choice questions may lead to trial-and-error strategy rather than learning and solving and give the students false sense of security, later resulting in low quiz/test marks.
 - Questions of the sort "Match the correct graph" instead of "draw a graph" questions send a wrong message to the students who may not get enough understanding and preparation for the hand-written tests.
"In general, I think it is very important for the homework to reflect the caliber of work that is expected of students on quizzes and exams in the course. If students are not practicing and being reminded of how to use proper mathematical notation on a regular basis, then they will more than likely do a poor job of this on

quizzes and exams. I feel that it is unfair to students in courses that use only online homework, written exams, and no quizzes for students to get penalized on the written exams because the homework does not require them to show any of their work.” (Malevich, 2011, p.16).

Findings

I will present the results of online survey of the students in Calculus II for the Biological Sciences course MATH-155 (Spring 2018) carried out at the end of the semester. Usually, that the students in this class have strong working ethics. They are determined to succeed as many of the students intend to join a medical school after getting their undergraduate science degree. Out of 108 students registered in the class, 99 students filled in the survey. Class average was a “C”-grade (GPA of 2) what corresponded to 55-59%. This course does not use any official textbook. The OA were created using the MathXL platform by Pearson publishing house. As it is shown in Figure 1, 95% of the responders were convinced that OA were useful and helpful in mastering the course material even despite all glitches with software and multiple requests for remarking.

Online assignments helped me master the content of the course

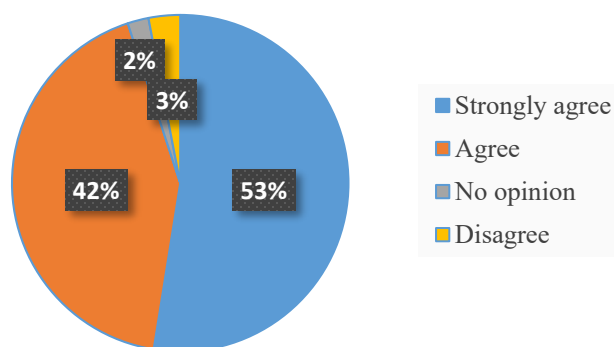


Figure 1

Online Survey Results on Usefulness of Online Assignments in Mastering the Course Content

The platform has a feature of providing the students with a solved hint example similar to the one they are solving. About 40% of the students found this feature helpful while 45% strongly agreed and agreed that it made the assignments too easy (Figure 2).

It was interesting to know the opinion of the students whether paper assignments would have been more efficient than OA (Figure 3). Here the class opinions were seriously split. The group of the weaker students favoured paper assignments: 35% strongly agreed (average “C-“, failure rate: 32.35%) and 18% agreed (average “C”, failure rate: 22.22%) that paper assignments would have been more helpful. At the same time, the stronger students (average “C+”, failure rate: 17.24%) clearly preferred OA. It is possible that the stronger students were better organized and could work on their assignments in advance, not leaving them to the night deadline. The weaker students may have liked paper assignments more because they would be still easier to cheat. This question needs to be studied more.

The average semester grade of the students in OA was 90.4% what is much higher than in case of paper assignments. This situation was observed in the previous classes as well. Since these abnormally high grades do not provide the students with true feedback on their current knowledge, I typically include quizzes in the class-marking scheme. While this class average on quizzes was much lower, only 46.26%, 52% of the students strongly agreed and 31% agreed that

In online assignments, using the solved "hint" example, made the assignments too easy

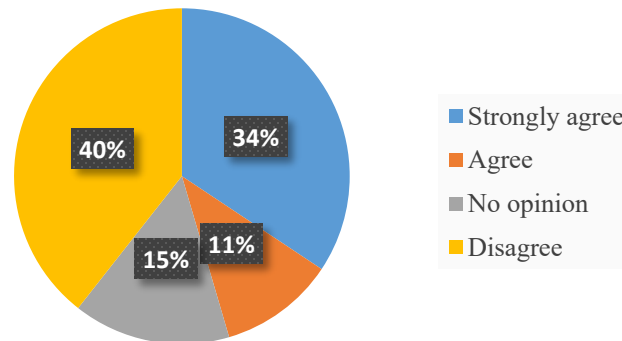


Figure 2

Online Survey Results on Usefulness of "Hint" Examples Provided by the Publisher

Paper assignments would have helped me better than online assignments, to master the course content

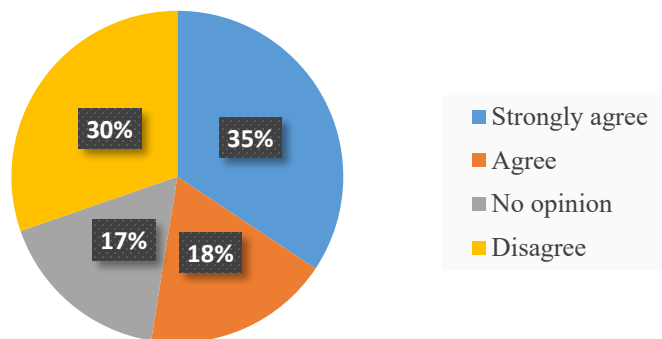


Figure 3

Online Survey Results on Usefulness of Online Assignments versus Paper Assignments quizzes were useful. Only a small group (4% of the respondents) disliked the quizzes, with three students among them failing the course (Figure 4). When studying the relationship between the overall course grades and quiz averages (Figure 5) it becomes clear that quizzes are reasonably good predictors of failure or success in the course.

Quizzes were helpful to master the class material

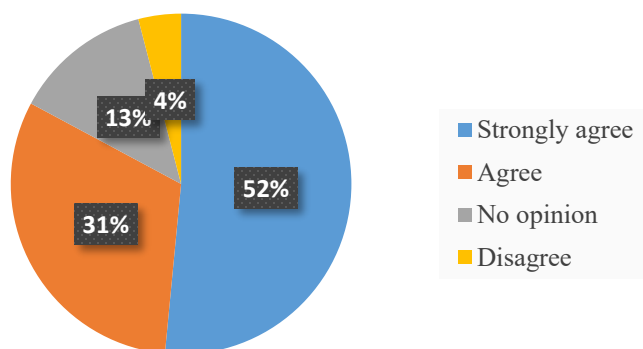


Figure 4
Online Survey Results on Usefulness of Weekly Quizzes

Quizzes vs course grade in MATH-155

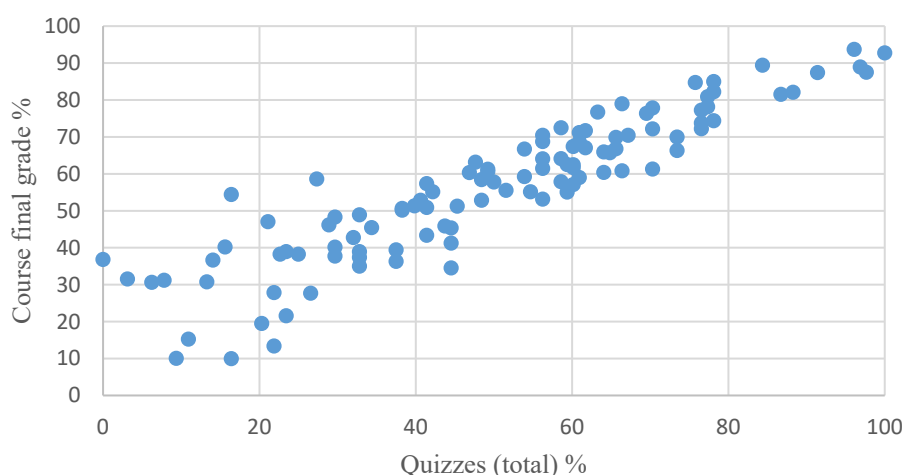


Figure 5
Relationship between Average Quiz Results and Overall Course Grades in the Course

Conclusions

In lower division undergraduate service mathematics classes OA can be viewed as a useful quick assessment and tutoring tool. At the same time, OA are lacking sophistication and challenges if compared with the problems on the serious tests. Therefore, OA should be used together with hand-written assignments and quizzes, in order to give students an experience of writing mathematics, in particular with proofs, what will be tested later during the midterm tests and on the final exams.

References

- Jungic, V., Kent, D., & Menz, P. (2012). On online assignments in calculus class, *Journal of University Teaching & Learning Practice*, 9(1). [On-line]. Available: <http://ro.uow.edu.au/jutlp/vol9/iss1/3/>.
- Malevich, K. (2011). *The Accuracy and Validity of Online Homework Systems*. MSc Thesis, Department of Mathematics and Statistics University of Minnesota Duluth. [On-line] Available: http://www.d.umn.edu/math/Technical%20Reports/Technical%20Reports%202007-TR%202011/TR_2011_2.pdf
- Penner, J., Kreuze, E., Langsam, S., & Kreuze, J. (2016). Online homework versus pen and pencil homework: do the

benefits outweigh the costs? [On-line]. Available:
<http://www.wiu.edu/cbt/jcbi/documents/NAASFeb2016/SpecialNAASIssueFeb2016-OnlineHomeworkVsPenAndPencilHomework.pdf>

Open And Closed Problems: A Comparison

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Abstract

This article recalls the definitions of open and closed problems in mathematics on the background of the historical course of implementing closed problems in Czech schools and their current role in the system. The main part of the study compares the positive and negative aspects of applying open and closed (with emphasis on multiple-choice) problems in the teaching and learning of mathematics. These aspects can be traced in other school subjects as well. The ideas presented here are based on four investigations – one conducted in the Slovak Republic, two others in the Czech Republic about ten years ago and, finally, on the results of a master's thesis work of the my student, and on my own long-term experience in creating problems of both types in the Czech Republic and abroad. I also include my personal view of the advantages and disadvantages involved in the use of these problems.

Keywords: *Open problem, closed problem, mathematics problem posing*

Introduction

This contribution deals with so-called open and closed problems. For detailed examples of problem classification, the reader is referred to the work of Byčkovský and Zvára (2007, pp. 16–22), Cihlár et al. (2007, pp. 7–8), and Zhouf (2010, pp. 28–29). Here, I will only take into account two of the many problem types, namely closed *multiple-choice problems*, and *open problems with an extensive answer*.

The main aim of the article is to point out those characteristics that distinguish one type from the other as well as those that they share. In the conclusion, I will further stress the inter-changeability of these two types of problems and, above all, the utility of closed problems. The reason for the latter argument can be found in the fact that closed problems are generally not perceived as quality problems by the Czech society. Such attitudes are also explained in the following text.

The methodology of the research lies in comparing pupils' written solutions to mathematical problems that were presented first in their open form and then in their closed form.

A Short History Of Multiple-Choice Problem Usage

In the book (Zhouf, 2010, pp. 29–30), there is described a short history of multiple-choice problems in the Czech Republic. While open problems have been always used in the Czech education system, multiple-choice problems have entered the scene in the Czech Republic only recently. Nonetheless, they are currently turning into a common tool for both teachers and pupils. Some similar aspects are described in the article (Zhouf, 2005, pp.139–143).

Historically, open problems probably preceded the closed ones. It is hard to tell when multiple-choice problems were first implemented. Let us mention that their wider use is first noted in the last century in North America (mainly in the USA and Canada), Western Europe, Australia and elsewhere. The many editions (since 1950) of *The Contest Problem Book* with sample problems for The Annual High School Mathematics Examinations should suffice as evidence.

This rise in multiple-choice problem usage can be attributed to the International Association for Evaluation of Educational Achievement (IEA) research. Founded in Holland in the 1950's, the IEA quickly extended its activities globally. Its most notorious research project, the Third International Mathematics and Science Study (TIMSS) in 1995, was initiated by the United States and countries in Western Europe. However, it involved many participant countries, including the Czech Republic, and gave them opportunity to contribute.

In the 1990's a similar long-term investigation was designed by the OECD. The main mathematics test took place in 2003 as the now well-known Programme for International Student Assessment (PISA). Unlike the TIMSS project, PISA focuses on pupils' mathematical literacy, connecting various mathematical areas, and testing so-called significant big mathematical ideas.

Related to the above international research, a similar national test with multiple-choice questions, *Sonda MATURANT*, was conducted repeatedly in the years 1997–1999. This test evaluated the knowledge and skills of students in their last year of higher secondary education, and was considered a pilot test for a planned standardized national leaving exam (the Czech maturita).

At the same time, publications with multiple-choice problems began to appear on the Czech market. Apart from the competition test Mathematics Kangaroo, one of the first books was 'Basic school mathematics in tests' (Matematika základní školy v testech) by Burjan and Bastlová, which was published in 1999 and contained a compilation of Czech basic (K-9) mathematical content in the test form.

Advantages And Disadvantages Of Each Of The Problem Type

The 'open vs. closed problem' discussion is a relatively common phenomenon in the Czech Republic: which of the two types is more suitable for mathematics? There are orthodox open end problem devotees, there are those who favour open problems with some tolerance for closed problems in specific insignificant cases, and finally, there are those who equally value both types. The author belongs to the final group. It should be noted that there is a very small number of people who advocate closed problems purely.

The most popular argument against multiple choice problems is that they encourage thoughtless guessing, and thus they cannot serve as a measure of pupils' real knowledge and skills. One way of dealing with this issue is to give punitive points for a wrong answer. This strategy has been adopted, for example, in the Mathematics Kangaroo competition.

Many test-makers investigate such issues: among the most prominent ones is the Scio agency in the Czech Republic, and the EXAM in Slovakia. Both of these institutions provide evidence that chance answers does not influence significantly the overall result in the case of a larger sample. The results may be distorted on an individual level only, while the whole is not affected. This finding is also supported by another Czech institution, the CERMAT, in the detailed statistical analysis by Řídká (2007).

Another argument against multiple choice problems holds that they are typically only simple problems. A more serious argument is based on the notion that one trivial (e.g. numerical) error has a fatal effect on the final answer. A multiple choice test is also believed to encourage copying during the sitting sessions.

On the other hand, there are some unquestionable advantages to multiple choices. One of them is the economical factor: multiple choice tests can cover a larger amount of content and the answers are easily evaluated. In defence of these problems it needs to be said that an open problem is equally prone to the trivial error problem, as it also consists of multiple steps any of which can lead to a taker's failure to as much as continue in solving the problem, the open problem may easily become numerically unmanageable and confusing.

One of the biggest disadvantages of open problems is the subjective factor in their scoring process - not only in case of multiple scorers but also when all scoring is done by the same person. As each pupil solution may affect a scorer in a different way, where many test-takers (e.g. at a nation-wide testing) naturally necessitate a larger number of test-scorers, objectivity cannot be assured even using rubrics, sample answers, or scoring coordinators (supervisors) (Zhouf, 2010, pp. 32). In my own experience, the difference between two scorers in the case of the Czech national Mathematics Olympiad can be up to 5 points out of a 6 point maximum. How is the situation when a pupil adopts a chance guessing strategy in a multiple choice test, operating at the 20 % probability level, different from this?

The effort to objectify open problem scoring is perhaps most manifest in institutions that conduct international research in the area of mathematical literacy across various age categories. One of the latest instruments used to this end is a pre-designed coding system: open constructed-response items require marking by a trained person who implements a marking rubric that may require an element of professional judgement. Because of the potential for disagreement between markers of these items, OECD/PISA implements marker reliability studies to monitor the extent of disagreement. Experience in these types of studies shows that clear marking rubrics can be developed and reliable scores can be obtained. (OECD, 1999, pp. 53)

Currently, the scoring system in PISA is designed in the following way: each step of the solution is coded with a double-digit code; the first digit typically assigns a degree of correctness, while the second digit denotes a particular choice of solution.

It should be apparent from the above, that such a coding system is still subjective. The reason lies in the fact that a) to anticipate all the possible solutions to an open problem is not feasible, and b) different scorers can perceive a step in a solution differently.

The advantages and disadvantages of both types of problems are discussed in further detail in (Sýkora and Zhouf, 2002, pp. 111–112), or (Zhouf, 2012), or (Zhouf, 2013).

Material And Methods

In order to see how the above characteristics of open and closed mathematical problems influence pupils' solutions to the problems and thus the pupils' assessment, it is necessary to investigate the way pupils actually solve the problems. To this purpose we will look at the results of studies in which pupils solved the same problems in both forms and analyse their written solutions. I depict three such studies: one conducted by a private subject in the Slovak Republic; one conducted by a public institution in the Czech Republic; and finally, one that preceded both of these, and was conducted by a master student where I was as a supervisor.

These three investigations took place about ten years ago. In the conclusion, a more recent study is included, one that maps out the current situation amongst teachers of mathematics in the Czech Republic, especially whether they prefer an open or closed form of mathematical problems, and how those views have changed over the span of years.

Results Concerning The Advantages And Disadvantages Of Both Types Of Problems

The first research in this area was conducted -- by a private bidder EXAM -- in Slovakia during the 1999-2001 MONITOR testing. Twelve pairs of problems were incorporated into two tests: in one test as multiple choice problems, and as open problems in the other. There were several thousand of pupils who took these tests; each pupil solved problems in only one form. The results can be summarized as follows: 'A (generally accepted) assumption was confirmed that multiple choice problems are overall easier for pupils than those requiring an open answer. However, the average difference is only 10 %, a fairly low value. Many problems showed no sensitivity to the form. There were also problems that showed worse results when posed in the multiple choice form. Those are typically problems with distractors that capture typical pupil misconceptions or mistakes. In some problems the difference in success rates for both types was relatively high – pupils were 30 % or even 40 % more successful when solving multiple choice problems.' (Burjan, 2001, pp. 10)

Another study took place in the Czech Republic during the CERMAT institute testing in the current decade. In addition to studying the reliability of both open and closed problem tests, the project also focused on the reliability in the case of various kinds of open problems (extended answer, short answer) and closed problems (multiple choice, dichotomy, matching, ordering). As concluded by Řídká (2007, pp. 169): 'The CERMAT tests repeatedly confirmed that the RIR (test item with test) correlation is significantly lower for closed problems than for open problems. Among the various types of closed problems it is the multiple choice problem that has the lowest of correlation that shows the lowest correlation. The interpretation at hand is that closed problems are, among other things, less reliable than open ones.'

The adoption of a punitive point system in multiple choice problem tests is intended to prevent massive guessing. In the above mentioned study, Řídká (2007, pp. 177) assesses the situation: '...using punitive points hardly ever affects the average result of a group. Thus it is possible, for example, to evaluate which class or which school is better. Conversely, it is impossible to compare objectively two individual test takers, no matter whether they were guessing or not. Only the data representing best test takers, those who should actually have no reason to be guessing, shows a minimal error.' Similarly, Klůfa and Kaspříková (2012, pp. 202) say that 'results can be evaluated quite easily for large number of students'.

Influenced by the debate over the suitability of closed (multiple choice) problems, I supervised a master thesis student dealing with this issue. From 1998 to 2003 Kateřina, the graduate student, investigated one of the pillars of the recent curricular reforms: the national standardized leaving exam (the maturita) in mathematics. She was creating prototypes of this part of the test, and looked for differences between a problem posed in its open and closed form, working with the solutions of high-school graduates-to-be. She designed several pairs of tests (one test with open form problems, one with the same problems in a closed form), statistically analyzed the results for both common and distinguishing phenomena. The data was collected from students of several upper secondary schools: some secondary grammar schools, some engineering schools, one business school, and one pedagogical school.

There were four versions of the tests: higher level with open problems, higher level with multiple choice problems, lower (basic) level with open problems, and lower (basic) level with multiple choice problems. Each version contained 7 problems. The allocated time was 35 minutes for multiple choice tests, and 40 minutes for the open problem tests, so that the testing could be done within one teaching period. The mathematical content of these problems was chosen to reflect the official document *Catalogue of requirements for the common part of the leaving examination in mathematics in 2004* (Katalog požadavků ke společné části maturitní zkoušky z matematiky v roce 2004). Each test version was piloted with about 100 pupils.

The graduate student conducted an item analysis for each problem, and the overall assessment of each test version. She used both the pupils' solutions to open problems and the cursory notes of pupils who solved closed problems. One analysis compared the results of tests in open and closed problem forms (there was used a punitive point system). Finally, she discussed the suitability of each item for the particular version (Zhouf, 2010, pp. 321–234).

The student was not a particularly enthusiastic advocate of the use of open problems in mathematics. Her second major was in teaching English as a foreign language (EFL). She could easily imagine the benefit of multiple choice questions in that subject, but in mathematics only with difficulty. After the study she wrote: 'The results of the investigation indicate that closed problems have a higher success rate. However, the reasons for this are not always evident (see word problems and missing answers). I found out that pupils are not able to simply estimate an answer and choose from the alternatives without doing a calculation. The same solution process for both forms was frequently evident in the written data. It would seem that the test takers who had choices provided in the test would have a certain advantage, as they could use the multiple choices to check their own solutions, or to simply guess. However, the pupils' solutions do not confirm this. It is apparent that they are afraid to take a risk in guessing when they do not understand the problem. My own belief about open problem tests' higher validity has not altered. It was merely influenced by the opportunity to take a look at the pupils' solutions of closed problems.' (Sedláčková, 2003, pp. 83–84)

Rephrasing the students' statement about the suitability of closed problems, the investigation did not shake her

beliefs, though a light trace of doubt can be detected. She further concludes that pupils are reluctant to take the risk involved in guessing the answer, but that they can learn to adopt even the guessing strategy through repeated test-taking.

The last study has been in process for the past two years. In it, the author asks teachers what form of mathematical problems they prefer. The interviews are always informal, and the number of respondents is so far around 200. Quantitative analysis is not of interest here, as the main research question is whether the views on open and closed problems, presented in the introductory section of this paper, have changed globally over the span of the past ten years. The opinion that closed problems are rather inappropriate for mathematics and should be only used in special circumstances, can be still now traced explicitly amongst teachers of mathematics in the Czech Republic.

Conclusion

To conclude, I would like to present my own point of view in the matter of open vs. closed problems. I tend towards an equally extensive use of both problem types. A suitable form of a closed problem and its effective inclusion in a test enables us to discern, well and quickly, a pupil's skills and knowledge in any relevant area of mathematics in school as well as the skills and abilities of a participant in a mathematical competition. This is more significant in diagnostics of a group sample but often also in individual cases. I believe that we do not cause bigger bias by including closed problems than by not being able to score open problem solutions without a bias.

References

- Byčkovský, P. and Zvára, K. (2007) *Konstrukce a analýza testů pro přijímací řízení*, Prague: PedF UK.
- Burjan, V. (2001) 'MONITOR 2001 – Pilotné testovanie maturantov', *Sborník příspěvků Letní školy z teorie vyučování matematiky Pythagoras 2001*, Bratislava: EXAM, pp. 5–11.
- Cihlář, J., Lesáková, E., Řídká, E. and Zelenka, M. (2007) *Očekávané výstupy v RVP ZV z matematiky ve světle testových úloh*, Prague: ÚIV, Tauris.
- Klůfa, J. and Kaspříková, N. (2012) 'Multiple-choice question tests for entrance examinations – a probabilistic approach', *Eries Journal*, vol. 5, no. 4, pp. 195–202.
- OECD (1999) *Measuring student knowledge and skills*, [Online] Available: <http://www.oecd.org/edu/school/programme-for-international-student-assessment-pisa/33693997.pdf> [24 Aug 2001].
- Řídká, E. (2007) 'Srovnatelnost testů', *Ani jeden matematický talent nazmar 2007*, Prague: PedF UK, pp. 168–178.
- Sedláčková, K. (2003) *Písemná maturitní zkouška z matematiky*, Prague: PedF UK.
- Sýkora, V. and Zhouf, J. (2002) 'Maturitní zkouška z matematiky, současný stav a problémy', *Učitel matematiky*, vol. 42, no. 2, pp. 103–113.
- Zhouf, J. (2005) 'Current reform of the school leaving examination in the Czech Republic', *CIEAEM 57, Changes in society: A challenge for mathematics education*, Palermo: Università Degli Studi, pp. 139–143.
- Zhouf, J. (2010) *Tvorba matematických problémů pro talentované žáky*, Prague: PedF UK.
- Zhouf, J. (2012) 'Porovnání otevřených a uzavřených problémů', *Sborník konference Setkání učitelů matematiky všech typů a stupňů škol 2012*, Plzeň: Vydavatelský servis, pp. 205–211.
- Zhouf, J. (2013) 'Categorisation of Multiple-choice Problems', *Procedia – Social and Behavioral Science*, vol. 93, pp. 592–596.

Opinions Of Academicians On The Concept Of Social Gender Role

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Abstract

The study was conducted to determine academicians' perceptions of and views on social gender roles. In this research, the phenomenology design, one of the qualitative research models, was used. The study group were the academicians who were working in universities located in various provinces in Turkey and who were volunteer to participate in the research. In the study, purposive sample type from non-random sample types were utilized. In this research, five questions about gender were asked to the academicians as a means of data collection. The questions were prepared with Google Docs and collected via e-mail and Facebook. The study group consisted of 71 academicians in total. The collected documents formed the main data source of the research. The data obtained in the research were analyzed by content analysis. The results from this study can be listed as follows: 49 academicians said that there was social inequality in the family and 22 academicians said that there was no difference. 31 academician stated that gender was an influencing factor in getting a job, 15 academicians stated that gender was not an influencing factor in getting a job and 25 academicians said that this situation would change according to profession and organization. 45 academicians stated that gender was an influencing factor in being selected as a manager, 17 academicians said that it was not an influencing factor in being selected as a manager, 9 academicians stated that this would change depending on the situation. 24 academicians pointed out that gender was an influencing factor in professional promotion, 39 scholars believed that it was not an influencing factor in this and 8 academicians stated that this would change depending on the situation. 56 academics stated that gender was an influencing factor in choosing a profession, 10 academicians stated that it was not an influencing factor and 5 academicians said that this would change depending on the situation.

Key Words: *Social gender role, academician, gender*

Introduction

Sex is one of the criteria used in order to differentiate and classify people. In the simplest term and basically, while sex is biologically defined, gender is defined in a cultural sense. Sex includes the structural, functional and behavioral characteristics of all living creatures, which are determined by the sex chromosomes (Torgrimson & Minson, 2005). According to the Oxford English Dictionary, sex (*noun*) is defined as “differences in the structure and function of the reproductive organs of living beings distinguished as male and female on that basis, and the other physiological differences resulting from this.” Gender may be regarded as behavioral, cultural or psychological features which are related to a sex typically. The word gender (*noun*) was derived from the Latin word “genus” which refers to the species or race. Gender (*noun*) is defined as the type that refers to the common hominid line. In this case, sex describes the genetic, physiological and biological traits which the one has as a male or female. It can be said that sex is an ascribed status. That an individual starts to become socialized in line with the values and norms of the society in which he or she lives is called as gender.

Gender is a concept related to the roles, duties and responsibilities that the society has assigned to the one, and concerning in which ways the society regards, perceives the one and its expectations from the individual (Seçgin, F and Tural, 2011). While being related to the concept of masculinity and femininity, gender does not have to be a direct outcome of the individual's biological sex (Giddens, 2008). Dökmen (2004) stated that gender concept includes the values, expectations, judgments and roles relevant to how the society perceives and considers the individual and what it expects the individual to do. Gender has differed in time and according to the theories. This case shows that it is changeable. It reveals how male and female should behave and that there are different duties expected to be performed by them. Roles present a certain status or social expectations attributed to the social standings, and analyze the realization process of these sorts of expectations (Marshall, 1999). Gender means sex related expectations that the society has defined and expected from the individuals to realize (İsen and Batmaz, 2002). The term “sex” indicates the biological aspect of being a woman or a man. Sex is a demographic category that is determined as based on the one's biological sex. The expression written on identity cards stands for this. As for the term “gender”, it involves the meanings which the society and culture attribute to being woman or man and expectations, cultural structure and also psychological features correlated with the individual's biological structure. Gender is a whole of psychosocial properties which characterize the individual as feminine or masculine (Rice, 1996). In order to eliminate this confusion, Gentile (1998) proposed five different terms: (1) sex; expresses biological function - sexual activities - (2) biologically sex-linked; states the features linked to the biological aspect of being woman or man - like color-blindness - (3) gender-linked; states the features linked to the cultural or social aspect of being woman or man - like the acceptance of that men are more aggressive - (4) sex- and gender-linked; indicates the features of both biological and social origin - like women's dealing with baby-care - (5) sex-correlated; states the features related to being woman or man, but whether the origin of which is biological or

cultural is not known. People are born biologically female or male, but they learn to be a girl or a boy while growing up. In this way, gender is a concept developing and changing in time; it differs from one culture to the other and in time; and, the woman's and man's roles and responsibilities and the power relations between these two sexes are defined according to these differences (Tümen, 2003).

According to Giddens, gender is something learned. Babies learn their sexes unconsciously. Before children can name themselves properly as a girl or a boy, they receive a series of signs (hairstyle, scent, and etc.) that are not uttered. The children at around two years old have an understanding or comprehension, even if not complete, about what the gender is and/or means. They are conscious of their own sexes, and can also classify the others. However, children, until they reach the age of five or six years, do not know that the one's gender does not change, everyone has gender, and sex differences between girls and boys are anatomy-based. The toys which little children see around them, illustrated children books and television programs underline the differences between male and female characteristics (Giddens, 2008). Seçgin and Tural (2011) stated that factors such as parents, teachers, the mass media, and etc., have an effect on not only the child's socialization but also the determination of the individual's gender role stereotypes. Sexual socialization constitutes one of the most important learning experiences for individuals. When the child starts nursery school, he or she can distinguish between sexual roles and is able to prefer his or her sex role. Boys are defined by masculine roles and girls by feminine ones (Brown, 1956). They learn the proper behavioral patterns. Hartley (1960) states children realize that the first female role is cleaning and the first male role is earning money, when they are at the age of four. In addition to the descriptions for sex roles and relevant expectations, girls and boys also learn the expectations of the society. They learn that boys are more esteemed than the girls. And as for the differences related to personality, while boys learn how to be active and successful, girls learn to be passive and affective. The eight-year-old children define girls as virtuous, proper, quiet and mild-mannered while they define adult females as nameless, ineffective, unlooked for, bad and exploitative (Hartley, 1959). In patriarchal societies like Turkey, as gender roles are shaping, traditionally, the roles of bearing and raising child, dealing with the household chores such as cleaning, cooking, and so on, and not taking an active role in business life are assigned to woman; on the other hand, the roles of being active in business life, ruling over financial issues and being the head of the household are attributed to men (Atış, 2010; Bhasin, 2003; Dökmen, 2004; Vefikuluçay, Zeyneloğlu, Eroğlu and Taşkın, 2007; Zeyneloğlu and Terzioğlu, 2011).

Discriminations associated with business life, family and marriage affect the status of women within the society in a negative way. An atmosphere of inequality in which women fall behind men in the society has occurred. However, nowadays, with the women's taking their own parts in business life and the upward tendency in their education levels, this has undergone a change (Atanapola, 2003).

The rise in women's education levels has introduced a contemporary perspective into the gender roles for individuals, and become a determinant of equality and justice for the benefit of woman. Enabling the social awareness to be gained is quite important so that the equality of woman and man can be ensured and the social status of woman can be enhanced. Therefore, it is essential to determine the academicians' opinions on gender. The objective of this study is to assess the opinions on gender which the academicians have adopted. Accordingly, the problem statement of the study is as below:

What are the academicians' opinions on gender?

Considering how the subject of gender is analyzed in the body of literature, foreign publications will be dealt at first, and following this, domestic publications will be mentioned. In foreign literature, certain studies analyzing the attitudes towards role sharing in families (Smith and Reid, 1986; Cooper, Chassin and Zeiss, 1985), carried out on the female and male sex roles (Bradbury and Fincham, 1988), analyzing the relation between sex roles and marriage satisfaction (Lye and Biblarz, 1993; Juni and Grimm, 1994; Guzman, 1996; Lee, 1999), and determining the high school and university students' perceptions on gender roles (Kimberly and Mahaffy, 2002; Rosenkrantz and et. al., 1986; Trommsdorff and Iwawaki, 1989; Keith and Jacqueline, 2002) have been encountered.

When the relevant literature in Turkey is reviewed, the publications analyzing the relation between sex roles and marriage satisfaction (Tezer, 1992; Curun, 2006; Çınar, 2008; Demirtaş and Dönmez, 2006), and the ones analyzing the attitude, perception and opinion on gender (Aylaz, Güneş and Uzun, 2014; Baykal, 1988; Girginer, 1994; Dinç Kahraman, 2010; Sis Çelik, Pasinoğlu, Tan and Koyunca, 2013; Pınar, Taşkın and Eroğlu, 2008; Aşılı, 2001; Güven, 1996; Vefikuluçay and et. al., 2007; Ersoy, 2009; Karasu, Göllüce, Güvenç and Çelik, 2017; Seçgin and Tural, 2011; Ünal, Tarhan and Çürükoğlu Köksal, 2017; Yaman Efe and Ayaz, 2015; Çetişli, Top and Işık, 2017; Öngen and Aytaç, 2013) have been seen.

Method

1. Research Model

Phenomenological design, one of the qualitative research models, has been used in this research. Phenomenology is the qualitative research design which aims to reveal the individuals' experiences relevant to a specific phenomenon. It presents introductory information about the phenomenon that we intend to research and helps us to make sense of the phenomenon (Creswell, 2016: 78-79). Since the academicians answer the research question by benefitting from their own experiences, phenomenological design has been employed in the research.

2. Collection of Data

In the research, as data collection means, 5 questions on the subject of gender were asked to the academicians. The questions were prepared in Google docs and collected via e-mail and Facebook. 91 feedbacks in total were received. 20 of those were excluded due to reasons such as inaccurate sampling, giving incomplete information, leaving the answer blank and so on. Therefore, totally 71 academicians are included in the study group. All those collected documents constituted the core data source of the research. The answers given by the academicians were kept confidential by the researcher and were not shared with any other person. The problem statement of the research is in the following.

- What are the academicians' perceptions on gender?

3. Analysis and Interpretation of Data

Data obtained in the research were analyzed by the method of content analysis. Content analysis is among the analysis methods which are mostly employed in the studies in the field of social sciences. Content analysis is the analysis within the scope of which the existence of the research object consisting of text or texts is specified by words, phrases or sentences (Büyüköztürk et. al., 2012). In this research, the answers given by the academicians were coded and classified into categories by the researcher. Each of the answers formed was grouped by themes. Data was analyzed according to the analysis stages that were established by Büyüköztürk et. al (2012).

3.1. The stage of determining the objectives:

In this research, the researcher has aimed to reveal the academicians' perceptions on gender, through the answers they give to the questions in the interview form. The answers given by the academicians in the interview form constituted the source of data of the research.

3.2. Classifying the relevant data:

The researchers organized the data obtained at that stage as based upon theoretical framework. The academicians participating in the research were firstly grouped according to their educational backgrounds. Then, they were given codes according to their sexes. For instance, a female assistant professor was coded as Dr.F.1.

3.3. Developing the logical structure:

The answers given by the academicians participating in the research were reviewed and sorted by frequency counts and percentages. In the event that questions left unanswered by the academicians are available, these have been excluded from the research. It was determined that received answers would be arranged according to the categories developed, educational status and sex.

3.4. Determining the coding categories:

At that stage of the research, data were read and valid answers were determined. After being analyzed, the common points in the answers were detected. Considering the grounds in common, categories were formed.

3.5. Counting / Digitization:

At that stage of the research, answers were systematized by being tabulated in frequencies (f) and percentages (%).

4. Validity and Reliability

Validity in qualitative researches is the condition in which the researchers, participants and/or subjects and readers assess the same thing in the same way, in consequence of the analysis of data (Creswell, 2016). In this research, validity has been tried to be ensured by explaining the analysis of data obtained in a detailed way and giving a direct coverage to the academicians' opinions related to the findings. Reliability in qualitative researches is explained in the way that the data obtained are reviewed by more than one coder and a shared decision is made in cases where dissent is (Creswell, 2016). In this research, data have been coded, classified and also the process of forming categories has been carried out by the two researchers. The differences in views were resolved by way of the researchers' getting together and arriving at a shared decision. Patton (2014) explains this case as the investigator triangulation. Investigator triangulation is the case where two or more researchers take part in an integrative analysis by analyzing the data of a research independently, and then comparing the data obtained.

5. Study Group

The study group of the research consists of the academicians who serve at the universities in various cities of Turkey and have agreed to voluntarily participate in the research. Purposeful sampling, which is of the non-random sampling techniques, was applied in the research. Purposeful sampling means specifying a community which is the most appropriate to the issue to be studied on as the subject of observation (Sencer, 1989, pg. 386). As a feature of qualitative research, it is determined in accordance with the considerations, typicality and the condition of having specific properties that all will assist to the researcher's study. In this way, to constitute a satisfying sampling for the researcher's special needs is aimed (Cohen, Manion and Marrison, 2007, pg. 114, 115; Fraenkel

and Wallen, 2009; pg. 99). Within the scope of this research, detecting academicians' perceptions on "gender" concept has been desired.

Table 1. Demographic information of academicians

Gender	N	%	Educational Level	N	%
Female	33	46,5	Master	28	39,4
Male	38	53,5	Phd	43	60,6
Total	71	100,0	Total	71	100,0
Age	N	%	Monthly Income (TL)	N	%
25-30	23	32,4	1000-2500	1	1,4
30-35	27	38,0	3000-4500	30	42,3
35-40	13	18,3	4501-6000	25	35,2
40-45	6	8,5	6001-7500	9	12,7
55-60	1	1,4	7501-9000	5	7,0
70-75	1	1,4	9000 +	1	1,4
Total	71	100,0	Total	71	100
Living Region	N	%	Title	N	%
Central Anatolia	25	35,2	Lecturer	3	4,2
Aegean	8	11,3	Instructor	10	14,1
Eastern Anatolia	5	7	Research assistant	28	39,4
Southeastern Anatolia	1	1,4	Research assistant Dr.	4	5,6
Mediterranean	3	4,2	Assistant professor	13	18,3
Black Sea	19	26,8	Associate Professor	10	14,1
Marmara	8	8	Professor Dr.	3	4,2
Abroad	2	2,8	Total	71	100
Total	71	100,0			
Number of Books Per Month	N	%			
0	8	11,3			
1-2	36	50,7			
3-4	14	19,7			
5-6	9	12,7			
7-8	1	1,4			
9-10	3	4,2			
Total	71	100			

Findings

In this part of the research, the answers which the academicians had given to the questions related to gender were initially subjected to the content analysis, and thereafter, interpreted and presented in tables.

Table 2. Academicians' opinions on the effect of gender differences in family

	f	Category	Theme	f
Yes	49	Social Reasons	Customs	9
			Social Directions	8
			Patriarchal	5
			Point of View	3
			Environment	2
			Media	1
		Biological Reasons	Physical Power	5
			Predisposition/Talent	6
			Temperament	3
			Mother-child Communication	2
No	22	Educational Level		2
		Responsibilities		12
		Mutual Life		10
		Modernization		1

In Table 2, academicians' opinions on gender differences in family are presented. The answers that they had given were analyzed by categorization and thematization. 49 of the academicians have mentioned that gender difference is effective at home and the mentioned effect depends on social and biological reasons. Among the social reasons, the ones restated at most are that customs, i.e. social mores, are highly effective, the society directs individuals and the differences result from the patriarchal family structure. In terms of biological reasons, the ones mostly repeated in the opinions expressed by the academicians are in the way that the distribution of tasks is according to the abilities and/or talents of sexes, and the man is active in situations requiring physical strength and power. Apart from this, the number of academicians who have stated that sex is not effective is 22, and the reason of why they say no can be seen from their statements indicating that the responsibilities in the family are equal and life is mutual.

The sample of answer:

Dr. F. 58. *Yes. Because of the ways we are raised, some tasks are suitable for men, and other tasks are suitable for women. Apart from that, I think that women's jobs in the house, probably because they spend more time at home than men. Usually, women finish household chores more diligently. For example, for men, some household tasks are done in a fast fashion unlike women. While men place dishes at random in the dishwasher, women place the dishes more precisely and more often than not in a way that they can fit in the contaminant. If they were placed by a man, the woman would probably replace those dishes and allow more space for other ones. Thus, the dishwashing work is done twice. Instead, the woman may prefer her husband to do the shopping. I think there is a task sharing in every house. A share in which the woman and the man take on the tasks she can do better in her ability.*

Table 3. Academicians' opinions on gender difference in acquiring job

	f	Category	Theme	f
Yes	31	Job-related Reasons	Employer's point of view (9)	23
			Required qualification (14)	
		Reasons Related to Women	Marital status / Child (6)	19
			Benevolent sexism (5)	
			Responsibilities (4)	
			Sexism (2)	
			Pregnancy (2)	
			Confidence (1)	
		Reasons Related to Men	Labor / Work force (6)	11
			Men in the forefront (5)	
		Social judgment / expectation		2
No	15	Achievement		5
		Competence		4
		Service Sector		2
		Should not be effective		1
		Pulling the wires		2
Sometimes	25	According to Profession		17
		According to Institution		7
		According to Position / Status		1

In Table 3, academicians' opinions on gender differences in acquiring job are included. The answers given by them were analyzed by categorization and thematization. Most of the academicians (n=31) have expressed their opinions in the way that gender difference is effective in acquiring a job. They have stated that the reason of why they answered in that way is its being related to job and especially resulting from being a woman or man. They have also stated the qualification required by the job and the importance of the employer's point of view, that women may have difficulty in acquiring a job if they are married with children, and on the other hand, as some business enterprises attach particular importance to appearance, women may acquire job in an easier way. Moreover, they have expressed that it can be easier for men to acquire a job since they are strong and do not have any special cases like pregnancy. Answers indicating that gender difference is not effective have been also received from the academicians (n=15). The reason for these answers has been explained in the way that the one who is successful and competent would acquire the job. Beside this, there are also academicians who state that it will change according to the case (n=25).

DR. F. 13. *Yes, because women have different responsibilities. Male employees are the reason for preference. Turkey Statistical Institute data for 2016 says that one-fifth of female employment of male employment. There is no clear scientific conclusion, but single women and married male employees are preferred especially in the private sector. It may be because single women are more independent and married men have more regular lives.*

In the meantime, you should not ignore a segment of the population who seem very modern from the outside that believes that women are shrinking the business sector, and believes that a child should be looked after at home. Unfortunately, women are also under the influence of manipulative psychologists like Adem Güneş, and they have begun to betray their children to continue their working life. In recent years, we have been slowing down on these issues, which may be another study issue.

Table 4. Academicians' opinions on gender difference in being elected as executive

	f	Category	Theme	f
Yes	45	Reasons Related to Men	Logic (12)	27
			Authority (6)	
			Dominancy (4)	
			Leadership (3)	
			Achievement (2)	
		Social Reasons	Patriarchal (5)	11
			Prejudices / codes (5)	
			Child-rearing Manner (1)	
		Reasons Related to Women	Liabilities at home (6)	15
			Sexism (5)	
			Glass ceiling syndrome (3)	
			Pregnancy (1)	
No	17	Achievement		5
		Equal conditions / circumstances		3
		Competence		4
		Ideological Favoritism		2
		Increase in Female Employee Rates		1
Sometimes	9	According to Job		5
		According to Institution		3
		Occupational Expectation		2
		According to Person		2

In Table 4, academicians' opinions on gender difference in being elected as executive are involved. The answers given by them were analyzed by categorization and thematization. Most of the academicians have expressed their opinions in the way that gender difference has an effect on being elected as executive (n=45). It was seen that the personal reasons arising from the women and men themselves and additionally the structure of the society are effective in terms of being elected as executive. It was stated that men are elected as executive due to the fact that they are logical, can easily assert their authority and are dominant characters. Moreover, they have stated that women are not elected as executive since their responsibilities at home are much, and due to the gender-based approaches to women and a point of view related to glass ceiling syndrome keeping women from rising in the ranks no matter how hard they try. It was pointed out that gender would lead to a great difference in advancing in the career and/or business life as socially a patriarchal structure is possessed and the society has certain prejudices as a consequence. Besides, some of the academicians have expressed that it does not have an effect (n=17). They have stated that the one who is successful can get his or her promotion as based on the view that women are equal men in being executive. In addition to this, academicians stating that it will change according to circumstance (n=9) are also present.

Ms. M, 38. *Yeah. Women do not act professionally because they are emotional beings.*

Table 5. Academicians' opinions on gender difference in being promoted

Table 3: Academicians' Opinions on gender difference in being promoted				
	f	Category	Theme	f
Yes	24	Social Reasons	Social prejudice (7)	15
			Social perspective (6)	
			Social expectation (2)	
		Reasons Related to Men	Easy for men (5)	9
			Complex (3)	
			Authority	
		Reasons Related to Women	Woman's responsibilities (4)	6
Easy for women				
Marital status				
No	39	Equal		8
		Industriousness		7

		Qualification	3
		Equity	3
		Should not be effective	2
		Pulling the wires	2
Sometimes	8	According to Position / Status	5
		According to Institution	2
		According to Person	3

In Table 5, academicians' opinions on gender difference in being promoted are presented. The answers given by them were analyzed by categorization and thematization. Most of the academicians have expressed their opinion in the way that gender difference is not effective in terms of being promoted (n=39). They have stated that woman and man are equal when it comes to be promoted, and the one who is successful will advance in his/her business life. Also, some of the academicians have put forth that gender has an effect upon being promoted (n=24). The reason of its being effective has been explained by the views indicating that it can result from a social prejudice, and additionally, a negative social perspective towards the woman's getting promoted exists, men advance in their careers more easily and woman's responsibilities and/or duties at home are also effective in this sense. Moreover, there are academicians stating that it will change according to circumstance (n=8).

Dr. F, 58. *No, I think they are more fair in career upgrades. In particular, I think that the gender discrimination in the career upgrades. through examinations is not taken very seriously.*

Table 6. Academicians' opinions on gender difference in the choice of profession

	f	Category	Theme	f
Yes	56	Social Reasons	Expectation (14)	34
			Cultural Structure (11)	
			Social Pressure (4)	
			Social role (2)	
			Sexism 2	
			Family Discipline 2	
No	10	Reasons Related to Individuals	Suitability for professions 22	41
			Physical structure 11	
			Personality / nature 5	
			Responsibility (2)	
			Women's travel restrictions	
Sometimes	5	Modernization		5
		Desire		3
		Merit		2
		According to Profession		1
		According to Person		1
		Job Definition		3

In Table 6, academicians' opinions on gender difference in the choice of profession are involved. The answers given by them were analyzed by categorization and thematization. Most of the academicians have expressed their opinion in the way that gender difference is effective in being promoted (n=56). They have clarified the reason why they gave that answer by stating that it takes its source from the society itself and individuals; the society has an expectation from men and women to choose some certain professions; the cultural structure requires for individuals to make this choice; and women and men are more predisposed to some professions in terms of their physical and emotional structures. Some of the academicians have also stated that gender difference is not effective in being promoted (n=10). They have explained the reason of giving this answer by stating that women and men can choose a profession at their own pleasure by virtue of modernization. Additionally, academicians who have expressed that it will change according to circumstance (n=5) are also present.

Dr. F, 1. *Certainly there are some features that bring the sexes, but they can vary even within the same sex. I think that the individual has a direct relation in choosing a self-sufficient profession.*

Conclusion and Discussion

49 of the academicians have stated that social disparity exists within the family, and 22 of them have asserted that there is no difference. Academicians have put forward that customs and traditions are influential, and additionally, the society directs individuals and has a patriarchal structure, as the reason of this social inequality in the family.

Öngen and Aytaç (2013) explain that the reflections of gender roles on communal living shape the women's and men's lives in different ways as traditional and egalitarian roles. Karasu and Göllüce (2017) have stated that gender-based discrimination has its root in the family itself, and women and men who approve gender inequality will have been raised, in conclusion, as based upon the fact that girls and boys are directed differently by the society. Considering the biological reasons, they have expressed their opinion in the way that sexes have different distribution of roles according to their abilities and man is more active in the situations requiring strength. In the body of literature, it has been seen that men deal with the out-of-home activities which require power and/or strength, while women engage in domestic responsibilities such as cooking, cleaning and so on (Weitzman et. al, 1972: 1125). Apart from this, the number of academicians stating that gender is not effective is 22, and they have also expressed that the distribution of tasks is performed equally. Families are known to be important institutions in the process of socialization. Families convey their own world-views to their children while raising them; however, children learn various things during the process of communication with the other people around, are affected by the media, television programs and books, and also acquire the others' views and stereotypes of the social circles where they are in (Arat, 1996). So, this promotes the results of the study.

31 of the academicians have stated that gender difference is effective in acquiring job; 15 of them that it is not important in terms of acquiring a job and 25 of them that it will change according to the profession and institution. 56 of the academicians have expressed that gender difference has an effect upon determining or choosing the profession, 10 of them that it is not effective and 5 of them that it will change according to circumstance. Starting from this, the conclusion arrived at is that gender stands for an influential factor in acquiring job, getting job and being elected as executive. In regard to be promoted, that gender difference is not considered as effective is concluded from the answers given. The existing stereotypes indicating that women are emotional, but men are not (Dökmen, 2012) and that women are considered as more sensitive, interested and caring while men are perceived as independent, assertive, with a leader spirit and strong lead them to serve in professions including these features (Dökmen, 2004). In the study carried out by Gönüllü and İçli (2001), the most suitable professions for girls have been specified as teaching, civil service, and they have decided on the professions such as engineering, advocacy, and being a doctor for boys. Çelik et. al (2013) have given a coverage to enabling woman to participate in communal living on an equal basis, preventing woman from being detached from working life by the articles related to pregnancy and maternity leave, opening kindergarten and day nurseries and so on, within the scope of the regulatory laws on working life, and strengthening the unity of family. This case is for preventing women's being detached from the business life. As is seen from the results, it has been observed that women in Turkish society are thrown background out of focus in working life. The perspective of the society and the employer's point of view have been shown as the reason for this. Physical and emotional characteristics of women have sometimes been reasons for preference; but however, sometimes they have not been preferred because of these same characteristics. Women's taking in charge actively for domestic life accelerates their being detached from professional life (Özçatal, 2011).

45 of the academicians have stated that gender is effective in being elected as an executive, 17 of them that it is ineffective and 9 of them that it will change according to circumstance. 24 of the academicians have expressed that gender difference is effective in being promoted, 39 of them that it is not effective and 8 of them that it will change according to circumstance. Leadership is to gather people on the basis of specific objectives and also the whole of knowledge and skill which will motivate people into realizing these objectives. Leadership is the skills which are inherent in every individual, can be potentially learnt and are improved (Grossman and Valiga, 2005). From past to present, in almost all societies, women have not been represented enough in the world of power, leadership and business which stands for the world of men; professionalism, authority and leadership have been the characteristics or traits identified for men (Terzioğlu and Taşkın, 2008). In the study carried out by Brooks and Bolzendahl (2004), it is seen that individuals exhibit positive attitudes in terms of the effects of gender perspective on woman's leadership behaviors. In this study, academicians have stated that women's responsibilities related to domestic life, as well as their physical and emotional traits, pose an obstacle for them to be elected as an executive. In literature, although publications asserting that men are acceptable as executive are generally encountered, the exact opposite result has revealed in the study which Aylaz et. al (2014) carried out. In other words, women are also able to carry out the executive task inasmuch as men can do. Judgments towards women such as their working in lower-paying occupations, not being able to work without receiving their husband's permission and/or consent, not staying out at night and not living alone, and mother role in family still exist; and as for men, the consideration of assigning the reverse roles is common. These sorts of discrimination affect the woman's social status negatively. Woman falls behind man. Yet, at the present time, this situation has changed in favor of woman (Attanapola, 2003).

Suggestions;

Academicians' perceptions and detections for gender have revealed highly important outcomes. Accordingly, the following suggestions can be brought forward.

In Turkey, within the scope of higher education programs, lectures for Gender can be included. Paying attention to that the contents of these lectures be same for each educational institution can be suggested. These lectures should be in interrogating quality, participative and responsive.

This study is in the quality of a fenemongly. New studies can be carried out by different methods. These studies can be performed with different sample groups. Also, the studies can be repeated with the same sample groups at regular intervals. Thus, it can be observed whether a change is in question, or not.

Academicians are the figures significant for the society. Various panel discussions can be arranged and/or organized in order to inform the individuals by the academicians who have studies on gender.

References

- Arat, N. (1996). *Kadın gerçeklikleri*. İstanbul: Say Yayınları.
- Attanapola, C. T. (2004). Changing gender roles and health impacts among female workers in export-processing industries in Sri Lanka. *Social science & medicine*, 58(11), 2301-2312.
- Aylaz, R., Güneş, G., Uzun, Ö., & Ünal, S. (2014). Üniversite öğrencilerinin toplumsal cinsiyet rolüne yönelik görüşleri. *Sürekli Tıp Eğitimi Dergisi*, 23(5), 183-189.
- Atış, F. (2010). *Ebelik/ hemşirelik 1. ve 4. sınıf öğrencilerinin toplumsal cinsiyet rollerine ilişkin tutumlarının belirlenmesi*. Yayınlanmamış Yüksek Lisans Tezi, Çukurova Üniversitesi Sağlık Bilimleri Enstitüsü, Adana.
- Baykal, S. (1988). Üniversite öğrencilerinin cinsiyet rolleri ile ilgili kalıp yargılarının bazı değişkenler açısından incelenmesi, Yayınlanmamış Doktora Tezi, Hacettepe Üniversitesi, Ankara.
- Bradbury, T.N., Fincham, F.D. ve Campbell, S.M. (1995), Longitudinal and behavioral analysis of masculinity and femininity in marriage, *Journal of Personality and Social Psychology*, 68(2), 32-341.
- Büyüköztürk, Ş., Çakmak, K. E., Akgün, E. Ö., Karadeniz, Ş. & Demirel, F. (2009). *Bilimsel araştırma yöntemleri*, Ankara: PegemA.
- Cetişli, N. E., Top, E. D., & Gülşen, I. (2017). The gender attitude related roles of university students who continued or not the gender equality course. *Florence Nightingale Hemşirelik Dergisi*, 25(2), 104-110.
- Cohen, L., Manion, L. & Morrison, K. (2007). *Research methods in education*. London New York: Routledge Falmer.
- Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches*. California: Sage.
- Cooper, K., Chassin, L. ve Zeiss, A. (1985), The relationship of sex role self-concept and sex role attitudes to the marital satisfaction and personal adjustment of dual-worker couples with preschool children, *Sex Roles*, 12 (1-2), 227-241.
- Curun, F. (2006), *Yüklemeler, iletişim çatışmaları, cinsiyet ve cinsiyet rolü yönelimi ile evlilik doyumu arasındaki ilişki*, Doktora Tezi, Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- Çınar, L. (2008), *Evlilik Doyumu: Cinsiyet Roller ve Yardım Arama Tutumu*, Yüksek Lisans Tezi, Gazi Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- Demirtaş, H. A. ve Dönmez, A. (2006), Jealousy in close relationships: Personal, relational and situational variables, *Türk Psikiyatri Dergisi*, 17 (3), 181-191.
- Diñç Kahraman, S. (2010). Determination of the opinions of women against social gender inequality. *DEUHYO ED 3* (1), 30-35
- Dökmen, Z. Y. (2004). *Toplumsal cinsiyet, sosyal psikolojik açıklamalar*. İstanbul: Sistem Yayıncılık.
- Dökmen, Ü. (2012). *Sanatta ve günlük yaşamda iletişim çatışmaları ve empati*. İstanbul: Remzi Kitabevi.
- Efe, Ş. Y., & Ayaz, S. (2013). Opinions of elementary teaching students regarding gender. *Türkiye Klinikleri Journal of Medical Ethics-Law and History*, 21(3), 118-126.
- Ersoy E. (2009). Woman and man identity in gender culture (example of Malatya). *Firat University Journal of Social Science*, 19 (2), 209-230.
- Fraenkel J. R. & Wallen N. E. (2009), *How to design and evaluation research in education*. New York: McGraw-Hill.
- Gentile, D. A. (1998). "Just what are sex and gender, anyway? A call for a new terminological standard." D. L. Anselmi, A. L. Law (Eds.). *Questions of Gender: Perspectives and Paradoxes* in, s. 14-17. Boston: McGraw-Hill.
- Giddens, A., (2008). *Sosyoloji*, İstanbul: Kırmızı Yayınları.
- Girginer U. H. (1994). *Türk toplumunda cinsiyet rolleri algısı*. Ege Üniversitesi Sosyal Bilimler Enstitüsü Psikoloji Anabilim Dalı. Yayınlanmamış Yüksek Lisans Tezi. İzmir.
- Gönüllü M. & İçli G. (2001) Women in work place: Their relations to family and work. *Cumhuriyet Üniversitesi Sosyal Bilimler Dergisi*. 25(1), 81-100.
- Guzman, R. C. (1996), *Attitudes toward traditional versus egalitarian gender roles in dual- earner marriages and their effect on marital satisfaction*, Master's Thesis, California State University, Long Beach.
- Grossman, S. C., & Aliga, T. M. (2005). *The new leadership and management challenge creating the future of*

- nursing. USA: Davis Company.*
- Juni, S. ve Grimm, D. W. (1994), Marital satisfaction as a function of dyadic gender role constellations, *American Journal of Family Therapy*, 22 (2), 106-112.
- İsen, G. & Batmaz, V., (2002), *Ben ve toplum*, İstanbul: Om Yayınevi.
- Karasu, F., Göllüce A., Güvenç, E. & Çelik S. (2017). The attitudes of the university students' regarding the gender roles. *Süleyman Demirel Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi*. 8 (1), 35-41.
- Keith, B. & Jacqueline, S. (2002). Parent and adolescent gender role attitudes in 1990's Great Britain, *Sex Roles*, 46 (7/8): 239-244.
- Mahaffy, A. K. & Ward, K. (2002). The gendering of adolescents' childbearing and educational plans: reciprocal effects and the influence of social context, *Sex Roles*, 46 (11/12), 403-417.
- Lee, S. C. (1999), Marital satisfaction factors for Korean-Americans, Master's Thesis. Andrews University, School of Education, Michigan.
- Lye, D. N. & Biblarz, T. J. (1993), The effects of attitudes toward family life and gender roles on marital satisfaction, *Journal of Family Issues*, 14 (2), 157-188.
- Marshall, G., (1999). *Sosyoloji sözlüğü*, (Translate, Osman Akınhay-Derya Kömürçü), Ankara: Bilim ve Sanat.
- Patton, M. Q. (2014). Nitel araştırma ve değerlendirme yöntemleri. Mesut Bütün, Selçuk Beşir Demir (Çev. Ed.), 3. Baskıdan Çeviri, Ankara: Pegem Akademi Yayıncılık.
- Pınar, G., Taşkın, L., & Eroğlu, K. (2008). The behaviours of the students in dormitory of baskent university against sexual role patterns. *Hacettepe University Faculty of Health Sciences Nursing Journal*, 15(1), 47-57.
- Oxford English Dictionary. New York: Oxford University Press, 1989.
- Öngen, B., & Aytaç, S. (2013). Attitudes of university students regarding to gender roles and relationship with life values. *Journal of Economy Culture and Society*, (48), 1-18.
- Özçatal, E. Ö. (2011). Patriarchy, gender and women's participation in working life. *Çankırı Karatekin Üniversitesi İİBF Dergisi*, 1(1), 21-39.
- Rice, F. P. (1996). *Intimate relationships, marriages, and families*. California: Mayfield Publishing.
- Rosenkrantz, P., Vogel, S., Bee, H., Broverman, I. & Broverman, D. M. (1986). Sex roles stereotypes and self-concepts in college students, *Journal of Consulting and Clinical Psychology*, 32 (3): 287-295.
- Seçgin, F., & Tural, A. (2011). Attitudes on gender roles of primary school teacher candidates. *Education Sciences*, 6(4), 2446-2458.
- Sis Çelik, A., Pasinlioğlu, T., Tan, G., & Koyuncu, H. (2013). Determination of university students' attitudes about gender equality. *Florence Nightingale Hemşirelik Dergisi*, 21(3), 181-186.
- Smith, A. D. and Reid, W. J. (1986). Role expectations and attitudes in dual-earner families, *Social Contemporary Social Work*, 67 (7), 394-402.
- Terzioğlu, F. & Taşkın, L. (2008). Reflections of social gender role on female leadership behavior and nursing profession. *CÜ Hemşirelik Yüksekokulu Dergisi*, 12(2), 62-67.
- Tezer, E. (1992), Evlilik doyumu ve iş doyumu: Bir ön çalışma, *Psikolojik Danışma ve Rehberlik Dergisi*, 1 (3), 24-26.
- Trommsdorff, G. & Iwawaki, S. (1989). Students' perceptions of socialisation and gender role in Japan and Germany. *International Journal of Behavioral Development*, 12(4), 485-493.
- Torgimson, B. N., & Minson, C. T. (2005). Sex and gender: what is the difference? *Journal of Applied Physiology*, 99, 785-787.
- Türmen T. (2003) [Gender and women's health]. In: Akın A, editor. Gender, health and women. Ankara, Turkey: Hacettepe University Women's Research and Implementation Center (HUWRIC)
- Ünal, F., Tarhan, S., & Köksal, E. Ç. (2017). The Role of Gender, Grade, Department and Socialization of Gender Norms in Predicting Perception of Gender. *Bartın University Journal of Faculty of Education*, 6(1), 227.
- Vefikuluçay, D., Zeyneloğlu, S., Eroğlu, K., Taşkın, L. (2007). Perception of and views on gender roles of senior students enrolled at Kafkas University. *Journal of Hacettepe University School of Nursing*, 14(2), 12-27.
- Zeyneloğlu, S., & Terzioğlu, F. (2011). Development and psychometric properties gender roles attitude scale Hacettepe University Journal of Education, 40, 409-420.

Opinions of School Principals on Financing Primary Education in the Context of Neoliberal Politics

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Abstract

The aim of this research is to provide insights into how funding for basic education, which is not beneficial to public financing, is provided by educational administrators and which problems they are financing while providing financing. In the study, in-depth interviewing technique was applied from qualitative research methods. In the study group of the study, criteria sampling method was used for purpose sampling methods. A group of eighteen school principals, three primary and secondary schools with high socioeconomic level and medium and low levels, were established in Ankara with the objective sampling method. An interview form was created by the researcher, presented to field experts working in the field of educational economics and reorganized by taking their opinions. For clarification of the interview questions, three school principals were also pre-applied, and unanswered questions were rearranged. Descriptive analysis and content analysis techniques were used to analyze the research data. In the survey, 18 primary schools (preschool-primary-secondary school) were interviewed. There are 6 administrators from each type of school. Six of the schools were selected from low-economic, medium, and relatively economical regions. Eight of the managers are female and 10 are male. Managers have more than five years of experience, 11 to 5 to 10 years, and 4 to 10 years of management experience. School income sources are generally referred to as fees, donations, registration fees, and income from various activities. It has been found that the public contribution is transferred to schools in very little service, and the resources transferred to private schools increase inequality in education.

Keywords: *Education; Education Finance; Primary Education; Neoliberal Policy*

Introduction

Education is one of the most important services that determine the future of an country. Because education has benefits both for the individual and for collecting. Education remains a matter of debate whether the financial resources allocated will be met by the public or beneficiaries of the education service. The Board (2002) describes education as a personal and social investment that is provided to different sectors, such as employers and the state, international organizations, as well as students and families. In this research, it is discussed who will meet more financial resources. The financing of public education away with the neoliberal transformation taking place in the world and Turkey is gaining weight and who benefit from the educational services that meet the required financing. compulsory education in Turkey said that although Although such services have to be met by public funding on the one hand, compulsory schooling families. As stated by the Council (2012), it is observed that there are two approaches to providing education in the world. These are the approach of financing education to the public budget and the approach of financing educational funds to beneficiary students and families. In our country where neoliberal economic policies are applied, it can be said that the second approach gains importance in education financing.

There are generally three different approaches to financing education in the world. One of the approaches to education-funded "direct financing" is the public funding of education expenditures, ie taxation approach. The state meets the educational resources with the tax as if it were in the public good. The second concept is the "indirect (private) financing method" in which financial resources in education are financed from the students' families. Education is to pay for the goods with fees instead of taxes. Thirdly, the "hybrid financing method" is a "partial financing" approach based on the direct or indirect funding of all segments benefiting from education. Educational resources are financed by the public and private sectors. While the state supplies training goods, the private sector also recognizes this privilege and reduces public financing by providing privatization of education in a sense. In other words, it pays education financing completely to those who use education services. There are many researches on this subject (Ünal, 1996, Adem, 2008, Karakutük, 2017, Board Tural, 2002, Tonbul, 2016). Analyzing the structure of education expenditure in Turkey is a very important part as 37% of total education expenditure is carried out by private enterprises. In the OECD average, however, only 12% of total education expenditure is made by private sources. made by public spending on education in Turkey remains behind the OECD average (ERG, 2009). In this case, it is seen that education planning and finance management are centralized and localization policies are applied in practice (Karakul, 2014). In line with development plans, the development of the financial policies of education programs is mostly based on the state financing of compulsory

education, participation of educated beneficiaries in expenditure at other levels of education, saving as much as possible in education expenditures, raising the resources to be allocated for training with general budgetary funds and increasing the share of private enterprise in education service provision (Küçük, 2010).

General education policies in Turkey, the number of work produced in the context of special education funding policy is limited. There are many reasons why researchers work in a limited manner in their policy of financing education. This is because individuals perceive politics as an element of conflict and thus confuse the data collection process, or school administrators tend to accept education policy and education funding politics in particular as a result of being left passive, and to give up the solution. Nevertheless, any change in the policies related to educational institutions can affect the schools that are the smallest unit of the education system, and the administrators and teachers working in these schools, positively or negatively (Altunay and Ağađiken, 2016). In this study, it was aimed to show the opinions of how the education administrators provided financing in the basic education which is not injured by public finance, and what problems they faced while providing financing.

Method

In-depth interviewing technique is applied from qualitative research methods. In-depth interview Punch (2011) is a good way to make people aware of reality, its meanings, its description, and its construction. It is a technique that examines in detail the research topic by asking open-ended questions in depth interview, listening to them, recording answers and asking additional questions related to them (Kümbetođlu, 2008). The participant is experienced at the beginning of the interview period, and the researcher is also curious. As the differences in the points of view during the process become apparent to the researcher, the researcher's assumptions decrease. The participant also undergoes a change due to having narrated his story in depth (Seggie, Bayyurt, 2015). A purposeful sampling method was used in this study.

The study group

In the study group, criteria sampling method was used for purposeful sampling methods.. Criterion sampling is the creation of samples of people, events, objects, or situations that have the qualities set in relation to the problem (Büyüköztürk et al., 2009). The advantage of this approach is that researchers use their previous knowledge and skills in the selection of subjects (Balci, 2007). A group of eighteen school principals, three primary and secondary schools with high socioeconomic level and medium and low levels, were established in Ankara with the objective sampling method. An interview form was created by the researcher, presented to field experts working in the field of educational economics and reorganized by taking their opinions. For clarification of the interview questions, three school principals were also pre-applied, and unanswered questions were rearranged.

Data collection and analysis

The interview form prepared was submitted to the opinion of field experts in order to check the relevance, suitability and applicability of the grade for the purpose of the research. An interview form has been arranged according to the recommendations of the experts. Expert examination, participant approval and negotiations with the managers have long been tried in the research to ensure internal validity through long-term interaction. In addition, the consistency of the findings from collected data was checked to increase the plausibility of the data. Towards this, the consistency of the findings with the conceptual framework used in the development of the interview form was constantly checked.

The data of the study were collected during the time when the participants could express themselves easily and in the environments where voice recording could be done, when they made an appointment. Interview questions were directed to each participant with the same words.

Descriptive analysis and content analysis techniques were used to analyze the research data. Descriptive analysis; (Yildirim and Şimşek, 2013), where the data obtained are summarized and interpreted according to a pre-determined theme, frequently the direct quotations are used in a striking way to reflect the views of the interviewed individuals, and the results obtained are interpreted in terms of the causal relationships. The descriptive analysis technique was performed within the framework of three steps of efficacy (reduction of data, presentation of data, conclusion and validation) (Türnüklü, 2000). In the presentation of the data, the criteria for the selection of the citation (different opinion), explanatory (suitability to the theme), diversity and extreme examples were taken into consideration (Ünver, Bümen ve Başbay, 2010).

Results

The findings of this study aimed at revealing the problems faced by the principals of primary education schools (elementary and junior high school) in financing their schools and the methods they have found to cope with these problems have been revealed.

In the survey, 18 basic education schools (preschool-primary-secondary school) were interviewed by the manager. There are 6 administrators from each type of school. Six of the schools were selected from low-economic, medium,

and relatively economical regions. Eight of the managers are female and 10 are male. Managers have more than five years of experience, 11 to 5 to 10 years, and 4 to 10 years of management experience.

School income sources

Managers of income sources of primary education schools, income from school-family reunions, voluntary donations, donations received in transcripts and transfers, income from sports theater fees, school theaters and demonstrations, revenues from kermes and festivals, photocopy and examination paper fees, they are trying to provide resources such as the resources they have obtained from the kindergarten of the schools in which they are located. The views of some of the school administrators are;

School-family association contributions, voluntary donations, donations received in transcripts and transcriptions, sports line fees, income from school theaters and shows, revenues from kermes and festivals, photocopy and examination paper fees, the sources of the kindergarten in the schools that have the kindergarten, school services, school dining hall rental, canteen rental

EA-5. Our first source of income is the donation of the lord. The school is demanding a family union.

How do you describe yourself when you generate these revenues?

A good marketer, a good bargain merchant, the person who should be sore, beggar, business owner,

EA-9. We're trying to convince like a full salesman, my child, actually I realize how far I am from my educator identity.

EA-8. It looks like 5 -10.000 TL for someone to look cute every time.

Public support

Electricity, water, certain amounts of fuel (natural gas), telephone and internet payments and certain payments for repair

EA-14. Since we use electricity, water, telephone and internet for approximately 1000-1200 pounds, we transfer the invoices to the system. He's paid in a couple of days.

EA-18. We are paid electricity, water and international, but we have problems in warming up. My school is a large school with just enough gas given weekly. I need support from the parents.

Maintenance and repairs

It has been found that education administrators can not receive public support at adequate levels in maintenance and repair of buildings and classes.

EA-2. When you want to repair from the general budget, it is evaluated on the ground later in the county. If 50-60 schools are applying for general repairs, 5 of them may have the chance this year.

EA-11. It is necessary to care for the building (annual roof, paint the building). You have a source, or you do not.

School stationery expenses

Educational administrators say that the school's stationery expenses are not met publicly and these expenses are covered by donations collected from the students.

EA-4. There is no allowance for teaching-learning services. However, materials can be requested in the form of stationery, toner, photocopy. Sometimes he comes, sometimes he does not. We demand from the students as copy money for us.

Service purchase expenses

Educational administrators say that they are not in sufficient numbers and that the school is in the process of receiving services to meet adequate staff, but that the school is very difficult to do so.

EA-12. The school has a permanent staff. 18 people (security, cleaning, civil servants) are employed as staff with Family Union facilities. We're stuck in their pay. The staff of the school will be able to meet the need, even if no other money is given.

Private school support

They expect to provide education and training support to private schools in public schools as well.

EA-11. Private schools are already getting money from their students. I do not think the state gives money to schools that have no money problems, not their own school.

EA-15. It does not make any sense to fund private schools. If we give half of those funds to state school, we will not deal with such problems at all.

Equality in education

The inequalities between schools have led to the discovery that the student also leads to inequalities in benefiting from educational services.

EA-9. Equality is not possible to provide. Regional and presently varying school income

EA-5. One of the problems faced as a result of school-level politics is the question of equal opportunity and equality in economic terms. We can say that we are collecting money with binary relations.

Problems that create finance in educational administration

Educational administrators have been able to find that they are unable to do educational management, which is their primary task while trying to provide financial support to the school, and that they spend all their time financing the school to live.

EA-1. I am very tired of the helplessness in monetary matters. Schools that do not have monetary inconveniences become more productive.

Discussion

The income sources are increasing or decreasing according to the school environment. While the income sources of the schools in the rich regions are diversifying and multiplying, the diversity of the income sources of the schools in the poor regions is decreasing and even it is the source of the single income.

It seems that educational administrators behave as a merchant trying to manage and live their business by leaving educational administration, which is the primary task of income generation, as an edge. This situation commercializes the relationships in the school and shows that they perceive it as a student / child customer.

Due to the limited public resources in basic education, it may be considered as a disadvantage for these schools that school principals need to look for private resources. Especially at this stage, it is seen as a source of funding for schools. Household education expenditures also support this finding.

Table 1. Household Education Expenditures (2010-2015).

The types of spending by income group share in 20% sequentially, Turkey, 2010-2015		Total	Income group				
			1. % 20	2. % 20	3. % 20	4. % 20	5. % 20
2010	Educational services	100,0	3,3	6,3	10,7	19,4	60,2
2011	Educational services	100,0	3,3	5,2	11,0	18,2	62,3
2012	Educational services	100,0	2,3	5,6	9,0	16,3	66,8
2013	Educational services	100,0	2,5	6,2	10,8	17,1	63,5
2014 ⁽²⁾	Educational services	100,0	2,2	5,6	10,6	16,9	64,7
2015 ⁽²⁾	Educational services	100,0	1,6	4,3	8,6	16,6	68,9

Source: TURKSTAT, Household Budget Survey 2016.

Starting from 2014, the new administrative division in sampling design has been taken as a basis

With the neo-liberal economic policies and the implementation of educational policies, public investment in education has decreased and on the contrary public support and private schools have been increased. The privatization efforts accelerated especially with the economic decisions of January 24, 1980.

The aim of "restructuring" practices in education is to transform educational administration into a profitable investment. Thus, all stages from the teaching process to what kind of information will be given and how the teacher will behave to the class have been rearranged and transformed the right to education, which is the fundamental human right, into a commodity,

Together with the neoliberal educational policies implemented, education becomes a right and becomes a commodity that can be bought and sold. Both the deterioration in the income distribution and the reduction of public expenditures together with these policies harm the right to education. Education is the only way to turn it into a privilege that can be enjoyed by those who have money. Nevertheless, these privileges in education lead to increased reproduction of inequalities existing in society.

Table 2. Private school support by years

Year	Preschool		Elementary school		Secondary school		High school/Basic High school		Total Student	Total Support Amount
	Number of students to be supported	Support Amount	Number of students to be supported	Destek Miktarı	Number of students to be supported	Support Amount	Number of students to be supported	Support Amount		
2014-2015	50.000	2.500	50.000	3.000	75.000	3.500	75.000	3.250	250.000	765.625.000
2015-2016	20.000	2.680	50.000	3.220	50.000	3.750	110.000	3.750	230.000	770.530.000
2016-2017	6.000	2.860	15.000	3.440	15.000	4.000	15.000	4.000	3.440	266.100.000
2017-2018	6.000	3.060	15.000	3.680	15.000	4.280	15.000	4.280	3.680	290.200.000

Source: National Education Statistics 2010-2017. Ministry of National Education Publications, Ankara, 2017.

As can be seen from Table 2, public resources are already being transferred to private schools offering paid education services. This resource transferred to private schools expresses that the administrators of public schools should be given to their own schools. This situation further increases inequality in education.

References

- Adem, M. (2008). Eğitim planlaması. Ankara. Ekinoks Yayınları
- Altunay, E. ve Ağaçdiken, Y. E. (2016). İlkokul ve ortaokul öğretmenlerinin eğitim politikasına ilişkin metaforlarının değerlendirilmesi. 12. Ulusal Eğitim Yönetimi Kongresi. 12-14 Mayıs 2016. İzmir.
- Balcı, A. (2007). Sosyal bilimlerde araştırma. Ankara. Pegem Yayınları.
- Büyüköztürk, Ş., Çakmak, E. K., Akgün, Ö. E., Karadeniz, Ş. ve Demirel, F. (2009). Örneklem yöntemleri bilimsel araştırma yöntemleri. Ankara: Pegem.
- ERG (Eğitim Reformu Girişimi) (2009). Eğitimde eşitlik politika analizi ve öneriler. Türkiye’de Eğitimde Eşitliğin Geliştirilmesi için Verilere Dayalı Savunu” projesi. Açık Toplum Enstitüsü. İstanbul: ERG
- Karakul, A.K. (2014). İran ve Türkiye’de eğitim finansmanının karşılaştırılması. Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 31(2).
- Karakütük, K. (2017). Eğitim planlaması. Ankara. Pegem Yayınları.
- Kurul, N. (2012). Eğitim finansmanı. 2. Baskı. Ankara. Siyasal kitabevi.
- Küçük, E. (2010). Türkiye’de eğitim planlaması neyi hedefliyor? International Conference on New Trends in Education and Their Implications 11-13 November, 2010 Antalya-Turkey.
- Kümbetoğlu, B. (2008). Sosyolojide ve antropolojide niteliksel yöntem ve araştırma. İstanbul: Bağlam Yayıncılık.

- Punch, KF. (2011), sosyal arařtırmalara giriř, çev. D. Bayrak, H. B. Arslan, Z.Akyüz, Ankara: Siyasal Kitabevi.
- Seggie, FN. Ve Bayyurt, Y. (2015). Nitel arařtırma: Yöntem, teknik, analiz ve yaklařımlar. Ankara: Anı
- Tural Kurul, N. (2002). Eđitim finansmanı. Ankara. Anı yayıncılık.
- Tonbul, Y. (2016). Eđitimin ekonomisi. Eđitbilim: Pedandragoji içinde. (Editör: Erdal Toprakçı). Ankara: Ütopya Yayınevi.
- Türnüklü, A. (2000). Eđitim Bilim Arařtırmalarında Etkin Olarak Kullanılabilecek Nitel Arařtırma Tekniđi: Görüşme. Kuram ve Uygulamada Eđitim Yönetimi, 24, 543-559.
- Ünal, L. I. (1996). Eđitim ve yetiřtirme ekonomisi. Ankara. Epar Yayınları.
- Ünver, G., Bümen, N. T. ve Bařbay, M. (2010). Ortaöđretim Alan Öđretmenliđi Tezsiz Yüksek Lisans Derslerine Öđretim Elemanı Bakıřı: Ege Üniversitesi Örneđi. Eđitim ve Bilim Dergisi, 155 (35), 63- 77.
- Yıldırım, A. ve řimřek, H. (2013). Sosyal bilimlerde nitel arařtırma yöntemleri. Ankara: Seçkin Yayınları.

Opinions Of The Turkish Language And Literature Participants Who Are Registered To The Pedagogical Formation Certificate Program And Who Have Questions About Their Correspondence In Teaching Practice

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Goal; the aim of this study is to determine the problems faced by the students of the Turkish Language and Literature Field registered in the pedagogical formation certificate program in their practice schools in the Teaching Practice course.

The study group; it is a qualitative study based on the opinions of fifteen students enrolled in the program of Abant İzzet Baysal University Faculty of Education Teaching Formation of the graduate student or graduate student of the Department of Turkish Language and Literature in the Second Term of the 2016-2017 Education- .

Data collection tool; The data were collected through a semi-structured interview form with open-ended questions prepared according to the pre-determined theme. Themes, A) Educational and educational problems in the application school: 1. Knowledge of the field, 2. Managing the teaching and learning process (1. Planning, 2. Preparing for the course, 3. Using the teaching principles and methods, 4. Communicating with the students, Classroom management and student relations 6. Students' learning assessment, 7. Self-confidence, B) Administrative problems in the school. Two field experts were consulted for the coverage of the Interview Form which was prepared in accordance with the template. Fifteen student interview forms were applied and fifteen complete interview forms were included in the evaluation.

Analysis of the data; interview forms were carefully monitored for content analysis, 1) coding stage, 2) screening stage, 3) category development stage, 4) validation and reliability assurance phase, and 5) frequency calculation and interpretation phase. In order to ensure the validity and reliability of this qualitative study, the data have been examined in detail. Coding was done by a doctoral student with researcher and qualitative working experience. Miles and Huberman's reliability formula is applied. (Reliability = agreement of opinion / agreement of opinion + difference of opinion) The two codes of opinion were re-assessed and agreed to provide 100/100 views. Coded problems are divided into categories according to pre-determined themes. In the tables prepared according to the hypothesis, the frequencies determined according to the frequency of expression of the two least acknowledged participants of the codes. Care has been taken to reflect the views of the participants as they are. The findings have been tried to be interpreted.

The major findings: Theme1. Area information; Difficulty in not knowing the curriculum program (f = 11) and adapting it to the student level (f = 12) 2. problems with the teaching and learning process; Theme 2.1. Making plans: difficulty in making plans (f = 15); Missing plan (f = 13) Theme 2.2 Preparation for the course; Failure to find appropriate course material for the topic (f = 11), failure to find sources other than the course book (f = 5); theme 2.3. (F = 14), Forcing practice of teaching principles and methods (f = 13) Theme 2. 4. Communicating with students: complaints that students did not listen to themselves (f = 11), Word Talk without getting the right (F = 10) Theme 2.5. Class management and students' relations: The lack of time (f = 14) The inability to collect the attention of the students on the subject (f = 11), the failure to rule the class (f = 9) : No time for the evaluation (f = 12), difficulty in writing the evaluation question (f = 8) D 7. Self-confidence; Very excited (f = 15), theme 3) The main administrative problems they encounter in the practice school are; (F = 15), failure to consult outside the class with the application teachers (f = 14), Failure to consult the application instructor because of the courses they had during the university course (f = 7), Not knowing the administrators apart from the manager = 7), Only seeing the schoolmaster once (f = 7), Appointment with a maximum of two branch teachers (f = 7) except for the application teacher. The identified problems overlap with the research done in this area.

As a result, it can not be said that students from the Teaching Practice course have gained the optimum level of experience. For the solution of students' problems: Teaching Practice lesson should be increased and include at least two academic semesters. Application lecturers and students should be gathered and discussed frequently during the course monitoring and should be aware of the missing lessons with the lessons that will be given to the application students. For example; Planning and implementation according to the objective and achievements of the course, selection of teaching principles and methods in accordance with achievements and subject, conscious use of educational technologies and taking into account individual differences can be taught. Criteria must be

selected carefully in the selection of application instructors and teachers. Implementation students can be introduced to all managers and teachers for positive communication and interaction with their colleagues. In general, attendance at school activities can be provided. They can organize activities with students. Also, It can recommend to make observations about the management process and functioning in the school, to communicate with the managers, to participate in the managerial processes and to accompany the guard teachers.

Opinions Of Undergraduate Freshman Students Of The School For The Handicapped On Career And Career Awareness

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Abstract

It is aimed at this study to examine the knowledge of the career and career awareness of 16 hearing impaired students, newly enrolled in the Graphic and Ceramic Undergraduate Programs of the School for the Handicapped (SfH) of the Anadolu University in the educational year of 2017-2018. According to the research findings, the restructuring studies that are realized in the courses and course contents have been planned according to the research findings. A questionnaire where 41 questions containing 25 closed-ended and 16 open ended answers have taken place, were applied to the students. The questionnaire consists of the sections, titled as “*Personal Information*”, “*Information on Education and School for the Handicapped (SfH) of the Anadolu University*”, “*Acknowledge About –Associate-Definition of Career Conception*” and “*Looking for Employment/Job After Graduation, Finding Job Advertisement and Job Application*”. A descriptive analysis has been used in order to determine the opinion of the hearing-impaired students with relation to the career. It is understood at the research that 68 % of the students do not know about the career conception and 81 %, however, about career planning. It has also been seen that 88 % of the students have taken examination called as E-KPSS (E- Public Personnel Selection Examination) in the career plan and become (public) officers or employees. Furthermore, it has also been understood that 56 % of the students had no knowledge about the documents, required in the job application, and 80 % of them had opinions on the job interview, 13 % had job interview in advance and 13 %, however, were able to write the definition of the job interview correctly. It has been seen that 19 % of the students knew what the job application file was, and 75 % of them knew about the Turkish Employment Agency and thought that they might benefit after their graduation.

Introduction

The career means that the progress of individual in the profession, decided upon by him and acquirement of experience by developing himself. The career process covers the education process of the individual. All stages of the education are a part of the career (Adıgüzel & Erdoğan, 2014; Sharf, 2006; Şimşek & Öge, 2011; Yeşilyaprak, 2012). The career planning, however, is to plan the educations, already taken and due to be taken in advance within the career direction and then, realize the same (Brown & Brooks, 1985; Campbell, 1997; Isaacson & Brown, 2000; Sharf, 2006; Yeşilyaprak, 2012). For making a career planning, it is necessary to search what the processes with relation to the career, determined before all else, namely, to have a career awareness. The individuals having the career awareness make progress faster to their targets when they started to their professional lives (Korukoğlu, 2003; Rae, 2007; Türkoğlu, Gavcar & Büyüksakallı 2013). However when it is focused on the career awareness researches, it is indicated that the individuals do not have sufficient career awareness (Özdinçler, Tarakço & Aslan, 2015; Sharf, 2002). This circumstance shows that the individuals cannot make necessary plans properly for due progress in their profession either. The career planning is an important process for the employment of the individual.

The employment and employability are different concepts. The employment is the work of an individual at a job whether it is related to his career or not and mostly indicates a temporary circumstance. The employability, however, is for the individual to work in a profession, selected by him, in a permanent manner in order to make contribution to himself, workforce, society and economy and a number of skill, knowledge and personal qualifications raising the possibility of his success (Bhaerman & Spill, 1988). In this context, it is important to prepare training environments where it is possible for the individual to acquire skills to increase the possibility of his employability. When the body of literature is examined, it is seen that there are researches determining the career awareness of the hearing and hearing-impaired individuals and clarifying the educational environments to be prepared for raising such awareness, however, they appeared to be not sufficient (Dursun & Aytaç, 2009; İstel, 2018; Karasu, 2018; Kaya, 2017; Kaya, 2012; Kaya, Özten Anay, Abalı, Karasu & Girgin, 2017a; Kaya, Özten Anay, Abalı, Karasu & Girgin, 2017b; Kaya, Özten Anay, Karasu, Abalı & Girgin, 2017; Kozak & Dalkıranoglu, 2013; Rae, 2007; Sarıkaya & Khorshid, 2009; Yılmaz, Dursun, Pektaş & Altay, 2012).

The economic conditions of our current period have made it necessary for the individuals to make their career planning. It is the legitimate right of the young people to find a job and work at the job, desired by them. However, the individuals work at the jobs wherever they find instead of planning their own career in our country where the rates of unemployment exceed 10 %. The increase of employability is related to making their career planning in a proper manner (Bhaerman & Spill, 1988). Inclusion of the career planning activities in every stage of the education

will help the students to make their career planning for future in a more realistic manner (Bhaerman & Spill, 1988; Sharf, 2002).

The matters of career awareness and employability are the joint problem of all the individuals living at the society whether handicapped or not. Various legal measures have been by the state with regard to the employment of the handicapped (Mevzuat/Regulations, 2003). However, despite of these measures, the placement of the handicapped in employment with regard to their profession where they make career appears to be considerably low and it becomes necessary for them to cope up with various problems at employment environments (Demir & Eliöz, 2016; Derican, 2010; Kaya, Özten Anay & Girgin, 2014; Erdiken, 2005; Erdiken, 2007). The handicapped experience various different problems according to their types and degrees of handicap in looking for a job, finding a job advertisement and working in job processes. The hearing-impaired individuals, however, struggle with various problems both in professional training and employment processes as a result of communication problems, experienced by them as a result of restriction in their languages (Erdiken, 2005; Erdiken, 2007; Kaya, Özten Anay & Girgin, 2014). The hearing-impaired individuals experience difficulties in reading and comprehending texts as a result of their reading-comprehending, writing problems and restricted vocabularies and lag behind from their equals in the education process (Schirmer, 2000). When the researches pertaining to the professional training of the hearing-impaired individuals, it is seen that the professional training has been effective when it is done by the provision of supports in accordance with the requirement and level of the handicapped (İstel, 2018; Karasu & Uzuner, 2018; Karasu, Uzuner & Beral, 2018; Karasu, 2011; Kaya, 2012; Schirmer, 2000; Uzuner, Girgin, Girgin, Erdiken, Karasu, Kaya, Cavkaytar & Tanrıdiler, 2011).

Higher Education Institution in the Hearing-Impaired Individuals: The School for the Handicapped (SfH)

The university education is a part of the professional training and occupies an important place in the career processes with relation to the selected profession. When the hearing-impaired individuals want to get university education in our country, they can get education in all universities, affiliated to the YÖK (Higher Education Council). However, it is necessary for the supports in conformity with their levels of disability to be provided. The “Regulation on the Handicapped Consultancy and Coordination of the Higher Education Institutions”, which was published and entered into force on August 14, 2010 at the Official Gazette having the issue number of 27672, was come in force in order to prepare required academic environment for the facilitation of education lives of handicapped students in higher education processes and ensure their full participation in their education process (YÖK, 2010). The “Handicapped Student Units”, put into force together with the related Regulation, conduct works in order to support the handicapped students in universities. The studies so made may be listed as the recognition of the handicapped students by each university within its structure and development of awareness for the handicapped student, requirement-determination works, planning the works to make the environment free of handicap and determination and solution of problems by organizing meetings with the handicapped students (Kalyon, 2012). However, it has not been put forth how these studies/works so made have affected the educational process of the handicapped individuals. Therefore, it is clear enough that the handicapped students the handicapped individuals especially requiring language support will face immense difficulties in their processes of continuing their educations at universities. Currently, there is one higher education institution, equipped with convenient environment and strategies for the hearing-impaired individuals. The School for the Handicapped of the Anadolu University has kept offering education since 1993 for the handicapped individuals. The SfH currently continues to offer education in four programs; two for undergraduate and another two for associate (two-year) degrees. An average number of 40 hearing-impaired young people graduate from the SfH for each year. The total number of the graduates of the SfH is 497 as of the end of the Spring Semester of 2018. The SfH is the first and only higher education institution in Turkey as of its specialist education cadre both in its field and special education field and at the programs, prepared in conformance to the hearing-impaired individuals.

The level of language skills of the hearing-impaired students are closely related to various number of factors such as type and degree of the hearing handicap and age of becoming a hearing handicapped person and special education, got in that respect. It is not possible to reach such information of the hearing-impaired students, placed in the undergraduate programs of the universities apart from the SfH. Therefore, the degree of hearing handicap and as a consequence, the language level of the hearing-impaired individuals, enrolled in the undergraduate programs, is not known. A great majority of the hearing-impaired students getting education in the SfH have advanced and highly advanced sensori-neural hearing handicap.

It is important to make the career awareness due to take place in their professional trainings in accordance with their language levels in order that the hearing-impaired individuals find place for them at the employment environments. In this respect, it is necessary to integrate the career awareness studies with courses in the professional training processes, support the same with applications and diversify with interdisciplinary studies (Karasu, 2011; Karasu, Uzuner & Beral, 2018; Kaya, 2012; Uzuner et al., 2011). Having knowledge what the

preliminary information for the career awareness of the hearing-impaired young persons, entitled to get university education, will illuminate the development/updating of the studies that are and will be made for the career awareness. It is thought that the findings that are obtained from the study will make contribution to the career awareness and making career planning of the hearing-impaired university students, integrity of the courses at the professional training programs, applications due to be made and diversification of the foregoing through interdisciplinary activities. The general objective of this research is the determination of perceptions of the university students with advanced and very advanced level of hearing-impaired beginning their undergraduate education processes, on the career and career planning. The research questions within the direction of this objective are as follows:

Of the young people, who are the advanced and very advanced level of hearing-impaired, coming from various education environments;

- a) What are the personal characteristics?
- b) What are the educational and SfH information?
- c) What is the preliminary information with relation to the career and career awareness?
- d) What is the career planning for the post-graduation period?

Method

The research where it is aimed to determine how the hearing impaired young persons, who came from different education environments, with the advanced and very advanced level of hearing-impaired, have come to the SfH and their opinions with relation to the career planning of them, is a descriptive analysis. According to this approach, the data, obtained within the research process, are summarized and interpreted within the themes, determined in advance. Direct quotations are given place at the descriptive analysis study in the reporting of the data, obtained at the end of an interview, questionnaire or observation in order to reflect the opinion of the individuals in a striking manner. The objective of the descriptive analysis is to submit the findings so obtained in a regulated and interpreted manner (Yıldırım & Şimşek, 2016).

The research data have been gathered with literature scanning, document scanning, observation, researcher diary, questionnaire process video shootings and questionnaire. The questionnaires are the scales, used for the obtainment of information for objective with the questions, asked to the group that is accepted to be representing a certain universe (Bal, 2001). Open- and closed-ended questions have taken place at the questionnaire, developed in the research.

Participants

The students and research team constitute the participants of the research. According to the official records in our country, only 1.518 out of a total number of 7.010.598 students taking place at the undergraduate and associate degree processes of the higher education as of 2017-2018 educational year, are the hearing-impaired (YÖK, 2018). It is seen hereunder that only 0,022 % of the number of students taking place at the undergraduate and associate programs are the hearing-impaired. It is indicated in the related reports that the number of students, who enrolled in the undergraduate programs in the educational year of 2017-2018, is 669.367 (YÖK, 2018). In this case, it is possible to say that there are an approximate number of 145 hearing-impaired individuals at the undergraduate programs according to the proportion so determined. The number of students, who enrolled in the undergraduate programs of the School for the Handicapped (SfH) of the Anadolu University in the educational year of 2017-2018, are 22. It is possible to say that an approximate proportion of 15 % of the hearing-impaired students, who newly enrolled in the undergraduate programs of universities, are studying at the SfH. The hearing-impaired information and degree of the remaining 123 students are unknown. In the meantime, there is no information on the language levels of these students available. In this case, it is possible to conclude that the students, enrolled in the SfH, represent the advanced and very advanced level of hearing-impaired students. In this context, 22 hearing-impaired students, who enrolled in the undergraduate programs of the SfH in the educational year of 2017-2018, constitute the universe of our research. A questionnaire has been applied to 16 (73 %) of these students having taken part in the research.

The research team consists of four instructors. The author of the article served duty as the conductor of the research. All instructors have taken place in the collection of data, their analysis and validity studies.

The research is limited by the 16 advanced and very advanced level of hearing-impaired students, for whom the data are gathered.

Data Collection Techniques and Analysis

The questionnaire that has been prepared in order to bring the opinions of hearing-impaired undergraduate students about the career and career awareness and to learn about the opinions of the students was applied to the undergraduate students, who newly began the SfH in the educational year of 2017-2018 at class environment. The questionnaire that has been prepared at the computer media and adopted to the language level of the handicapped students upon regulation was applied in three sessions on the dates of 03-06-07/11/2017. The questionnaire has been filled in at the class environment. While the questionnaires were answered at the class, the researchers responsible for the application of the questionnaire have taken place beside the students. No time limitation has been given for filling in the questionnaire. The questionnaire has been filled in with individual supports, given by the researchers to the students. The validity study of the questionnaire has been carried out by three academic members, experienced on research methods and specialists in the hearing-impaired individuals. A total number of 41 questions were taken place at the developed questionnaire where there were 25 closed-ended and 16 open-ended questions. The developed questionnaire contained the following topics: *“Personal Information”*, *“Information on Education and School for the Handicapped (SfH) of the Anadolu University”*, *“Acknowledge About –Associate-Definition of Career Conception”* and *“Looking for Employment/Job After Graduation, Finding Job Advertisement and Job Application”*.

The hearing-impaired students, who participated in the research, show a dispersion of 8 females (50 %) and 8 males (50 %) in consideration of sex. The students of the graphic 1st Class, Ceramic 1st Class and Preparatory class students in Turkish (language) have answered the questionnaire in different sessions. The descriptive analysis techniques have been used in the analysis of data, gathered in the direction of the questionnaire and prepared for the objective. Each section-taking place in the questionnaire has been analysed within itself.

The students have been informed about the content and application of the research in the questionnaire sessions and written permission letters were taken from the students. All of the students have participated in the research voluntarily. A camera record has been made after the collection of letters of permission. The questionnaire answering process has been jointly participated by an instructor, who knows sign language, and special training experts. A group and individual support study has been made for the comprehension of questions by the students in advance of answering the questionnaire.

Any question that is not understood and asked by a student for clarification was explained firstly to the student and then, to the class and by doing so, it was tried to ensure the equality. The video record of all questions so explained has been taken. It has been tried to make same explanations in all sessions. The problems and suggestions, experienced in the process are entered in the diary of the researcher (Figure 1).



Figure 1: Participant Students in the Questionnaire Session

Findings

The findings at this section of the research will be presented under the topic of the research questions. The questions of the questionnaire under the research questions and students' answers will be interpreted within the direction of the objectives and transmitted accordingly.

a) What are the Personal Characteristics of the Students Studying in the Undergraduate Programs of the SfiH?

Relevant questions on *demographic information, looking or a job and working in a job* take place at the “*Personal Information*” section of the questionnaire. There are a total number of 20 questions take place at this section.

Demographic Information

The average age of the students is 21. In this respect, 9 (56 %) of the students are enrolled in the Ceramic and 7 (44%) however, in the Graphic department. While 3 (19 %) of the students use cochlear implant, 13 (81 %) students, however, use hearing aid. While 9 (70 %) of the students wearing hearing aid uses their devices in a regular manner, the remaining students said that they do not wear their devices in a regular manner. When it is looked at the reasons of not wearing the devices, however, the information such as disturbed by noise, headache and failure to get sufficient training was given. 2 (13 %) students have not answered this question. The personal information of the students, participated in the research, take place at the Table 1.

The effect of having a hearing-impairment is a known fact on the skills of using the language (Kretschmer & Kretschmer, 1988). When the ages of the hearing-impairment ages of the students are taken into consideration, it has been understood that 10 (63 %) students are the hearing-impaired inborn, 3 (19 %) are at the age of 1, 2 (13 %) at the age of 8 and 1 student, however, at the age of 11. Within the light of these data, the ages of 13 (81 %) students when the hearing-impairment started have similar natures. It has been understood that 3 (19 %) students have become hearing- impaired after the language acquirement age. This circumstance shows that the language levels of these three students have been more developed and rich in comparison with the others. Showing a conspicuous difference of the answers of these students in comparison with others is an expected circumstance. When the hearing impairments of the students are classified, it has been understood that 13 (81 %) of the students are subject to very advanced, 2 (13 %) advanced level and 1 (6 %) student, however, at medium level hearing-impairment (WHO, 2018).

Table: 1 – Characteristics of the Participant Students

Department/Class	Student	The Cause of Hearing Loss /Age	Hearing Loss (dBHL)	
			Right	Left
Ceramic/ Intensive Turkish Program	M.Ç.	Congenital	116	120
Ceramic/1	C.K.	Congenital	96	100
Ceramic /1	T.K.	Congenital	105	108
Ceramic/ Intensive Turkish Program	S.K.	Congenital	105	102
Ceramic /1	Y.Y.	Congenital	105	110
Ceramic /1	E.K.	Disease/Age 1	97	103
Ceramic /1	Z.İ.	Congenital	71	73
Ceramic /1	İ.B.	Congenital	71	73
Ceramic /1	Ü.B.	Congenital	105	95
Graphic/ Intensive Turkish Program	H.T.	Unknown/Age 1	105	102
Graphic/ Intensive Turkish Program	İ.B.	Congenital	116	118
Graphic/ Intensive Turkish Program	E.B.	Congenital	116	118
Graphic /1	G.E.	Sudden Hearing Loss/Age 8	110	110
Graphic /1	M.H.	Meningitis /Age 8	110	107
Graphic /1	U.A.	Meningitis /Age 11	107	108
Graphic /1	R.G.	Disease/Age 1	68	68

Information on Looking for a Job and Working in a Job

There are 3 questions with relation to this topic: “*Did you look for a job before arrival in the school?*”, *If the*

answer is YES, please explain it. What have you done when looked for a job? Did you work before you came to the school? If the answer is YES, please say where you worked?

When the questionnaire data are examined, it has been determined that 8 (50 %) of the students were looking for a job and 8 (50 %), however, did not look for a job. The students, who looked for a job, were asked what they have done while looking for a job. Only 4 (26 %) of these students answered this question. 2 students said that they went to the İşkur (Turkish Employment Agency) and 1 student said that he gets support from his family and 1 student, however, the CV. The other students did not answer the question. It has been determined that the students, who have worked before he came to the school, were 9 (56 %).

b) What are the Educational and SfH Information of the Students Studying in the SfH Undergraduate Programs?

It has been understood in this section of the questionnaire where the questions for the educational information of the students take place that 11 students (69 %) have taken pre-school education and 5 (31 %), however, not taken the said pre-school education. It is seen that 9 (56 %) students have taken education at the “Day Special Education” and 1 student at the “Special Boarding School” and 5 (31 %) students, however, have taken education in the “Inclusion” environment. 1 (6 %) student did not answer this question. 2 (13 %) students, who have taken education at the day special education environment indicated that they passed to the inclusion environment. It is seen that at the secondary education processes, however, 10 (63 %) students have taken education at the Day Special Education” institution, and 2 (13 %) students at the “Special Boarding School” and 5 (31 %) students, however, have taken education in the “Inclusion” environment. 1 student did not answer this question (Figure 2).

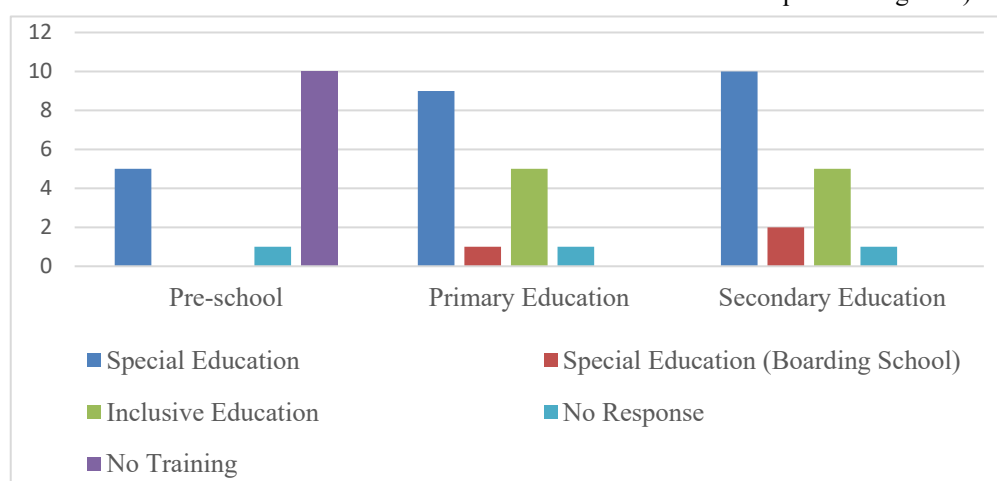


Figure: 2 – Educational Background of the Students

The questions such as: “where did you learn about the School for the Handicapped (SfH)? Did you plan to come to this school? If yes, what did you do? And “What might you do if this school was not available? have taken place at the questionnaire in order to learn about the causes for the selection of the SfH for undergraduate education and whether the university education have taken place at their career planning and for undergraduate education with relation to the career awareness of the students.

The objective of the first question is to get information about the recognition of the SfH. According to the findings so found, the aim is to determine the environments where the recognition of the School for the Handicapped (SfH) and plan the studies. It is indicated in this question that more than one alternative may be ticked. When the answers are examined, it has been seen that 5 (31 %) students ticked that they have learned from the internet”, 3 (19 %) students “Guidance Research Units” and 15 other students, however, ticked as learned from “friend”. According to the data, the unit where the maximum number of data has been taken on were “friends” the SfH. In any meetings, conducted with the students after the questionnaire, it has been understood that the students had friends, graduated from the SfH or currently studying and they set up contact with them about the school. It has been seen that the rate of guidance of the hearing-impaired students by the Guidance Units taking place at the secondary education institutions to the university environments, especially to the SfH, have been considerably low. Within the lights of these data, it has been decided to carry out informative works with the personnel and managers serving duties at the Guidance Research Units taking place at the secondary education institutions and special education vocational high school having hearing-impaired students within their structure, and to take the trips for school introduction to the special education vocational high schools where the hearing-impaired students take place, on the agenda again.

The student ere asked *whether they have planned to come to the SfH in advance* in order to understand if an university education was available in their career planning targets or not. While 12 (75 %) of the students answered this question by “Yes”, 3 (19 %) gave the answer “No”, 1 student did not answer it. 12 students, who gave the answer “Yes”, were asked to write down what they have done in order to come to the SfH. 8 students among 12 have understood and replied the question why. The explanations, written down, by them were that they wanted to read university and their friends were studying as well and therefore, they wanted to come. A few examples to the answers of the students:

- I want to learn about the courses a lot.
- I want to attend in a school like university.
- I like graphic and art and work for it, I see them in order to find at Internet.
- I previously came and saw the Eskişehir University with my mother, father and sibling. I wanted to study at this school.

They were asked a question of “*What would you do if that school was not available?*” in order to understand that the hearing-impaired young persons had any plans to take education in another university if the SfH did not exist or continue their education. They were requested to give an open-ended answer. This question was answered by all students. 1 student said he didn’t know anything about it. 8 (50 %) students indicated that they would work, 5 (31 %) of them said that they would not study, 1 (2 %) would stay at home and 1 (2 %) however, study in another school. When the personal information of the student, who said that he would study in another school, it was understood that he became hearing-impaired at the age of 11 and was able to target an alternative apart from the SfH as a result of the fact that his communication skills were close to normal students. However, the other students did not have any plans of studying in another university apart from the SfH. This is clearly understood from the answers of the students:

- .. Comfortable at home.
- I worked at a job
- I would not study. I did not have any intention of studying in advance. I would be an officer through the KPSS (E- Public Personnel Selection Examination).
- If not available, there would be no intention to go to another school and develop communication.
- Very difficult for me because a normal school is not convenient for me. I would write a petition to the Ministry of National Education.

c) What Are the Preliminary Information Levels with relation to the “Career” and “Career Awareness”?

There are 6 questions in this section. 2 (33 %) of the questions were open-ended and 4 (67 %), however, as multiple-choice questions. 2 of the questions, prepared as multiple-choice, contain an explanation indicating that open-ended answers might be written in.

Question 28. “Do you know about the meaning of the word career? (Yes/No)

The first question was prepared as a kind of Yes/No question. There are 6 (38 %) “Yes” and 10 (63 %) “No” answers. According to the questionnaire data, it is seen that the knowledge of the students about the wording “career” is limited.

Question 29. If your answer is yes, “where do you know about the wording “career””? (You can click more than one choice)

The students, who gave the answer “Yes”, were asked to click where they knew about the career wording. It has been indicated that it would be possible to click more than one choices taking place at the question. The dispersion in the Figure 3 is seen when the answers are examined.

Based on the answers, it is understood that the internet media is an important means in the comprehension of the wording “career”. It is understood that the preliminary information with relation to the career is mostly acquired from the internet and school. 6 students answered the section “*Explain*” taking place in the choices of the question. When the said answers are examined, it is seen that 1 student made a proper career definition, 1 student answered it by using the answers of the next question and 1 student, however, wrote that he did not know about the answer and would make a search about it. The student, who gave the proper/correct answer indicated as follows: “Career means to determine the future in your life, and think about what kind of job, work and so on will be done.” It is seen how good he used the language in his said answer. The student, who gave the answer, has been a hearing-impaired at the age of 11. This matter clarifies that he comes forth as different from other students in respect of reading and comprehension skills.

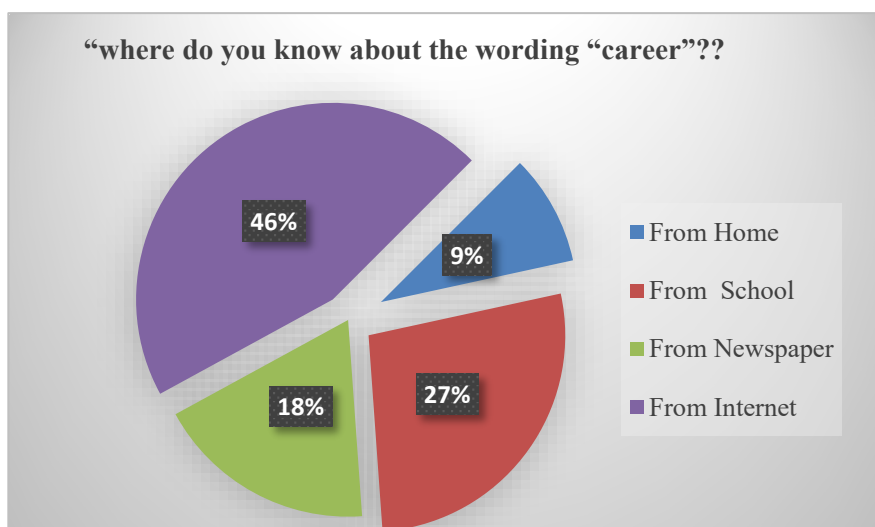


Figure 3 – The Sources of Career Information of the Participants

Question 30. In your opinion, which of the following the career may be related to?

According to the questionnaire results, 10 (63 %) students have answered this question. The dispersion of the students having giving answers is seen at the Figure 4.

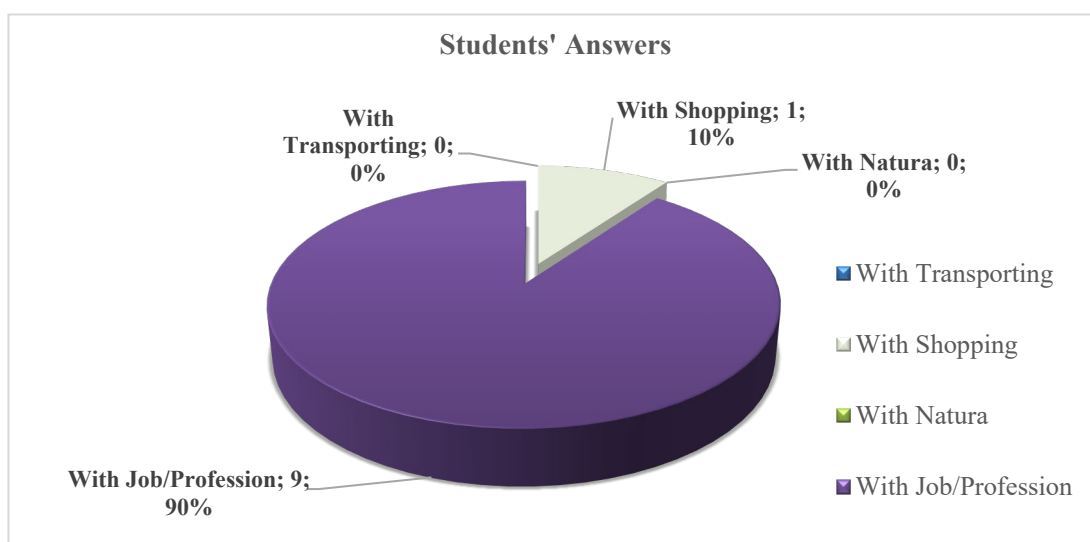


Figure 4 – Opinions of the Participants about the Question 30

Upon examination of answers, it is seen that 9 (90 %) students gave the answer of “with job/profession) and the answer “with shopping”, however, is ticked by 1 (10 %) student. Other choices have not been ticked. On the basis of this question, it is understood that the students could associate the wording career with the job/profession. It is understood from the answer of the student, who gave the answer “with shopping”, saying “Looking for a job with shopping, career is working.” That he confused the wording “career” with the wording of “cashier”.

Question 31. What does career mean in your opinion? Please write down.

The question is open-ended. The definition of the wording “career” is required to be written down. 10 (63 %) students have given answers to the question. 1 student among those, who answered, has given an answer by confusing the wording with the word “cashier”. Among the remaining 9 students; 3 (33 %) gave their answers as “job”, 2 (22 %) as “looking for a job”, 1 (11 %) “İŞKUR (Turkish Employment Agency)” and 1 (11 %), however, as “workplace”. It is seen when the answers are examined that only 2 students gave the correct answers to the question. The examples from the answers of the students are indicated as follows:

- It is something like the İşkur but I have no knowledge about it.
- For a person exercising a profession, desired by it.
- It means for work.
- Market queue the career working.

Question 32. "Do you have any knowledge about the Career Planning?" (Yes/No)

It is aimed in the question to understand whether the student has any knowledge about "Career Planning". Giving answer to the question as "Yes/No"; those having answered the question as "Yes" were expected to write an explanation with relation to the "career planning" at the explanation section. It is seen when the questionnaires were examined that 3 (19 %) students gave the answer as "Yes", 9 (56 %) as "No" and 4 (25 %) students, however, did not give any answer. 2 of 3 students, who gave the answer "Yes" written down information at the explanation section. It is seen that both of the students, who wrote down their answers, have written correct information. It is understood according to the data that 88 % of the students did not know about the wording "career planning". Furthermore, it is also understood that linguistic skills of the students, who gave correct answers to the question, are better than other students as a result of the fact that they had the hearing-impairment at the ages of 8 and 11. The answers were as follows:

- We plan our field, what we will do in future and in what job we will work.
- It means aiming better targets and achieving the targeted objective.

Question 33. Do you have any career planning? If yes, what is it?

The question has been prepared as open-ended. 7 (44 %) of 16 students having participated in the research answered the question. When the answers were examined, it has been seen that 4 students having given answer have written down the answer of "I don't know". Only 2 (13 %) students have written correct explanations to the question. The same students have answered the 32nd and 33rd questions correctly. The answers, given by the students are as follows:

- Yes, I have career planning too. I want to take an undergraduate study for four years at the university and become successful at the E-KPSS (E- Public Personnel Selection Examination) and to be a civil servant and on the other hand, a graphic designer. My field of interest for the current period is the graphic designing, photography and communication.
- Yes, I have career planning. I want to run my own business after getting experience in a corporate firm.

d) What Are the Career Plans for the Post-Graduation Period?

The questions pertaining to the career plans of the students take place at this section. There are 8 questions in this section. 5 of the questions were prepared as open-ended. 2 of them were multiple-choice and 1, however, "Yes/No" question. The multiple-choice questions have explanatory sections.

Question 34. What do you want to do when you complete/graduated from the school?

The aim of the question is to acquire information on the career plans of the students for the graduation. There are 5 choices at the question. Furthermore, a space is left where he can write his own answer as an alternative. It is indicated in this question that the students may tick more than one answer. All students answered this question (Figure 5). The alternative "I never thought about it" was not ticked.

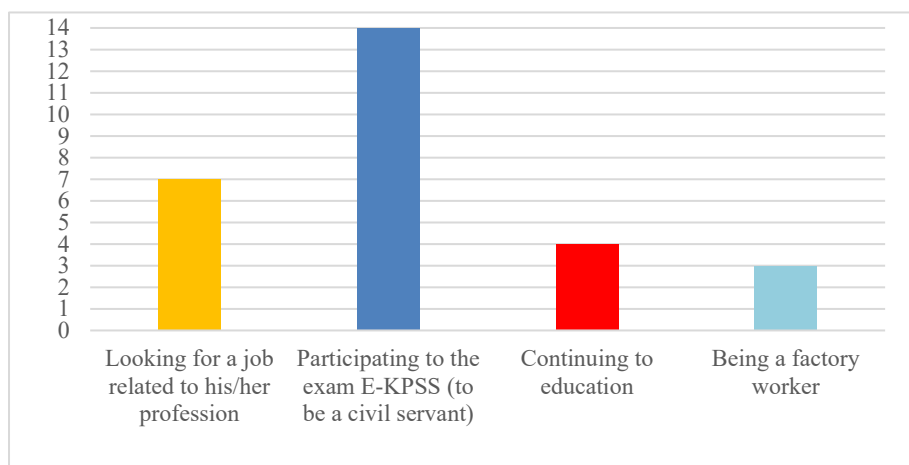


Figure 5: Opinions of the Participants about their Career Plans

Only one student contributed to the question by adding an article to it. The student indicated that he could work in a municipality. When the answers of the students are examined, it will be seen that 88 % of the students ticked the choice of "I will participate in the E-KPSS (E- Public Personnel Selection Examination) and become a civil servant"

Question 35. How do you look for a job when you finish your school?

The question is prepared as a multiple-choice question. It is indicated that the students can tick more than one answer. The dispersion of the student's answers is seen at the Figure 6.

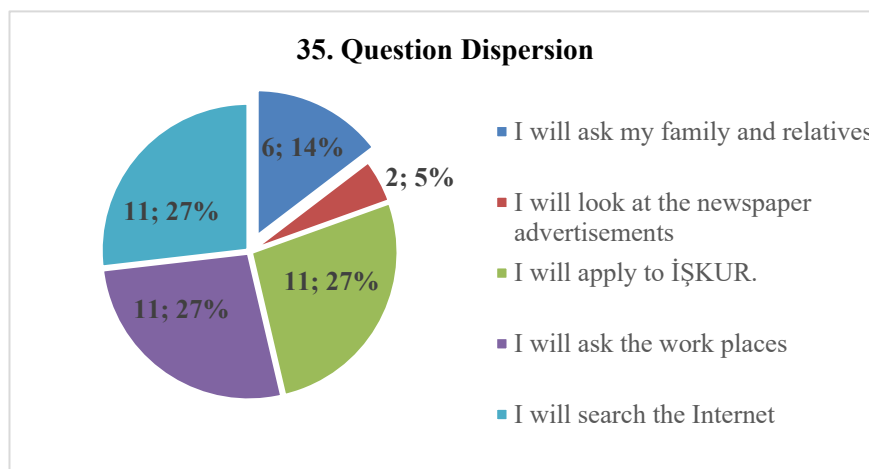


Figure 6: Opinions of the Participants about the method of Job Searching

It is seen according to the questionnaire data that the students ticked the choice of “*I will look at the newspaper advertisements*” with the lowest rate (2.5 %) to look for a job after their graduation. Within the direction of data, it is decided for seeking and finding a job to dwell at the courses with regard to the career awareness, conducted within the process of courses, upon the importance of job advertisements taking place at newspapers.

Question 36. Which documents are used in the job application?

The question is prepared as open-ended. All students answered the question. While 2 (13 %) of the students indicated that they did not know about it, 4 (25 %) students gave answers that are not related to the question. 2 (13 %) students said that they would get their diplomas and make job application, and 1 (6 %) student, however, said that his family might help him. The remaining 7 (44 %) students, however, gave correct answer by writing the names of documents such as CV, report and so on, correctly. Some of the answers of the students are as follows:

- Handicapped report or internship document school document training field document available.
- Diploma, health report, identity card photocopy, photograph and military service document.
- Curriculum Vitea – CV Recorded, signature
- Like the list, but I understood little.
- Diploma document to computer at the job application.

Question 37. What are done in a job interview?

The question, prepared as open-ended, was answered by 13 (81 %) students. 11 (69 %) students made the definitions of their employment experience or job interview. 2 students have given correct answer to the question. It is understood when the answers of the questionnaire are looked at that 80 % of the students have knowledge about job interview, 13 % of them experienced a job interview before and again, 13 % of the same could write the definition of the job interview. Some examples to the answers of the students are as follows:

- Do not speak like an interview, if we agreed upon, my family takes it.
- Talking about the job, then, how to look for job afterwards....?
- Interview and training are made.
- I made an application through internet and they called me a week later and we had an interview.

38. Question. What is a job application file?

The question was prepared as open-ended. The job application file is the file where necessary documents take place in during the job application. It is aimed to learn about what the file is and what is available in it. 10 (63 %) have given answer to the question. It is seen that 19 % of the students have answered the question correctly. Some of the answers of the students are as follows:

- All documents of the person identity card photocopy, photograph diploma. It is the file where documents such as military service are available.
- Something important necessary.
- I will give everything when the your form and list are brought it.

Question 39. What does a CV mean?

10 (63 %) of the students answered the question correctly. 6 (38 %) students did not answer or wrote down that it is not known to him. "The "Curriculum Vitae" answer is accepted as correct. Only 2 (13 %) students made a correct definition of CV in this question.

Question 40. Do you know about the "İŞKUR" (Turkish Employment Agency)? (Yes/No)

12 (75 %) students answered the question by "Yes" and 4 (25 %) students, however, by "No". It is understood from the data that 75 % of the undergraduate students had knowledge about the İŞKUR and could benefit from it after their graduation.

Question 41. What does the "İŞKUR" do?

The students are expected to give an open-ended answer to the question, prepared in order to learn about to what degree the students have knowledge about the İŞKUR. 12 (75 %) have answered the question. It has been understood that 10 (63 %) of the students could described the İŞKUR correctly and 2 students, however, mentioned about their own experiences.

Discussion and Conclusions

It is tried within the scope of the research to put forth the demographic information, SfH preferences, their opinions on the career and career awareness of 16 hearing-impaired students studying at the undergraduate programs of the School for the Handicapped (SfH) of the Anadolu University, located in Eskişehir province, according to the questionnaire questions, applied in this respect.

It has come forth within the direction of a descriptive analysis so made that;

- Those of hearing impaired students, who preferred the SfH and acquired the right of studying there were the advanced and very advanced level of hearing-impaired individuals;
- The hearing-impaired students regarded the SfH as an important, even further the only opportunity for the higher education process of their careers, and thought that they would not study or were going to work if the SfH was not available;
- The advanced and very advanced level of hearing-impaired students had knowledge about the SfH that have taken place in their career plans through their friends, and the Guidance Research Units remained at the background on the subject matter thereof;
- The hearing-impaired undergraduate students had limited knowledge with relation to their careers and career planning, and could not write answer(s) with relation to the concepts because of insufficiencies in their vocabulary, however, could manage to associate the career and career awareness with the job and profession.
- It is an important target for the bachelors to be graduated from the SfH to be successful at the E-KPSS (E-Public Personnel Selection Examination) and find a job at the public sector;
- They had knowledge about the CV that is one of the necessary and important documents for the job application, however, this knowledge was limited;
- They had limited knowledge about job interview; and
- The İŞKUR (Turkish Employment Agency) that is an important institution on the placement in job is known by the hearing-impaired undergraduate students.

It is understood according to the research results that the majority of the individuals studying at the SfH is consisted of the advanced and very advanced level of hearing-impaired individuals. The reading and comprehension problems of the advanced and very advanced level of hearing-impaired individuals come forth as an important obstacle in their educations at university level. Before all else, they experience difficulties to achieve necessary success points for placement in the related university programs. Various works have been carried out at the SfH for the hearing-impaired students in order to enable them to take place in university programs. One of these works is related to the student acceptance through preliminary enrolment and special talent. In 2013, a condition indicating "It is necessary to have at least one of the YGS (Transition to Higher Education Examination) be 100 or over, provided that the handicapped students (physically handicapped, visually-handicapped, hearing-impaired, autism) proved that they are handicapped, at the programs accepting students by a special talent examination" was added I the 2014 Student Selection and Placement Examination through the correspondences and catch-up works between the SfH and ÖSYM (Assessment Selection and Placement Centre) (OSYS, 2014). In the continuation of the decision, it was resolved in a meeting of the General Board of Higher Education on September 25, 2014 to make the enrolments of the students, who won the talent examination by the assessment according to the result of a separate talent examination between them without taking the YGS (Transition to Higher Education Examination) into consideration, to the programs taking the handicapped students through a special talent examination (OSYS, 2015). This case has speeded up both the flow of students to the School for the Handicapped (SfH) and facilitated

the placement of the handicapped individuals in the programs apart from the SfH. There has been sufficient number of student applications since 2014 to fill in the quotas of the undergraduate programs of the SfH. This circumstance is an important opportunity from the point of placement of the hearing-impaired students in the SfH that comes forth as an important opportunity for taking undergraduate education. However, the placement in the programs is not sufficient. It is necessary to evaluate the higher education processes well and to prepare and support environments for raising both profession and language experience knowledge of the students (Uzuner et al., 2011, Karasu, 2011; Karasu, 2017; Kaya, 2012; Kaya, Özten Anay & Girgin, 2014).

According to the result of the questionnaire, it is understood that the students at the undergraduate programs of the SfH prefer the SfH in order to get education at higher education level in the undergraduate programs of the SfH and they have no other studying plans at a different higher education institution. From the point of view of the higher education school that is sole institution in its field of engagement, this is an important opportunity for the higher education of the hearing-impaired students. However, it is necessary to open new higher education institutions in order to increase the hearing-impaired individuals taking place in the higher education and to make the educated individuals be acquired by the economy. In this context, the researches, made with relation to the teaching and teaching methods at the SfH will play a guiding role for the establishment of new departments.

The results of the questionnaire give some clues with relation to the career and career awareness of the hearing-impaired undergraduate students. However, there is a requirement for the diversification of data and method of research in order to put forth the problems and pertaining solutions. According to the results of the questionnaire, notwithstanding that the hearing-impaired students do not know about the meaning of the wording "career", it is seen that they could make correct estimations when the choices and clues are given. It is understood that the practice of employment or internship by some of the students in advance of the school give ideas for workplaces and recruitment. However, the permanence of this knowledge for the hearing-impaired students will be realized by the repetition of the same in various contexts and significant environments (Paul, 1998; Rupley, Blair & Nichols, 2009). It is possible to say that the studies, carried out with the final class students on the matters of raising the career awareness at the higher education school and learning about the techniques of applying for a job, provides an important source on this matter. It is understood to be necessary to make these studies, made within the lights of information being obtained from the questionnaire results, in previous classes as well.

The opinions of 88 % of the students, enrolled in the undergraduate programs of the SfH, about the placement in a job through E-KPSS (E- Public Personnel Selection Examination); it is sufficient for the students to find a job at the public sector and they have no willing to work in own their field of profession. It is very limited for the graduates of fine arts departments such as Graphic, Ceramic and so on, to find a job opportunity in their field at the public sector. Whereas there are lots of job opportunities at the private sector in these fields. However, as a result of lack of sufficient knowledge and experience of the hearing-impaired undergraduate students to look for job and find job advertisement, it is possible to say that they want to take part in the E-KPSS (E-Public Personnel Selection Examination) and place in a job immediately. Therefore, the studies to be made with the hearing-impaired students in this direction are important from the point of view of employability of them. Various positive developments are made at this stage through the studies, conducted at the Higher Education School.

It is understood as a consequence of the questionnaire results that the İŞKUR is known about by the hearing-impaired undergraduate students. However, it is necessary to teach the effective use of the İŞKUR in order to find a job.

The questionnaire results show that the diversification of activities for increasing the career development and employability such as looking for a job, finding job advertisement, application for a job, job interview, getting to know about the workplaces and so on, conducted at the SfH and keeping on making the same in lower classes will be beneficial and important.

References

- Adıguzel, I & Erdogan, A. (2014). *Anne Roe ve Holland'in kişilik kuramları ile Shein'in kariyer değerlerinin içerik analizi yöntemiyle değerlendirilmesi*. International Journal of Alanya Faculty of Business. 6(3). 15-25.
- Bal, H. (2001). *Bilimsel araştırma yöntem ve teknikleri*. Süleyman Demirel Üniversitesi Yayınları. Yayın No:20, Isparta.
- Bhaerman, R. Spill, D. (1988). *A Dialogue on Employability Skills: How Can They Be Taught?*, Journal of Career Development (Springer Science & Business Media B.V.). Fall1988, Vol. 15 Issue 1, p41-52. 12p
- Brown, D. & Brooks, L. (1985). *Career choice and development*. San Francisco, London. Jossey-Bass Publisher.
- Campbell, C.P. (1997). *Training the workforce: an alternate approach*. Vocational-Technical Education

- Conference, Lousville. 2-26.
- Demir, A.Z. & Eliöz, M. (2016). *Engelli bireylerin eğitim ve istihdamı için bir model Önerisi*. ASOS Journal, Akademik Sosyal Araştırmalar Dergisi, Yıl:4, Sayı:33, Kasım 2016, S. 76-90.
- Derican, T. (2010). *İşitme engelli gençlere iş başvurusu dosyası (Portfolyo) geliştirme çalışmalarının incelenmesi: Eylem araştırması*. Yayınlanmamış Yüksek lisans Tezi. Dumlupınar Üniversitesi, Kütahya.
- Dursun, S. & Aytaç, S. (2009). *Üniversite öğrencileri arasında işsizlik kaygısı*. Uludağ Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 28(1), 71-84.
- Erdiken, B. (2005). *Anadolu Üniversitesi Engelliler Entegre Yüksekokulu'ndan mezun olmuş işitme engelli öğrencilerin istihdamı, iş durumları ve ayrımcılık*. ÖZ-VERİ Dergisi. 2(1), 389-409.
- Erdiken, B. (2007). *Anadolu Üniversitesi Engelliler Entegre Yüksekokul mezunu işitme engelli gençlerin iş durumu: Anket ve eylem araştırması*. ÖZ-VERİ Dergisi, 4(2), 1041-1063.
- Isaacson, L.E. & Brown, D. (2000). *Career information, career counseling, and career development*. USA. Allyn and Bacon.
- İstel, Ç. (2018). *İşitme engelli gençlere uygulanan yapı bilgisi dersinin öğretim sürecinin incelenmesi: eylem araştırması*. Yayınlanmamış Doktora Tezi Üniversitesi Eğitim Bilimleri Enstitüsü, Eskişehir.
- Karasu, G. (2011). *İşitme engelli gençlere uygulanan sözcük dağarcığı geliştirme stratejilerinin incelenmesi*. Yayınlanmamış Doktora Tezi Üniversitesi Eğitim Bilimleri Enstitüsü, Eskişehir.
- Karasu, G. (2017). *İşitme engelli üniversite öğrencileriyle yazma sürecinin incelenmesi*. Anadolu Üniversitesi Bilimsel Araştırma Projeleri. Proje Ana 2015/05E440.
- Karasu, G., Uzuner, Y., & Beral, A. (2018). *İşitme engelli üniversite öğrencilerinin yazma sürecinde uygulanan etkinlik ve stratejilerin incelenmesi*. Ege Eğitim Dergisi / Ege Journal of Education, 19(1), 262-283. Doi: 10.12984/eegefd.343127
- Karasu, G. & Uzuner, Y. (2018). *İşitme Engelli Üniversite Öğrencileriyle Dengeli Okuma Yazma Yaklaşımı ile Gerçekleştirilen Yazma Çalışmalarının İncelenmesi*. Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi, 19(2), 199-232. doi: 10.21565/oelegitimdergisi.310350
- Kaya, Z. (2017). *İşitme engellilerin mesleki eğitimi için bir bakış: Engelliler entegre yüksekokulu örneği*, Mesleki Bilimler Dergisi, 6 (3): 677 – 688.
- Kaya, Z., Özten Anay.M., Abalı, G., Karasu, G. & Girgin, C. (2017a). *Acquaintance with profession: Using internship as a tool for. hearing-impaired university students*, Contemporary Educational Researches Journal, Volume 07, Issue 3, (2017) 134-143.
- Kaya, Z., Özten Anay.M., Abalı, G., Karasu, G. & Girgin, C. (2017b). *İşitme engelli üniversite öğrencileriyle kariyer planlama: iş yeri ziyareti*, Küreselleşen Dünyada Eğitim. (Ed) Demirel Ö. & Dinçer S.. Pegem İdeks. Ss: 805-818.
- Kaya, Z., Özten Anay.M., Karasu, G., Abalı, G. & Girgin, C. (2017). *On The Way Towards Career Awareness: Interview With Graduates*. Turkish Online Journal of Educational Technology. Special Issue for INTE 2017, November 2017, 658-679.
- Kaya, Z. (2012). *İşitme engelli yüksekokul öğrencilerine bilgisayar yazılımı kullaniminin öğretilmesi: eylem araştırması*. Yayınlanmamış Doktora Tezi Üniversitesi Eğitim Bilimleri Enstitüsü, Eskişehir
- Kaya, Z., Özten Anay, M. & Girgin, M., C. (2014). *Anadolu Üniversitesi Engelliler Entegre Yüksekokulu mezunlarının sosyal paylaşım ağları yoluyla izlenmesi süreci*. Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, 15 (Özel Sayı), 139-159.
- Kolb, D. A. (1984). *Experiential learning*. New Jersey. Prentice Hall.
- Korukoğlu, A. (2003). *Üniversite öğrencilerinin eğitimden beklentileri "Ege üniversitesi İ.İ.B.F. örneği"*. Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi, C.8, S.1, pp:79-89.
- Kozak, M. & Dalkiranoglu, T. (2013). *Mezun öğrencilerin kariyer algılamaları: Anadolu üniversitesi örneği*. Anadolu Üniversitesi Sosyal Bilimler Dergisi. 13(1), 41-52.
- Mevzuat. (2003). <http://www.mevzuat.gov.tr/MevzuatMetin/1.5.4857.pdf>. Erişim Tarihi: 08/08/2018.
- OSYS. (2015). <https://dokuman.osym.gov.tr/pdfdokuman/2015/OSYS/2015-OSYSKONTKILAVUZU15072015.pdf>. Erişim Tarihi: 08/08/2018
- OSYS. (2014). <https://dokuman.osym.gov.tr/pdfdokuman/2014/OSYS/Tercih/2014-OSYSKONTKILAVUZU14072014.pdf>. Erişim Tarihi: 08/08/2018
- Özdiñler, A., Tarakçı, E. & Aslan, Y. (2015). *Fizyoterapi ve rehabilitasyon bölümü öğrencilerinin mesleki farkındalık düzeylerinin incelenmesi*. Sağlık Bilimleri ve Meslekleri Dergisi. Cilt 2, Sayı 2, pp:217-222.
- Paul, V. P. (1998). *Literacy and deafness: The development of reading, writing and literate thought*. Boston: Allyn and Bacon
- Rae, D. (2007). *Connecting enterprise and graduate employability: Challenges to the higher education culture and curriculum?*. Education + Training. Vol. 49 Issue: 8/9, pp.605-619, <https://www.emeraldinsight.com/doi/pdfplus/10.1108/00400910710834049>, Erişim Tarihi, 31/07/2018.
- Rupley, W. H., Blair, T. R. & Nichols, W. D. (2009). *Effective Reading Instruction for Struggling Readers: The Role of Direct/Explicit Teaching*. Reading and Writing Quarterly. 25. 125-138.

- Sarikaya, T. & Khorshid, L. (2009). *Universite ogrencilerinin meslek seimini etkileyen etmenlerin incelenmesi: universite ogrencilerinin meslek seimi*. Turk Egitim Bilimler Dergisi. 7(2). 393-423.
- Sharf, R. S. (2006). *Applying career development theory to counseling*. USA: Brooks/Cole Thomson Learning.
- Şimşek, M.Ş. & Öge, H.S. (2011) *Kariyer yönetimi*. Eğitim Akademi Yayınları. ISBN:9786054392377. 281-305.
- Schirmer, R. B. (2000). *Language and literacy development in children who are deaf*. Boston: Allyn and Bacon, Inc.
- Türkoğlu, T., Gavcar, E & Büyüksakallı, H. (2013). *Meslek yüksekokul öğrencilerinin program tercihlerinde farkındalık düzeylerinin belirlenmesine yönelik bir Araştırma*. Elektronik Journal of Vocational Colleges (pp:98-106). December, Özel Sayı.
- Uzuner, Y., Girgin, Ü., Kaya, Z., Karasu, G., Girgin, C., Erdiken, B., Cavkaytar, S. ve Tanrıdiler, A. (2011). *İşitme engelli gençlere uygulanan dengeli okuma-yazma öğretimi modelinin incelenmesi*. Kuram ve Uygulamada Eğitim Bilimleri. 11(4), 2111-2132.
- Yeşilyaprak, B. (2016). *Mesleki rehberlik ve kariyer danışmanlığı kuramdan uygulamaya*. Pegem Akademi. Ankara.
- WHO. (2018). Prevention of blindness and deafness. http://www.who.int/pbd/deafness/hearing_impairment_grades/en/. Erişim Tarihi: 13/08/2018
- Yeşilyaprak, M. (2012). *Mesleki rehberlik ve kariyer danışmanlığında paradigma değişimi ve Türkiye açısından sonuçlar: geçmişten geleceği yönelik bir değerlendirme*. Kuram ve Uygulamada Eğitim Bilimleri. 12(1). 97-118.
- Yıldırım, A. & Şimşek, H. (2016). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri*. Seçkin Yayıncılık, Ankara.
- Yılmaz, I.A., Dursun, B., Pektas, K. & Altay, A. (2012). *Universite ogrencilerinin kariyer secimlerinin demografik ozellikler acisindan incelenmesi: Pinarhisar MYO Ornegi*. Electronic Journal of Vocational Colleges. and education: Instructional implications and applications of sociohistorical psychology (pp.111-126). Cambridge, MA: Cambridge University.
- Yüksek Öğretim Kurumu. (2010). Bilgi Sistemi. <https://istatistik.yok.gov.tr/>. Erişim tarihi: 31/07/2018
- YOK, Bilgi Sistemi. (2018). <https://istatistik.yok.gov.tr/>. Erişim tarihi: 31/07/2018.

Osmanlı Düşünce Tarihinde 12./18. Yüzyıl Veliyyüddin Cârullah Örneği

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Özet

Bu bildiride, Osmanlı düşünce tarihinin 12./18. yüzyıldaki temsilcilerinden Veliyyüddin Cârullah (ö. 1151/1738) konu edilmiştir. Bildiride öncelikle Cârullah'ın hayatı hakkında özet bilgiler verdik. Ardından, Veliyyüddin Cârullah'ın yazdığı ve sahip olduğu kitapların kenarlarına düştüğü notlar vesilesiyle, onun ilgi alanlarına, ilmî kişiliğine ve âlim ve düşünür olarak temel özelliklerine temas ettik. Bu çalışmayla, özelde Veliyyüddin Cârullah, genelde son dönem Osmanlı düşüncesine dair henüz yetersiz durumdaki birikime mütevazı bir katkı sunmayı hedefledik.

Anahtar Sözcükler: *İslam Felsefesi, Osmanlı Düşüncesi, Mantık, Veliyyüddin Cârullah, Cihet-i Vahde.*

Not: Bu bildiri, Ç.Ü. BAP Koor. Birimi'nce desteklenen SDK-2018-10161 kodlu proje kapsamında sunulmuştur.

I. Hayatı ve İlmi Kişiliği

Osmanlı ilim ve düşünce tarihinin önemli simalarında birisi olan Veliyyüddin Cârullah, 1070/1659 yılında Tırhala vilayetinin Yenişehir kazasına (Larissa-Yunanistan) bağlı bir köyde doğdu. Doğduğu bölgedeki medreselerde okudu. Otuz iki yaşında Mekke'ye gidip yedi yıl kaldı ve bu sebeple "Cârullah" (*Allah'ın komşusu*) olarak anıldı. Mekke'den ayrıldıktan sonra Kudüs, Şam, Halep, Hama, Nablus ve Bağdat'a giderek çok sayıda âlimin derslerine katıldı. Nakşi, Kâdirî, Halvetî ve Bektâşî tarikatına bağlı şeyhlerden tasavvuf terbiyesi gördü. 1110/1698 yılında İstanbul'a geldi ve müderrisliğe başladı. Galata ve Edirne'de kadılık yaptı. Cemâziyelâhir 1151/Eylül 1738 tarihinde İstanbul'da vefat etti (Özcan, 2013: 38).

Veliyyüddin Cârullah, döneminin birçok ilim merkezini uzun bir süre dolaşmış ve gittiği yerlerde ulamanın derslerine katılmıştır. Gittiği yerlerdeki eserleri toplamış ve İstanbul'da bir kütüphane oluşturmuştur. Topladığı 3515 eser halen Süleymaniye Kütüphanesinde Cârullah Efendi bölümündedir. Cârullah'ın kendi eserleri mantık, tefsir, hadis, fıkıh, kelam, kıraat, meânî, tasavvuf, astronomi gibi çok geniş bir yelpazeye sahiptir. Özellikle mantık alanında birçok risale derlemiştir. Bu risaleler mantık ile ilgili mesela "cihet-i vahde" gibi önemli mevzuları da kapsamaktadır. Onun mümeyyiz vasıflarından biri de kütüphanesindeki kitaplara özellikle dönemindeki tartışmalı meseleler üzerinden düştüğü notlardır. Kısaca Cârullah, yaşadığı çağın epistemolojik ve ontolojik yaklaşımlarını, 17. ve 18. yüzyılların ilmî ilgi ve tartışmalarını, düşünce mirasımızın gün yüzüne henüz çıkmamız boyutlarını kavramada bizlere ışık tutacak önemli bir entelektüeldir.

Her ne kadar geç kalınmış olsa da bu önemli aydınımızla ilgili çalışmalar ortaya çıkmaktadır. Berat Açıl'ın editörlüğünde hazırlanan *Osmanlı Kitap Kültürü: Cârullah Efendi Kütüphanesi ve Derkenar Notları* adlı kitapta, Cârullah'ın kütüphanesinde kayıtlı ve kendisi tarafından okunan kitaplarındaki notları; İslâmî ilimler, aklı ilimler ile dil ve edebiyat ilimleri üç ana başlığı altında 14 ayrı çalışma içerisinde ele alınmıştır. Muhammed Uşame Onuş, "Bir Osmanlı Âlimi Cârullah Efendi'nin Terceme-i Hâli" adlı makalesinde kenar notları ve muhtelif kaynaklar üzerinden Cârullah Efendi'nin hayatını konu edinmiştir (Onuş, 2015: 19-51). Sami Arslan ise, "Eserden Müessire Seyr-u Sefer: Cârullah Efendi'nin Derkenar Notlarının Biyografisine Katkısı" adlı çalışmada, Cârullah Efendi'nin kütüphanesindeki sadece tasavvuf kitaplarının kenarlarına düştüğü Arapça notların satır aralarından yola çıkmış ve bu notların Cârullah Efendi biyografisine/otobiografisine dair söylediklerini göstermeye çalışmıştır.

Arslan, Cârullah'ın, Sadreddin el-Konevî'nin (ö. 673/1274) telif ettiği *Kitâbü'n-Nusûs*'un bir nüshasının zahriyesine aldığı iki not üzerinden şu sonuçlara ulaşmaktadır (Arslan, 2015: 70-72):

- (1) Cârullah Efendi 1151/1738 yılında hayattadır.
- (2) Adı Veliyyüddin; künyesi Ebû Abdullah; lakabı Cârullah'tır. Mekke'de, Cârullah lakabını almasını gerektirecek kadar uzun süre kalmıştır.
- (3) Fatih Camii'nin yanında bir vakıf kütüphanesi kurmuştur. Bu kütüphaneye tasavvuf sahasındakiler dâhil çok sayıda kitap vakfetmiştir.
- (4) Çok istemesine rağmen *Kitâbü'n-Nusûs*'un ikinci bir nüshasını henüz temin edememiştir. Bu durum, hayatının son dönemlerinde nispeten iktisadi sıkıntı içinde olduğu şeklinde yorumlanmaya müsaittir.
- (5) Vefat ettiği 1151 yılı ile genç yaşlarında yazdığı notlar arasında, yazı stili ve üslup açısından farklılık yoktur. Buradan hareketle, seksenli yaşlara ulaştığı 1151 yılında hâlâ dinç olduğu, elden ayakta düşünmediği söylenebilir.
- (6) Künyesini verdiği müellifleri, "muhakkik, fazıl, şeyh, allâme" gibi farklı sıfatlarla anarak, kendisinden önceki âlimleri sınıflandırmaktadır.

- (7) Edebî eserler kaleme alacak derecede Arapçaya vakıftır.
 (8) İlimlere ve kitaplara tutkuyla bağlı birisidir. Dikkatli, titiz ve sorgulayan bir okurdur. Elden geldiğince kitapları farklı nüshalarından okumakta; nüshaların kenarlarına metni tashih eden ve muhtevasını tenkit eden notlar düşmektedir.

Bunlarla birlikte, Cârullah Efendi'nin kütüphanesinde bulunan yazma eserlerdeki temellük kayıtlarından hangi tarihte nerede olduğuna dair bazı bilgilere ulaşılmıştır. Buna göre, Hicrî 1100'de Mekke'de; 1103'de Medine'de; 1104'te Mekke'de; 1106'da Kudüs'te; 1107'de Şam'da; 1110 ve 1111'de Bağdat'ta; 1112'de Halep'te, 1114'te Konya'da ve tekrar Halep'te; 1116-1119 yıllarında Şam'da; 1120, 1126, 1135, 1138 ve 1140'ta İstanbul'da; 1143'de kadı olarak Halep'te, 1147'de İstanbul'da, 1150'de sürgün olarak Gümülüne'de; 1150'de Edirne'de, 1151'de İstanbul'da bulunmuştur (Arslan, 2015: 74-76).

Elyazmaların kenarlarına düştüğü notlarda yer yer kişisel hayatının perdelerini aralayan Cârullah, bazen arkadaşlarından ve karşılaştığı hâdiselerden de bahsetmektedir. Mesela, “muhakkik ulemanın önde gelenlerindendir” dediği sûfi Şeyh Sa'deddin el-Hamevî ile Beytül-Makdis ve Şam'da zaman geçirmiştir. Bir başka kayda göre, “mel'ûn ve maktûl” kethüdanın düşmanlığının akabinde zalim vezir tarafından Gümülüne'ye sürülmüştür. Bu sürgün esnasında veya öncesinde Edirne'de kadılık yapmıştır (Arslan, 2015: 78).

Osmanlı tarihi kaynaklarında bireylerin kendileriyle ilgili anlatılarının bulunmadığı kabulünü sorguladığı (ve bunun böyle olmadığını gösterdiği) çalışmasında Cemal Kafadar, “el yazmaları arasında sürdürülecek sistematik araştırmaların daha nice hatırat, rüya defteri, otobiyografi, esaret anısı ve şahsi mektup örneğini ortaya çıkaracağını” belirtmektedir (Kafadar, 2009: 70). Bu konuda haklı olduğunu bir kez daha teyit etmek gerekir.

II. Kütüphanesindeki Eserler

İSAM veri tabanına göre, Süleymaniye Kütüphanesi Cârullah Efendi koleksiyonunda 3515 eser bulunmaktadır. Bu eserlerden bir kısmı aynı eserin farklı nüshalarıdır. Bunlardan 646 tanesi de risale şeklinde yazılmış eserlerden oluşmaktadır. Farklı ilim dallarından farklı eserler zengin bir ilim ve fikir dünyasına sahip olduğunu göstermektedir. Kütüphanesinde bulunan farklı ilim dallarına göre eserlerin sayısal dağılımı şu şekildedir:

<i>İlim Dalı</i>	<i>Eser Sayısı</i>	<i>İlim Dalı</i>	<i>Eser Sayısı</i>
Tasavvuf	374	Matematik	58
Kelam	365	Felsefe	56
Hadis	288	İslam Ahlakı	54
Mantık	257	Kimya	37
Edebiyat	250	Metafizik	36
Arap dili	224	Biyografi	35
Tefsir	199	Tarih	25
Fıkıh	195	Tıp	24
Hanefî Fıkıhı	183	Külliyyatlar	20
Psikoloji	149	Ferâiz	15
Kuran İlimleri	97	Siyer	14
Fıkıh Usulü	95	İslam Tarihi	14
Astronomi	71	Coğrafya	7

Tablo 1. Cârullah'ın kütüphanesindeki kitapların konularına göre dağılımı

III. Cârullah'ın Okuduğu Kitaplar Üzerindeki Notlar

Tuba Nur Saraçoğlu, “Kitap ve Sahibü'l-Kütüp: Cârullah Efendi'nin Siyer ve Tarih Kitapları” başlıklı çalışmasında Cârullah Efendi'nin zikredilen önemli notlarına dair bazı açıklamalar yapmaktadır. Ona göre, Cârullah Efendi'nin koleksiyonundaki notları kütüphane ve bilgi notları şeklinde sınıflandırmak mümkündür. Kütüphane notlarında iki tür bilgi yer alır: Birincisi, mülkiyet kayıtları ve esere dair bilgileri kapsayan kısa notlardır. İkincisi ise, yeri geldikçe konuyla alakalı gördüğü eserlerin kendi kütüphanesinde olduğunu belirten ifadelerdir. Koleksiyonun bilgi notlarında ise eserlerin ve müelliflerin isimleri, vefat tarihlerine yönelik tashihler, nesep bilgileri ve çeşitli eserlere atıflar yer almaktadır. Bu notlar Cârullah Efendi'nin ilmi birikimini ortaya çıkardığı gibi, okuyucular için kolaylık sağlayan bilgilerdir (Saraçoğlu, 2015: 265).

Cârullah Efendi'nin bilgi notları arasında araştırmalarına dair ipuçları da yer almaktadır: Mesela, Feridüddin el-Attar'ın (ö. 618/1221) *Tezkiretü'l-Evliyâ*'sında geçen bir hikâyenin kaynaklarını açıklarken Sadreddin el-Konevî'nin (ö. 673/1274) Nasîrüddin et-Tûsî'ye (ö. 672/1274) gönderdiği bir risaleden bahsetmektedir. Hz. Yusuf'un yaşı ile ilgili olarak *Teyşîr* isimli -muhtemelen Kâfiyeci'ye (ö. 879/1474) ait olan- eserde bu bilgiyi bulduğunu söylemektedir. Ebü'l-Hüseyn el-Kudurî (ö. 428/1037), Sa'deddin et-Teftazânî (ö. 792/1390) ve Seyyid Şerif el-Cürçânî'nin (ö. 816/1413) eserlerine yazılan şerhlere özellikle dikkat çekmektedir. Hanefî mezhebine mensup bir kadı olarak Hanefî fıkıhına ve fakihlerine çokça atıf yapmıştır. Hanefî fakihlerinin biyografileri konusunda da

oldukça hassastır (Saraçoğlu, 2015: 273-274). Hanefî usulüne dair Ebû Zeyd ed-Debûsî'nin (ö. 430/1039) veya Ebû'l-Yüsr el-Pezdevî'nin (ö. 493/1100) değil, Şemsü'l-Eimme es-Serahsî'nin (ö. 483/1090 [?]) eserini en güzel eser olarak nitelemiştir (Köksal, 2015: 115).

Notları arasında, mütalaa ettiği eserlere dair önemli bilgiler bulmak mümkündür. Bazı notlarda yalnızca eseri mütalaa ettiğini söyler, bazılarında çokça istifade ettiğini ekler, bazılarında ise hangi nüshayı mütalaa ettiğini belirtir. Mekke ve Medine'de iken okuduğu kitaplarda, mütalaanın bu yerlerde yapıldığını özellikle vurgulamıştır. İncelediği kitabın hacmini ve muhtevasını belirlemiştir; eser kendi kütüphanesinde ise mutlaka bunun kaydını düşmüştür. Aşağıdaki örnekte onun yaklaşımını açıkça görmek mümkündür (Saraçoğlu, 2015: 274-275):

Muhakkik Tûsî, Risale-i 'de Allah'ın külliyyat ve cüziyyatı alâ vechin külliyyin bildiğini kaydetmektedir. Yani Allah'ın cüz'îyyatı bilmesi bizimkinin aksine havâs ile değildir. Hakîm eş-Şehrîstânî el-Milel ve'n-nihâl isimli eserinde şöyle demektedir: Aristoteles âlemin hudûsuna kâildir; buna mukabil bir takım şüpheler ileri süren hukemadan bazıları âlemin kadim olduğu fikrini ileri sürdüler. Daha sonra gelenler de mezkûr şüphelerin âlemin kîdemine delil olduğunu zannettiler. Hâlbuki durum böyle değildir. Muhakkik Taftazani Şerhu'l-makâsîd'da birinci cevaba; Muhakkik el-Kutb Muhâkemâtu Şerhi'l-İşârât'ta ikincisine; Şeyh Şa'rânî de Risale-i Müfredde'de üçüncü cevaba işaret etmiştir. Ben bu son risaleyi 1100/1688-9 yılında Mekke-i Mükerreme'de bulunduğum sırada mütalaa etmiştim. Daha geniş tafsilat isteyen mezkûr kitaba bakabilir.

IV. Kendi Yazdığı Başlıca Eserler

1. *Hâşiye alâ Hâşiyeti'l-İsâm li-Şerhi'l-Akaidi'n-Neseftiyye.*
2. *Hâşiye alâ Şerhi'l-Bircendî fî İlmi'l-Hey'e.*
3. *es-Seb'u's-Seyyâretü'n-Nûriyye alâ Hâşiyeti'l-Fevâidi'l-Fenâriyye li-İsâgucî*
4. *Hâşiye alâ Hâşiyeti Muhyiddîn alâ Şerhi Hüsâmiddîn el-Kâtî alâ İsâgücî.*
5. *Ta'lîka alâ Şerhi'l-Hanefiyye ve Hâşiyeti Mîr Ebi'l-Feth.*
6. *Hâşiye alâ Şerhi'l-Makasîd li-Teftâzânî.*
7. *el-Fevâidü'n-Nûriyye ale'l-Âdâbi'l-Hüseyniyye.*
8. *Hâşiye alâ Şerhi'l-Âdâb li-Taşköprizâde*
9. *Şerhu Âdâbi'l-Birgivi.*
10. *Hâşiye alâ Şerhi Hikmeti'l-Ayn.*
11. *Hâşiye alâ Şerhi Ciheti'l-Vahde.*
12. *Mecmûatü'l-Havâşî ale'l-İşârât.*
13. *Şerhu'l-Âdâb li-Sinâniddîn el-Kencî*
14. *el-Furkân fî Kırâati'l-Kur'ân.*
15. *Hâşiye alâ Şerhi Âdâbi'l-Mes'ûdî.*
16. *Hâşiye alâ Şerhi'l-Hidâye fî'l-Hikme li-Kâdî Mîr*
17. *Hâşiye alâ Hâşiyeti'l-İsâm alâ Tefsîri'l-Beyzâvî.*
18. *Hâşiye alâ Şerhi Âdâbi'l-Birgivi li-Kazâbâdî li-Cârillâh* (bkz. Özcan, 2013: 38-40).

Sonuç olarak döneminin ilmî tartışmalarını ve külliyyatını anlamak açısından Velîyüddin Cârullah'ın kütüphanesinde bulunan, özellikle fıkıh, fıkıh usulü, kelam, felsefe, mantık ve tasavvuf eserleri dipnotlarıyla birlikte daha detaylı olarak incelenmelidir.

Kaynakça

- Onuş, M. Uşame, “Bir Osmanlı Âlimi Cârullah Efendi'nin Terceme-i Hâli”, *Osmanlı Kitap Kültürü: Cârullah Efendi Kütüphanesi ve Derkenar Notları*, ed. Berat Açıl, Ankara: Nobel, 2015, s. 17-47.
- Arslan, Sami, “Eserden Müessire Seyr u Sefer: Cârullah Efendi'nin Derkenar Notlarının Biyografisine Katkıları”, *FSM İlmî Araştırmalar: İnsan ve Toplum Bilimleri Dergisi*, 5 (2015), s. 67-83.
- Özcan, Tahsin, “Velîyüddin Cârullah”, *TDV İslam Ansiklopedisi*, Ankara: TDV, 2013, c. 43, s. 38-40.
- Köksal, A. Cüneyd, “Velîyüddin Cârullah Efendi'nin Fıkıh Usulüne Dair Notları”, *Osmanlı Kitap Kültürü: Cârullah Efendi Kütüphanesi ve Derkenar Notları*, ed. Berat Açıl, Ankara: Nobel, 2015, s. 107-121.
- Kafadar, Cemal, *Kim Var İmiş Biz Burada Yoğ İken*, İstanbul: Metis, 2009.
- Saraçoğlu, T. Nur, “Kitap ve Sahibü'l-Kütüp: Cârullah Efendi'nin Siyer ve Tarih Kitapları”, *Osmanlı Kitap Kültürü: Cârullah Efendi Kütüphanesi ve Derkenar Notları*, ed. Berat Açıl, Ankara: Nobel, 2015, s. 255-281.

Öğretmen Adaylarının Empati Düzeylerinin Belirlenmesi

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Özet

Bu araştırma öğretmen adaylarının empati düzeylerini belirlemek amacı ile gerçekleştirilmiştir. Tarama modellerinden ilişkisel tarama modeline göre gerçekleştirilen bir araştırmadır. İstanbul Üniversitesi Hasan Ali Yücel Eğitim Fakültesi'nin Psikolojik Danışma ve Rehberlik ile Türkçe öğretmenliğinin 1. ve 4. Sınıflarında 2018 bahar döneminde öğrenim gören öğrenciler örnekleme dâhil edilmiştir. Örneklem amaçlı örnekleme yöntemlerinden olan tipik örnekleme yöntemine göre belirlenmiştir. Veriler Bora ve Baysan-Arabacı (2009) tarafından Türkçeye uyarlanan Cambridge Davranış Ölçeği kullanılarak toplanmıştır. Veriler SPSS programına aktarılmış ve betimsel istatistikler ile bağımsız gruplar için t-testi istatistiksel işlemleri gerçekleştirilmiştir. toplam 147 öğretmen adayından elde edilen bulgulara göre Psikolojik Danışmanlık ve Rehberlik bölümünde öğrenim gören öğretmen adayları ile Türkçe Öğretmenliği bölümünde öğrenim gören öğretmen adaylarının genel empati düzeyleri puanları arasında anlamlı bir fark bulunamamıştır. Ayrıca kızların ve erkeklerin empati düzeyleri puanları arasında da anlamlı bir fark söz konusu değildir. Son olarak dördüncü sınıfta öğrenim gören öğretmen adayları ile birinci sınıftaki öğretmen adaylarının empatik yönelimleri arasında anlamlı bir fark bulunmamasına rağmen dördüncü sınıf öğrencilerinin empatik yönelim tutum puanlarının biraz daha yüksek olduğu belirlenmiştir. Dördüncü sınıfların Bilişsel Empati, Empatik İlgi-Sempati ve Sosyal Yeti düzeylerinde daha yüksek bir puana sahip olması bu düzeylerin eğitim yoluyla kazandırılabilirliğini göstermektedir.

Anahtar Kelimeler: *Empati, öğretmen adayları, Empati Düzeyi*

Giriş

Empati bencil olan ve kendi çıkarlarının peşinden koşan insanların arttığı, para ve güç üzerine odaklandığı, savunmasız insanların görmezlikten geldiği dünyada insanın kendisini başkasının yerine koyarak ona ilgi, anlayış ve sevecenlik gösterebilmesidir (Tekinalp 2014). Empatide esas olan karşımızdaki kişinin duygu ve düşüncelerini anlamaktır. Empati kurarken karşımızdaki kişiyle aynı duygu ve düşünceleri paylaşmak zorunda değildir (Dökmen 2004).

Dökmen'e (2004) göre karşımızdaki bir insana empatik tepki vermenin iki yolu bulunmaktadır. Bunlar yüzümüzü, bedenimizi kullanarak onu anladığımızı ifade etmek ve sözlü olarak onu anladığımızı dile getirmektir. Yine Dökmen (2004) bir kişinin karşısındakıyla empati kurabilmesi için gerekli olanları şöyle sıralamaktadır:

- Empati kuracak olan kişi kendisini karşısındakinin yerine koymalı ve olaylara onun gözüyle bakmalıdır. Ancak empati kurduktan sonra kişi girdiği rolden çıkıp kendi yerine geçmelidir. Eğer bunu gerçekleştirmez ise empati kurmuş olmaz.
- Empati kurmuş sayılmak için karşımızdaki kişinin duygu ve düşüncelerini doğru anlamamız gerekir.
- Empati kuranın zihnindeki empatik anlayışı karşıdaki kişiye iletilmesi gerekir.

Tekinalp'e (2014) göre empatik davranma, eğitimi ve olgun olmayı gerekli kılar ve empatik davranış, 3 aşamada gerçekleşir (Tekinalp, 2014: 42):

1. Bilişsel aşama: Kişinin kendisini karşısındakinin yerine koyarak onun ne düşündüğünü anlamaya çalışması.

2. Duygusal aşama: Başkasının bir olay hakkında ne hissettiğini hissetmeye çalışmak
3. Aktarma: Bir insanın karşısındaki kişiye ilk iki aşamayla zihninde meydana gelen empatik kavrayışı aktarması.

Empatide bencilliğe yer yoktur. Bencil insan, karşısındaki kişinin düşüncelerini, hislerini anlayamaz bu nedenle empatik bir davranış gösteremez (Tekinalp, 2014, s. 42). Bencil olan, başka bir ifade ile benmerkezci bir kişinin empati kurması mümkün değildir. Başka kültürlerin nasıl bizim gibi düşünmediklerine şaşırıyorsa veya bizim önemsiz gördüğümüz bir olaya karşımızdakinin üzüldüğünü görünce bu durumu yadırgıyorsak ise benmerkezci bir özelliğe sahibiz demektir. Empati kurabilmek için ön şart benmerkezcilikten kurtulmaktır (Dökmen, 2004).

Başkaları tarafından anlaşılıp önem verilmek kişiyi rahatlatır ve iyi hissettirir. Başkasıyla empati kuranların bu durumdan sağladıkları kişisel kazanç, ruhsal yönden gelişmek olabilir. Eğer kişi başka insanların iç dünyasına girebiliyor ve empati kurabiliyor ise bu insanın iç dünyası da zamanla zenginleşecektir. Empati, empatiyi kuran için de önemlidir. Yardım sever ve empatik becerileri yüksek olan kişilerin çevreleri tarafından sevilme, (Dökmen, 2004: 158), beğenilme ve takdir edilme ihtimalleri yüksektir.

Öğretmenlik mesleği kişiler arası iletişime dayanan mesleklerden birisidir. Kişilerin aralarında doğru bir iletişimin kurulabilmesinde empati önemli bir yere sahip olduğuna göre öğretmenlerin empati kurabilme becerisine sahip olması oldukça önemlidir (Şahin ve Ünüvar, 2011). İyi bir öğretmende mesleki ve kişisel olmak üzere bulunması gereken bir takım nitelikler vardır. Başka bir ifade ile iyi bir öğretmenin sadece akademik becerilere sahip olması yeterli değildir. Öğretmenlerde bulunması gereken kişisel özellikler arasında, hoşgörülü, sabırlı, anlayışlı olma başta olmak üzere öğrencilerinin sosyal ve duygusal yönden gereksinimlerini belirleyebilecek ve bu gereksinimleri giderebilecek yeterliliğe de sahip olması gerekir. Pala'ya (2008) göre öğrencilerinin hislerini ve bakış açılarını anlayabilen öğretmenler, onların ihtiyaçlarını anlar ve bunu karşılamak için çabalarlar. Bunun sonucunda öğrenciler öğrenmeye ve paylaşmaya yoğunlaşabilirler. Duygusal yakınlık, öğretmenin öğrenmeyi artırıcı veya kısıtlayıcı faktörlerinin keşfini sağlar. Bundan dolayı öğretmenlerin kişilik özellikleriyle birlikte empati kurma becerisine sahip olması büyük önem taşımaktadır. Bu da beraberinde öğretmenlerin öğrencileriyle iyi bir şekilde iletişim kurmasına, öğretme konusunda becerilerine, sınıf ortamının olumlu olmasına katkıda bulunur (Şahin ve Ünüvar, 2011).

İnsanlar arası ilişkide ve bireyin yaşam doyumunu artırmada önemli iki değişken olan empati ve olumlu sosyal davranışları ilişkilendiren çokça araştırma yapılmıştır. Acun-Kapıkıran, Kapıkıran ve Başaran (2010) PDR öğrencilerinin algılanan anne ve baba olumlu sosyal davranışları ile empatik eğilimleri arasındaki ilişki ile cinsiyetin buna etkisini incelemişlerdir. Acun-Kapıkıran, Kapıkıran ve Başaran (2010) yaptıkları çalışmada PDR öğrencilerin empatik eğilimleri, algıladıkları anne ve baba olumlu sosyal davranışlarından etkilendiğini bulmuşlardır. Annelerin olumlu sosyal davranışları empatik eğilimin önemli bir unsuru olurken, babaların duyguların açıklaması empatik eğilim için önem taşımaktadır. Ayrıca babaları tarafından duygularını açıkladığı şekilde algılayan erkeklerin empatik eğilimlerinin daha da arttığını bulmuşlardır. Empatik davranışları yüksek olan kızların olumlu sosyal davranışlarının da yüksek olmasıyla birlikte Psikolojik Danışma ve Rehberlik çalışanlarının mesleğinin gereği olarak, daha empatik olmaları ve daha olumlu sosyal davranışta bulunması beklenir. Bir bireyin empatik eğilim ve becerilere sahip olması, yardım etme davranışını ortaya çıkarmada önemli bir faktördür (Acun-Kapıkıran ve ark., 2010).

Pala (2008)'nın yapmış olduğu çalışmalara göre öğrencilerin empati kurma becerisi, ekonomik düzeylere göre farklılık göstermektedir. Ekonomik durumu iyi olan öğrencilerin empati kurma becerisi, ekonomik durumu kötü olan öğrencilere göre daha yüksektir.

Araştırmanın Amacı

Öğretmen adaylarının empati düzeylerini belirleyerek, empati düzeylerinin çeşitli değişkenlere göre farklılık gösterip göstermediğini belirlemektedir.

Alt Problemler

1. Öğretmen adaylarının empati düzeyi nedir?
2. Öğretmen adaylarının empati düzeyi,
 - a. Cinsiyete göre,
 - b. İlk ve son sınıfta olmalarına göre,
 - c. Branşlarına göre farklılık göstermekte midir?

Araştırmanın Önemi

İnsanların davranışlarının altında yatan nedenleri anlayabilmek için empati kurmak önemli olduğuna göre öğretmenlik mesleğini icra eden kişilerin de öğrencilerini anlayabilmelerinde, sorunlarını belirleyebilmelerinde ve sorunlarına çözüm yolları bulabilmelerinde empati kurma becerisine sahip olmaları son derece önemlidir. Eğitim sürecinde öğretmen adaylarına bu beceriyi kazandırmaya çalışmak gelecek yıllarda göreve başladıklarında çok daha başarılı olmalarını sağlayacaktır. Bunun içindir ki öğretmen adaylarının empati kurma becerisine eğitim fakültelerinin ne kadar katkı sağladığını belirlemek gerekir. Bu araştırma eğitim fakültelerinde öğrenim gören öğretmen adaylarının empati kurma becerilerine ne derece sahip olduğunu belirleyerek gerekli önlemlerin alınması için önerilere yer verilmiş olması açısından önemlidir.

Sınırlılıklar

Bu araştırma 2017-2018 öğretim yılında bir devlet üniversitesinin eğitim fakültesinde öğrenim gören Psikolojik Danışma ve Rehberlik Anabilim Dalı'ndaki ve Türkçe Öğretmenliği Anabilim Dalı'ndaki öğretmen adaylarıyla sınırlıdır.

YÖNTEM

Araştırmanın Modeli

Bu araştırma genel tarama modelleri arasında yer alan ilişkisel tarama modeline göre yapılmıştır. Genel tarama modeli çok sayıda elemandan oluşan evrende evren hakkında genel bir bilgiye ulaşmak için evrenin tümü veya içerisinden alınan bir grup örneklem veya örnek üzerinde yapılır.

Evren ve Örneklem

Bu araştırmanın evrenini 2017-2018 öğretim yılında İstanbul Üniversitesi Hasan Ali Yücel Eğitim Fakültesi'nde öğrenim gören öğretmen adayları oluşturmaktadır. Bu araştırmanın örneklemini İstanbul Üniversitesi Hasan Ali Yücel Eğitim Fakültesi Fakültesi'ndeki PDR ve Türkçe Öğretmenliği birinci ve dördüncü sınıf öğretmen adaylarından oluşturmuştur. Örneklem amaçlı örnekleme yöntemlerinden tipik örnekleme yöntemine göre yapılmıştır. Bu örnekleme yöntemine göre Psikolojik Danışma ve Rehberlik ve Türkçe Öğretmenliği Anabilim dallarında öğrenim gören 1. ve 4. Sınıf öğrencilerinden araştırmanın örneklemini oluşturulmuştur.

Veri Toplama Araçları

Bu çalışmada veri toplama aracı olarak Bora ve Baysan-Arabacı (2009) tarafından Türkçeye uyarlanan Cambridge Davranış Ölçeği kullanılmıştır. Orijinali üç alt boyut ve kırk maddeden oluşan Empati Ölçeği, Türkçe'ye uyarlandığında dört alt boyut ve yirmi altı madde olarak geçerli ve güvenilir bulunmuştur. Dört alt boyut; (1) bilişsel empati, (2) empatik-ilgi-sempati (duygusal empati), (3) emosyonel yanıt (duygusal empati) ve (4) sosyal yetidir. Bilişsel Empati boyutunu 19, 22, 25, 26, 36, 41, 43, 44, 52, 54 ve 55. Maddeler; Empatik İlgi-Sempati boyutunu, 10, 15, 27, 29, 34, 46 ve 48. Maddeler; Emosyonel Yanıt boyutunu, 32, 38, 42, 50 ve 59. maddeler ve Sosyal Yeti boyutunu, 8, 35 ve 57. Maddeler ölçmektedir. 4'lü likert tipi olarak hazırlanmış olan ölçekte ters madde bulunmamaktadır. Ölçeğin değerlendirilmesi ise "Kesinlikle katılıyorum" 2 puan, "Sıklıkla katılıyorum" 1 puan, "Bazen katılıyorum" 0 puan, "Kesinlikle katılmıyorum" 0 puan şeklindedir. Ölçekten elde edilecek en yüksek puan "80" en düşük puan "0"dır. Yüksek puan empati düzeyinin iyi olduğunu göstermektedir. Empati Ölçeğinin iç tutarlılığı oldukça yüksek bulunmuştur ($\alpha = 0.84$). Split half yöntemi ile elde edilen Guttman split-half katsayısı 0.78 olarak bulunmuştur. Cronbach alfa katsayısı ölçeğin ilk yarısı için 0.75, ikinci yarısı için 0.74 olarak bulunmuştur. Ölçeğin kısa formu için seçilen 22 sorunun Cronbach alfa değeri 0.814 olarak bulunmuştur. Ölçeğin test-tekrar test korelasyonu $r = 0.76$ olarak bulunmuştur. Kısa formundaki sorular için ise $r = 0.72$ 'dir.

Verilerin Toplanması ve Analizi

Ölçek gerekli izinler alındıktan sonra ilk olarak PDR birinci ve dördüncü sınıf öğrencilerine; bir gün sonra ise Türkçe Öğretmenliği birinci ve dördüncü sınıf öğrencilerine ders öncesinde verilerek ders başlamadan doldurtulmuştur. Ölçek yüz yetmiş kişiye uygulanmıştır. Yüz yetmiş veriden yirmi üç tanesi eksik ve yanlış doldurulduğu için işleme alınmamıştır. Yüz kırk yedi ölçek veri analizine dâhil edilmiştir. Öncelikle frekans tablosu alınmış ve betimsel istatistikler yapılmıştır. İki bağımsız değişkene ait ortalamaların karşılaştırılması için "bağımsız gruplar için t-testi" analiz tekniği kullanılmıştır. $P < 0,05$ anlamlılık düzeyi aranmıştır.

Bulgular

Örnekleme yer alan öğretmen adaylarının demografik özellikleri aşağıdaki gibidir:

Tablo 1: Öğretmen Adaylarının Demografik Özelliklerine Ait Bulgular

Özellikler	N	%
Cinsiyet	Kadın	115
	Erkek	32
	Toplam	147
Sınıf	1. Sınıf	78
	4. Sınıf	69
	Toplam	147
Bölüm	PDR	91
	Türkçe Öğretmenliği	56
	Toplam	147

Tablo 1’de görüldüğü üzere örnekleme yer alan 147 öğretmen adayının “%78,2’si” kadın, “%21,8’i” erkektir. Öğretmen adaylarının “%61,9’u” Psikolojik Danışmanlık ve Rehberlik (PDR), “38,1’i” de Türkçe Öğretmenliğinde öğrenim görmektedir. Sınıflara göre incelendiğinde ise 1. sınıfta okuyanların oranı “%53,1”, 4. sınıfta okuyanların oranı “%46,9’dur.”

Birinci Alt Probleme Ait Bulgular**Tablo 2: Öğretmen Adaylarının Empatik Yönelimlerine Ait Betimsel İstatistikler**

Değişkenler	N	Puan	ss
Bilişsel Empati	147	12,742	5,094
Empatik ilgi-Sempati	147	1,4218	2,16740
Emosyonel Yanıt	147	4,9932	1,27406
Sosyal Yeti	147	1,6259	1,17748
Genel	147	20,7823	6,38869

Öğretmen adaylarının empatik yönelimlerine ilişkin dört alt boyut Tablo 2’de verilmiştir. 147 öğretmen adayından elde edilen verilere göre “bilişsel empati” düzeyine ilişkin puanlara bakıldığında alınabilecek en yüksek puan ($2 \times 11 = 22$) dikkate alındığında ortalamanın biraz üstünde olduğu söylenebilir. Ölçeğin bir alt boyutu olan “Empatik ilgi-sempati” düzeyinin alt sınırdan bulunduğunu söyleyebiliriz ($7 \times 2 = 14$ puan- en yüksek değer). Emosyonel yanıtın ortalama bir değere çokça yaklaştığını söyleyebiliriz. ($5 \times 2 = 10$ puan- en yüksek değer) Sosyal yetinin çok düşük bir sınırdan yer aldığını söyleyebiliriz. ($3 \times 2 = 6$ puan- en yüksek değer) Genel puanlamaya bakacak olursak yirmi altı maddeye göre ortalamanın altında bir değer aldığı görülmektedir ($26 \times 2 = 52$ puan- en yüksek değer).

İkinci Alt Probleme ait bulgular**a) Cinsiyete göre****Tablo 3: Öğretmen Adaylarının Cinsiyetlerine göre Empatik Yönelimlerine Ait T-Testi Sonuçları**

Bağımsız Değişken	N	Puan	ss.	t	df	P
Bilişsel Empati	Kız	115	13,026	4,839	1,287	145 ,200
	Erkek	32	11,719	5,893		
Empatik İlgi-Sempati	Kız	115	1,357	2,177	-,691	145 ,491
	Erkek	32	1,656	2,149		
Emosyonel Yanıt	Kız	115	5,009	1,188	,279	145 ,781
	Erkek	32	4,938	1,564		
Sosyal Yeti	Kız	115	1,626	1,151	,005	145 ,996

GENEL	Erkek	32	1,625	1,289	,845	145	,400
	Kız	115	21,017	5,846			
	Erkek	32	19,938	8,100			

Öğretmen adaylarının empati düzeyleri cinsiyete göre incelendiğinde, Tablo 3'teki t-testi sonuçlarında " $p<0,05$ " düzeyinde ölçeğin bütün boyutlarında ve genelinde anlamlı bir farkın bulunmadığı belirlenmiştir. Ölçeğin geneline bakarsak kız öğretmen adayları 21,01 puan; erkek öğretmen adayları da 19,93 puan almıştır. Bu puanlar cinsiyete göre anlamlı bir fark olmadığını ortaya koymakla birlikte alınabilecek en yüksek puanın 52 olduğu göz önüne alındığında, öğretmen adaylarının empati düzeylerinin ortalamasının altında olduğu ifade edilebilir.

b) Sınıfa göre

Tablo 4: Öğretmen Adaylarının Sınıflarına göre Empatik Yönelimlerine Ait T-Testi Sonuçları

Bağımsız Değişken		N	Puan	ss.	T	df	P
Bilişsel Empati	Birinci	78	12,4231	4,91887	-,805	145	,422
	Dördüncü	69	13,1014	5,29746			
Empatik İlgi-Sempati	Birinci	78	1,2949	1,90767	-,754	145	,452
	Dördüncü	69	1,5652	2,43430			
Emosyonel Yanıt	Birinci	78	5,0513	1,39477	,586	145	,559
	Dördüncü	69	4,9275	1,12875			
Sosyal Yeti	Birinci	78	1,5128	1,17045	-1,240	145	,217
	Dördüncü	69	1,7536	1,18080			
GENEL	Birinci	78	20,2821	6,52248	-1,009	145	,314
	Dördüncü	69	21,3478	6,23280			

Öğrenim gördüğü sınıf düzeyine göre öğretmen adaylarının empatik yönelimlerine ait t-testi sonuçları Tablo 4'ten incelendiğinde bütün boyutlarda " p " değerlerinin " $0,05$ "den büyük olmasından dolayı hiçbir alt boyut ve ölçeğin bütününe ilişkin anlamlı bir fark bulunmamıştır. Bu durum da bize göstermektedir ki fakülteye geldikleri andan itibaren sonuna kadar öğretmen adaylarının empati düzeylerinde fark yaratacak düzeyde bir artış olmamaktadır.

c) Bölüme göre:

Tablo 5: Öğretmen Adaylarının Bölümlerine göre Empatik Yönelimlerine Ait T-Testi Sonuçları

Bağımsız Değişken		N	Puan	ss.	T	df	P
Bilişsel Empati	PDR	91	12,758	4,675	,051	145	,960
	Türkçe	56	12,714	5,755			
Empatik İlgi-Sempati	PDR	91	1,165	1,797	-1,847	145	,067
	Türkçe	56	1,840	2,627			
Emosyonel Yanıt	PDR	91	4,912	1,279	-,984	145	,327
	Türkçe	56	5,125	1,266			
Sosyal Yeti	PDR	91	1,473	0,970	-2,034	145	,044
	Türkçe	56	1,875	1,428			
GENEL	PDR	91	20,308	5,730	-1,149	145	,252
	Türkçe	56	21,554	7,324			

Öğrenim gördüğü bölüme göre öğretmen adaylarının empatik yönelimlerine ait t-testi sonuçları Tablo 5'de verimştir. Tablo incelendiğinde Bilişsel Empati (" $t=,051$ " " $p=,960$), Empatik-İlgi-Sempati (" $t=-1,847$ " " $p=,067$ "), Emosyonel Yanıt (" $t=-,984$ " " $p=,327$ ") ve ölçeğin geneline ilişkin (" $t=-1,149$ " " $p=,252$ ") " p " değerleri $0,05$ den büyük olduğundan $p<0,05$ düzeyinde anlamlı bir fark bulunamamıştır. Sosyal Yetide ise " $t=2,034$ " ve " $p=,044$ " olduğundan $p<0,05$ düzeyinde anlamlı bir fark bulunmuştur. PDR bölümü öğrencilerinin Sosyal Yeti alt boyutundaki ortalaması " $1,473$ " Türkçe Öğretmenliği bölümü öğrencilerini ortalaması ise " $1,875$ " puandır. Bu durum Türkçe Öğretmenliğinde öğrenim gören öğretmen adaylarının daha yüksek empati

düzeğine sahip olduğunu göstermektedir. Bu boyutta böyle bir bulgu elde edilmesine rağmen ölçeğin geneli için hemen hemen her iki bölümdeki öğrencilerin de aynı empati düzeyine sahip oldukları belirlenmiştir.

Sonuç, Tartışma ve Öneriler

Öğretmen adaylarının empati düzeylerini ortaya koymak ve empati düzeylerinin çeşitli değişkenlere göre farklılık gösterip göstermediğini belirlemek amacı ile eğitim fakültesinin Psikolojik Danışmanlık ve Rehberlik (PDR) ve Türkçe Öğretmenliği Anabilim Dallarında öğrenim gören 147 öğretmen adayı ile gerçekleştirilen bu araştırmaya ait ulaşılan sonuçlara aşağıda yer verilmiştir:

Öğretmen adaylarının empati düzeyleri oldukça düşüktür. Eğitim Fakültelerinde öğretmen adaylarının empati düzeyini geliştirecek derslere ve etkinliklere daha fazla yer verilmelidir. Karşısındaki kişinin ne isteyebileceğini anlamayan bir kişiden verimli bir öğrenme ortamını oluşturmasını beklemek doğru bir yaklaşım olarak görülmemelidir. Öğretmen adaylarının empati düzeyini arttıracak derslere ve etkinliklere yer vermek, gelecekte öğrencilerini tanıyan, anlayan ve onlar için en uygun öğrenme ortamlarını yaratabilen öğretmenlerin var olmasını sağlayacaktır.

Araştırma bulgularına göre kızların ve erkeklerin empati düzeylerine ilişkin puanları arasında anlamlı bir fark bulunmamıştır. Dördüncü sınıfta öğrenim gören öğretmen adayları ile birinci sınıfta öğrenim gören öğretmen adaylarının empati düzeyleri arasında da anlamlı bir fark belirlenmemiştir. Eğitim Fakültelerine başlayan öğretmen adaylarının mezun oluncaya kadar bazı özelliklere sahip olmasını beklemek gayet doğaldır. Bir öğretilerde bulunması gereken kişisel nitelikler göz önüne alındığında ilk akla gelen özellikler, hoşgörölü ve sabırlı olma, anlayışlı, sevecen ve espirili olma, cesaretlendirici ve destekleyici olma, açık fikirli esnek ve uyarlayıcı olma, yüksek başarı beklentisi içerisinde olma gibi özellikler gelmektedir. Ancak gözden kaçan durum şudur ki, bu özelliklerin bir çoğu kendi içerisinde empati kurabilmeyi barındırmaktadır. Bu nedenle öğretmen adaylarının fakültelele geldiği andan itibaren ayrılınca kadar empati düzeylerinde belirli bir gelişme göstermesi gerekmektedir. Bunun içinde gerekli empati geliştirici çalışmalara fakültelerdeki ders programlarına dahil etmek gerekmektedir. Ayrıca öğretim üyeleri de bu konuda üzerlerine düşeni yerine getirmelidir.

Psikolojik Danışmanlık ve Rehberlik Anabilim Dalı'nda öğrenim gören öğretmen adayları ile Türkçe Öğretmenliği Anabilim Dalı'nda öğrenim gören öğretmen adaylarının genel empati düzeylerine ait puanları arasında da anlamlı bir fark bulunmamıştır. Ayrıca Türkçe Öğretmenliği bölümünde öğrenim gören öğretmen adaylarının PDR bölümünde öğrenim gören öğretmen adaylarına kıyasla sosyal yeti empati düzeylerinin daha yüksek düzeyde olduğu belirlenmiştir. Aslında bu branşlardaki öğretmen adaylarından Psikolojik Danışmanlık ve Rehberlik Anabilim Dalı'nda öğrenim görenlerin empati düzeyinin daha yüksek olması beklenirken, Türkçe Öğretmenliği Anabilim Dalı'nda Öğrenim gören öğretmen adaylarının ölçeğin geneline ilişkin anlamlı bir fark oluşturmamak ile birlikte az da olsa daha yüksek olduğu belirlenmiştir. Bütün branşlarda önemli olmak ile birlikte özellikle Psikolojik Danışma ve Rehberlik Anabilim Dalı'nda öğrenim gören öğretmen adaylarının mesleklerini en doğru bir şekilde yerine getirebilmeleri için de empati kurabilme becerisine sahip olması son derece önemlidir. Bu nedenle de empati düzeyini geliştirecek etkilere yer verilmesi son derece önemlidir.

Kaynakça

- Acun-Kapıkıran, N., Kapıkıran, Ş. & Başaran, B. (2010). Psikolojik Danışma Ve Rehberlik Öğrencilerinin Empatik Eğilimler Ve Algıladıkları Anne Ve Baba Olumlu Sosyal Davranışları: Cinsiyetin farklılaştırıcı rolü. *Ege Eğitim Dergisi*, 11(1), 1-19.
- Bora, E. ve Baysan-Arabacı, L. (2009). Empati-Ölçeği Türkçe Formunun Üniversite Öğrencilerinde Psikometrik Özellikleri. *Klinik Psikofarmakoloji Bülteni*, 19 (1), 39-47.
- Dökmen, Ü. (2004). *İletişim çatışmaları ve empati* (27. b.). İstanbul: Sistem Yayıncılık.
- Fawer, A. (2017). *Empati* (40. b.). (M. Kayı, Çev.) İstanbul: April Yayıncılık.
- İkiz, F. E. (2009). İlköğretim okullarında çalışan psikolojik danışmanların empati düzeylerinin incelenmesi. *İlköğretim Online*, 8(2), 346-356.
- Pala, A. (2008). Öğretmen adaylarının empati kurma düzeyleri üzerine bir araştırma. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 23, 13-23.
- Şahin, H., & Ünüvar, P. (2011). Eğitim fakültesi öğrencilerinin empatik becerileri ve kişilik özelliklerinin incelenmesi. *E-Journal of New World Sciences Academy Education Sciences*, 6(1), 1216-1226.
- Tekinalp, Ş. (2014). *Güzel konuşma bir markadır* (4. b.). İstanbul: Beta Basım A.Ş.

Ölüm Düşüncesi Karşısında İnsan ve Dinî İnanç

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Özet

İlk insandan günümüze kadar herkes az ya da çok ölümün neliği ve nasıllığı ile ilgilenmiş, ölümü anlamaya ve onun vereceği acıyla başa çıkmaya çalışmıştır. Kuşkusuz her insan kendi mesleği, meşrebi, dünya görüşü ve kişiliği açısından ölümü farklı şekillerde yorumlamıştır. Genellikle bilimsel açıklamalar soğuk ve korkutucu kabul edilirken dinî ve tasavvufî izahlar, ölümün bir son değil yeni bir hayatın başlangıcı olduğunu vurgulaması hasebiyle revaçta olmuştur. Bu çalışmada öncelikle ölüm olgusuna yüklenen anlamlardaki değişim üzerinde durulacak, daha sonra ölüm düşüncesinin ürettiği kaygıyla başa çıkma hususunda Kübler-Ross'un "acının beş evresi" olarak tanımladığı aşamalarda dini-manevi başa çıkmanın etkili olup olmadığı tartışılacaktır. Çalışma nitel bir desene bağlıdır. Veriler bilimsel kaynaklardan ve araştırmacının gözlemlerden hareketle toplanmıştır. Toplanan veriler betimsel analiz tekniğiyle çözümlenmiş, anlayıcı geleneğe bağlı olarak yorumlanmıştır. Ulaşılan sonuçlara göre ölümle ve kayıplarla başa çıkma sürecinde ortaya çıkan "şok ve inkâr", "isyan ve öfke" ile "depresyon" aşamaları, "mevcut gerçekliği reddetme", "Allah'a isyan" ile birlikte "manevî ve sosyal destekten yoksunluk" içerdiği için olumsuz dinî başa çıkma şekilleri olarak değerlendirilebilir. Pazarlık aşaması olumlu dinî başa çıkmanın ilk adımı kabul edilebilir. Bu süreçte ibadet ve dua başta olmak üzere dinî yaşantıda artış gözlenir. Kabullenme aşamasında olumlu dinî başa çıkma stratejilerinden olan "takdir-i ilahî" ve "lütüf da hoş kahır da hoş" anlayışı ön plandadır.

Anahtar Kelimeler: Ölüm, yasın beş evresi, inanç, başa çıkma

Giriş

İlk insandan günümüze kadar herkes az ya da çok ölümün neliği ve nasıllığı ile ilgilenmiş, ölümü anlamaya ve onun vereceği acıyla başa çıkmaya çalışmıştır. Kuşkusuz her insan kendi mesleği, meşrebi, dünya görüşü ve kişiliği açısından ölümü farklı şekillerde yorumlamıştır. Genellikle bilimsel açıklamalar soğuk ve korkutucu kabul edilirken dinî ve tasavvufî izahlar, ölümün bir son değil yeni bir hayatın başlangıcı olduğunu vurgulaması hasebiyle revaçta olmuştur. Bu çalışmada öncelikle ölüm olgusuna yüklenen anlamlardaki değişim üzerinde durulacak, daha sonra ölüm düşüncesinin ürettiği kaygıyla başa çıkma hususunda Kübler-Ross'un "acının beş evresi" olarak tanımladığı aşamalarda dini-manevi başa çıkmanın etkili olup olmadığı tartışılacaktır. Çalışma nitel bir desene bağlıdır. Veriler bilimsel kaynaklardan ve araştırmacının gözlemlerden hareketle toplanmıştır. Toplanan veriler betimsel analiz tekniğiyle çözümlenmiş, anlayıcı geleneğe bağlı olarak yorumlanmıştır.

Ölüm Hadisesine Yaklaşımlar

Yerine ve durumuna göre "ölüm" bazen stres kaynağı iken, bazen de stresten kurtulma umudu olarak algılanabilir. Hatta kimine göre o, yok oluşun simgesi iken, kimine göre ölümsüz bir hayatın başlangıcıdır. Ölümü algılama ve anlamlandırma biçimine göre insan, ölüm karşısında kaygı yahut sevinç duyabilirler. Bu durum ölüm kavramının, farklı kültür ve toplumlar arasında farklı şekillerde tanımlandığı, bireylerin de öznel kişilik yapısı içinde bu olguya nasıl bir anlam ve değer yükledikleri ile yakından ilişkilidir.

Freud'a (2016; 2017) göre bütün kaygı ve korkuların temelinde ölüm düşüncesi vardır. Bununla birlikte Freud kariyerinin ilk dönemlerinde insanın libidinal hazlarının yaşamdan tat almaya odaklı olduğunu söylerken insanda organikite inorganite dönme içgüdüsünün de olduğunu söylemiştir. Buna göre insan aslında ölmek için yaşayan bir varlıktır. Çünkü insan ölmekten korkar. Jung (1958; 1996), ölümü, kişi için bir bütünleşme ve kendini gerçekleştirme süreci olarak nitelendirdiği "bireyleşme" süreci çerçevesinde ele almıştır. Ona göre birey, hayatının ikinci devresinde, ölüme hazırlıkla uğraşır; dinler, kişiyi, ölüme hazırlık sürecinde yardımcı olacak motivasyonlar sunar. Logoterapi yaklaşımının kurucusu Frankl (2006; 2014; 2016), ölümün ve acının hayata anlam katıp hayatı tamamlayan unsurlardan olduğunu belirtmiştir. Varoluşçu yaklaşımın temsilcilerinden Yalom (2001; 2006), ölüm kaygısının her yerde ve her yaşta var olduğunu; insanın, yaşamı boyunca, hayat enerjisinin bir kısmını bu kaygıyla baş edebilmek için harcadığını ifade etmiştir.

Kur'an-ı Kerim'de geçen "*Her nefis ölümü tadacaktır.*" (29/Ankebût, 57) mealindeki ayet başta olmak üzere temel dinî metinlerde insanlara sıklıkla ölümlü oldukları gerçeği hatırlatılarak onların doğru yola (sırat-ı müstakim) kılavuzlanmaları istenmektedir. Çünkü bireysel dindarlığın en önemli kaynaklarından birisi de insanın ölümlü (fâni) bir varlık olmasıdır. Batson ve Ventis (1982, s. 8) dindarlığı; "*Kendimizin ve diğer insanların bir gün öleceğini anlamamız sebebiyle karşı karşıya kaldığımız sorunları çözebilmek için yaptığımız her şeydir.*" şeklinde tanımlarken bu hususu açıkça ifade etmektedir. Zira ölüm, sonsuzluk arzusu ile fanilik arasında sıkışan insanın varoluşsal bütün kaygılarını alttan alta besleyen bir olgu olarak karşımıza çıkmaktadır (Yapıcı, 2007).

İnanç sistemlerinin mensuplarını ikna edici tarzda içten bir kavrayışla kendisine sınırsız çekmesi kuşkusuz dinlerin hayata ve ölüme anlam yüklemesiyle yakından ilişkilidir (Willaime, 1995; Yapıcı, 2003; 2007). Bununla birlikte sekülerleşen modern dünya, bireylerin dinî duygu ve bağlarını zayıflatarak adeta onlara ölümü unutturmuş, dahası değerlerden arınmış bir şekilde sınırsız hazlarla dolu bir yaşam sunmuştur (Yapıcı, 2017). Bu durumu Ariés (1991: s.85-86) modern insanın ölümü hayatından çıkartmak için gösterdiği her türlü çabayı ihtiva eden "*yasaklanan ölüm*" kavramıyla ifade eder, Bauman'a (2000, s. 127) göre modern insanın ölümü kabullenmesi geleneksel insana göre daha zordur. Çünkü modernlik öncesi çağda ölüm, hayatın doğal bir sonucu olarak görüldüğünden bugünkü kadar ürkütücü algılanmamaktadır .

Hayatın ve zevklerin yok olacağı düşüncesinin verdiği kaygı ve rahatsızlıktan ölüm gerçeğini unutarak kurtulmaya çalışan modern insan, yaşamın doğal bir sonucu olan ölümü kabullenmekte zorlanmaktadır. Bu zorluk, hem kişinin bizzat kendi ölümüyle yüzleşmesi sürecinde yaşanan travmalarda, hem de evlat, ebeveyn ve eş gibi sevilen kişilerin ölümüne şahit olunduğu zaman ortaya çıkmaktadır.

Bir insanın kanser veya AIDS gibi ölümcül bir hastalığa yakalandığını duyduğu yahut çok sevdiği bir yakının ansızın ölüm haberini aldığı durumda gösterdiği tepkiler genellikle birbirine benzerdir. Bu konuda araştırmalarıyla ünlü Kübler-Ross (2010) özellikle tıbben öleceği teşhisi konulmuş ancak henüz şuuru kaybetmemiş hastaları inceleyerek geliştirdiği modelde beş psikolojik evreden bahsetmiştir . Burada hatırlatmak gerekir ki Kübler-Ross'un (2010) bu modeli sadece öleceği haberini alan terminal dönemdeki hastalar için değil yakınların vefatı, kaza sonucu organ kaybı ya da engelli bir bebeğe sahip olmak gibi durumlarda da geçerlidir.

Ölüm ve Acıyla Karşılaşma Süreci:

1- Şok ve İnkâr Evresi: Olumsuz bir haberin ya da kaybın ilk duyulduğu anda şok ve hissizlik yaşanır. Gelen bilginin reddedilip inkâr edilmesi söz konusudur. Bu evrede kişi ölümün kendisine ya da sevdiği kişiye bu kadar yakın olduğunu bir türlü kabullenemez. Genellikle "*Hayır, bu doğru olamaz!*" şeklinde tepkiler verilir, hatta tıbbî tahlillerde yanlışlık olduğu yahut tahlillerin karıştığı iddia edilebilir. Aslında beklenilmeyen bir biçimde ansızın gelen ve şok etkisi yapan haberlerden sonra devreye giren inkâr, adeta koruyucu bir tampon işlevi üstlenerek kişinin geçici de olsa kendini toparlamasına ve daha farklı savunma mekanizmalarına geçiş yapmasına zemin hazırlamaktadır.

2- İsyan ve Öfke Evresi: İnkâr durumu genellikle fazla sürmez ve onun yerini öfke, isyan ve küskünlük duyguları alır. "*Neden ben?*", "*Ben bunu hak etmedim.*", "*Yeryüzünde o kadar kötü ve iğrenç insanlar varken neden ben öleceğim?*" şeklinde tepkiler ortaya çıkabilir. Sevdiğini kaybeden kişilerde de benzer tepkiler gözlenir. İsyan ve öfke evresi inkâr evresine nispetle daha dirençlidir. Yerine ve durumuna göre doktorlara, hemşirelere, hatta Allah'a ve kadere isyan söz konusudur.

3- Pazarlık Evresi: Acıklı haberi alan insan, inkâr ve öfkenin işe yaramadığını görünce kaçınılmaz sonun ertelenmesini talep eden bir uzlaşıya ihtiyaç duyar. Burada "*öfkelenmek işe yaramıyor. Allah'ın dediği olur. En iyisi Allah'a dua ederek O'ndan sağlık, sıhhat ve uzun ömür isteyeyim.*" düşüncesi hâkimdir. Terminal dönemdeki hastalar ya da bir kayıp yaşayan kişiler çoğu kere Allah'la bir pazarlığa girer. Adak adama psikolojisi bu bağlamda oldukça dikkat çekicidir. "*Eğer iyileşirsem kurban keseceğim*", "*Kendimi Allah'a adayacağım*", "*Malımı mülkümü Allah yolunda harcayacağım*" tarzı ifadeler sıklıkla duyulur.

4- Depresyon Evresi: Ölümcül hastalığın artık inkâr edilemediği, cerrahî müdahalelerin çoğaldığı, hastanede yatma süresinin uzadığı ve artan semptomlarla birlikte fiziksel yapı belirgin bir şekilde zayıflayıp güçsüzleşince hasta gülümseyemez duruma gelir. Bu süreçte öfke ve hiddet yerini derin bir yokluk hissine bırakır. Benzer bir durum sevdiği insanı kaybedenlerde de görülür. Ölüm gerçeğini inkâr edemeyen, öfke ve pazarlık süreçlerinden de istenen çözüme ulaşamayan kişilerde duygu durum bozuklukları, yalnızlık ve çaresizlik hissi, düşük öz saygı, sosyal çevreden uzaklaşma, içe kapanma, ağlama, iştah bozuklukları ve fiziksel güçsüzlük gibi depresif belirtiler baş gösterir.

5- Kabullenme Evresi: Bu aşamada artık ölüm kabullenilmeye başlar. Ölümle başa çıkma mekanizmaları gelişmiştir. Ancak kişinin kendi ölümünü kabullenmesi ile sevdiği kişinin ölümünü/kaybını kabullenmesi farklı süreçler içermektedir. Açıklamak gerekirse hasta eğer bu aşamaya kadar ölmemişse, daha önceki aşamalarda kendisine biraz da olsa destek verilmişse ne kaderine karşı öfkelenir, ne de depresyon yaşar. Bununla birlikte o, sağlıklı bir şekilde yaşamlarına devam eden diğer insanlara zaman zaman imrenebilir. Yaklaşan sonla birlikte yaşamdan ve sevdiklerinden ayrılacağını düşünerek hüznlenir. Sevdiği bir yakını kaybeden kişi ise yaşanan kaybı kabullenerek eski yaşamına geri döner.

Ölümle ve kayıplarla başa çıkma sürecinde ortaya çıkan “şok ve inkâr”, “isyan ve öfke” ile “depresyon” aşamaları, “mevcut gerçekliği reddetme”, “Allah’a isyan” ile birlikte “manevî ve sosyal destekten yoksunluk” içerdiği için olumsuz dinî başa çıkma şekilleri olarak değerlendirilebilir. Pazarlık aşaması olumlu dinî başa çıkmanın ilk adımı kabul edilebilir. Bu süreçte ibadet ve dua başta olmak üzere dinî yaşantıda artış gözlenir. Kabullenme aşamasında olumlu dinî başa çıkma stratejilerinden olan “*takdir-i ilahî*” ve “*lütüf da hoş kahır da hoş*” anlayışı ön plandadır.

Normal ve Anormal Yas Tepkileri:

Yas (matem), üzerine duygusal yatırım yapılmış bir nesnenin hayatımızdan çıkması, yani kaybedilmesi sonrasında yaşanan doğal fizyolojik bir duygudur.

Kübler-Ross’un (2010) sunduğu beşli evre, şayet çok sevilen bir yakının vefatından sonra yaşanacak olursa, bu durum normal yas tepkisi olarak değerlendirilebilir. Ancak yas her zaman normal değildir. Kayba verilen tepkiye fiziksel ve ruhsal sağlık sorunları eşlik etmeye başlamışsa, bu durumda “anormal duygusal tepkilerle örülü patolojik yas” denilen durum ortaya çıkar.

Yas tutma, yaşanılarak tamamlanması gereken doğal bir süreçtir. Normal yas sürecini yaşayamayan kişilerde ikincil ruhsal ve bedensel sorunlar gelişebilir. Bu nedenle kayıpların ardından normal bir yasın yaşanması sağlıklıdır. Örneğin babasını ya da evladının kaybeden bir kişi çevrenin de etkisiyle güçlü görünmek için ağlamazsa yasını tamamlamadığı için *zeigarnik* (yarım kalmışlık) etkisi denilen durum ortaya çıkar. Bu da onun kişiliğini olumsuz etkiler. Hz. Peygamberin oğlu İbrahim vefat edince gözlerinden yaş gelecek şekilde ağlaması (İbn Sa’d, 2001) psikolojik açıdan sağlıklı bir davranış olup bu durum onun yasını tamamladığını gösterir

Kişi kaybını sürekli inkâr ederse, sosyal çevre ilişkilerinde bozukluk veya gerileme görülürse, duygusal olarak donuk tepkiler vermeye başlarsa, iş yaşamı ve sosyal hayatı bozulursa bu durumda “normal olmayan yas” belirtilerinden bahsedilebilir.

Sonuç

Ölüm düşüncesinin bilinçte canlı bir şekilde var olması yas sürecini normalleştirmede önemlidir. Çünkü ölüm unutuldukça olağanüstü bir olay gibi algılanmakta, bu da yaşanan kayıplar/ölümler karşısında patolojik yas tepkilerine neden olmaktadır. Bu noktada Hz. Peygamber’in: “*Lezzetleri bıçak gibi kesen ölümü sıkça hatırlayınız.*” (Tirmizî, Zühd, 4; Nesâî, Cenâiz, 3) hadisi sadece ahlakî ve dinî hayat açısından değil, bununla birlikte ölümü normalleştirme ve yas tepkilerinin sağlıklı verilebilmesi anlamında yeniden değerlendirilmelidir.

Kaynaklar

- Ariés, P. (1991). *Batılının Ölüm Karşısında Tavırları* (Çev. M. A. Kılıçbay). Ankara: Gece Yayınları.
- Batson, D. C. & Ventis, L. W. (1982). *The Religious Experience: A Social-Psychological Perspective*. Oxford: Oxford University Presses.
- Bauman, Z. (2000). *Ölümlülük, Ölümsüzlük ve Diğer Hayat Stratejileri* (Çev. N. Demirdöven). İstanbul: Ayrıntı Yayınları.
- Frankl, V. E. (2006). *Découvrir Un Sens à Sa Vie Avec La Logothérapie*. (Traduit par C. J. Bacon & L. Drolet). Québec: Les Édition de l’Homme.
- Frankl, V. E. (2014). *Psikoterapi ve Din: Bilinçdışındaki Tanrı* (Çev. Z. Taşkın) Ankara: Say Yayınları.
- Frankl, V. E. (2016). *Hayatın Anlamı ve Psikoterapi* (Çev. V. Atayman). Ankara: Say Yayınları.
- Freud, S. (2016). *Psikanalize Giriş Dersleri* (Çev. S. Budak). İstanbul: Öteki Yayınları.
- Freud, S. (2017). *Cinsellik Üzerine* (Çev. A. A. Öneş). İstanbul: Say Yayınları
- İbn Sa’d, M. (2001). *Kitâbü’t-Tabakâti’l-Kebîr I-XI* (Thk. Âlî Muhammed Ömer). Kâhire: Mektebetü’l-Hancı.
- Jung, C. G. (1958). *Psychologie et Religion* (Traduit par M. Bernson & C. Cahen). Paris: Buchet & Chastel.
- Jung, C. G. (1996). *Problèmes de l’Âme Moderne* (Traduit par Y. Le Lay). Paris: Buchet & Chastel.
- Kübler-Ross, E. (2010). *Ölüm ve Ölmek Üzerine* (Çev. Ekin Uşaklı). İstanbul: April Yayıncılık.
- Willaime, J.-P. (1995). *Sociologie des Religions*. Paris: PUF.

- Yalom, I. (2001). *Varoluşçu Psikoterapi* (Çev. Z. İ. Babayiğit). İstanbul: Kabalcı Yayınevi.
- Yalom, I. (2006). *Din ve Psikiyatri* (Çev. Ö. Arıkan). İstanbul: Merkez Kitapçılık.
- Yapıcı, A. (2003). Fiziksel ve sosyal hadiselerle sebep atfetmede dinin rolü. *Çukurova Üniversitesi İlahiyat Fakültesi Dergisi* 3 (1), 127-165.
- Yapıcı, A. (2007). *Ruh Sağlığı ve Din: Psikososyal Uyum ve Dindarlık*. Adana Karahan Yayınları.
- Yapıcı, A. (2017). Postmodern dönemde din, kimlik ve anlam problemi. A. Tüzer (Ed.) *Dinin Kaderi: Çağdaş Sorunların Kısacasında Din* içinde (ss. 117-174). Ankara: Elis Yayınları.

Parents' Experiences About Their Child's Type 1 Diabetes

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Abstract

Introduction: Type 1 Diabetes Mellitus is a chronic disease that is expanding and increasingly affects children and adolescents, resulting in changes in their lifestyle as well as in their families. **Objective:** To identify the experiences of parents regarding their child's Diabetes Mellitus. **Methods:** Qualitative, phenomenological study, having as participants 14 parents of children and adolescents who have diabetes and are followed up in consultations. We used the semi-structured interview and carried out content analysis. **Results:** Diabetes in children leads to a family restructuring and in particular to changes in diet and relationships with other children; represents a load of negative feelings and fears that lead to the demand for new parental skills and to the appreciation of health professionals and supports received. **Conclusions:** The results can help health professionals in the development of parental role, namely in accepting and adapting to the disease, in overcoming the difficulties and, above all, in improving the family's quality of life.

Introduction

The scientific and technological development has allowed the diagnosis of chronic diseases to be made increasingly early. Thus, an adequate therapeutic plan can be designed in order to control the evolution of the disease. Although early diagnosis does not prevent the onset of the disease, it contributes to a favourable outcome, preventing risks and complications (Gregory, Moore, & Simmons, 2013). Type 1 Diabetes Mellitus is a chronic, complex, and difficult to control disease that interferes with the quality of life of both the patients and their families. Correia (2011) points out that the unpredictability, characteristic of diabetes, generates a sense of discomfort and insecurity in parents when they are not close to their diabetic children. Over the past decades, it has been verified that the incidence of this disease is increasing in children and young people. In 2010, 18 new cases of Type 1 Diabetes were detected per 100,000 young people aged 0-14 years, nearly twice as high as in 2000 (similar to that observed in the 0-19 age group) (Boavida et al. 2012). This reality requires joint efforts on behalf of the health professionals, the child/adolescent and the family, with regard to the adaptation, treatment and metabolic control of this disease in order to minimize the complications that may result in the long term as well as to maintain the quality of life (Almino, Queiroz, & Jorge, 2009). Therefore, the need to involve the family as an integral part of the whole care process of the diabetic child and adolescent is evident (Alencar, & Alencar, 2009). In this sense, it seems relevant to identify the experiences of the parents regarding their child's Diabetes Mellitus. In fact, the family constitutes a system in which the behaviour of each individual is interdependent of the others (Correia, Franco, Demário, & Santos, 2012), and when exploring the parents' experiences of this phenomenon, we can obtain subsidies for the improvement of the health care provided by health professionals to the child/adolescent with diabetes as well as to their family (Sousa, 2012).

Methodology

In our clinical practice we have seen an increasing number of children and young people with type 1 diabetes. Inevitably, we have also noticed the difficulties, anxiety, fears and exhaustion of parents in dealing with this situation.

In order to identify the parents' experiences with their child's Diabetes Mellitus, we developed this study based on the following research questions: What are the feelings experienced by parents after the diagnosis of Type 1 Diabetes Mellitus has been made to their child? What experiences struck the parents during the process of acceptance and adaptation to diabetes? To what extent did the intervention of the health professionals influence the adaptation of the child/adolescent and his/her family to diabetes?

We conducted a qualitative, exploratory-descriptive, phenomenological study using the semi-structured interview. The target audience was the parents of children/adolescents with Diabetes Mellitus type 1 who are followed in the Paediatrics External Consultation of a Hospital Centre in the North of Portugal. We used a non-probabilistic sample of 14 parents (10 mothers and 4 fathers). The inclusion criteria were parents of a child or adolescent with Type 1 Diabetes Mellitus, 4 years of age or over, and in whom the diagnosis of the disease had been carried out more than 6 months ago. The study had been authorized by the Hospital Centre and obtained a favourable opinion from the Ethics Committee. The interviews were carried out by the researcher in a private consultation office and, prior to each interview, parents were informed of the objectives, benefits and nature of the research, and the

confidentiality and anonymity of the data was ensured. We obtained a written informed consent from each parent to guarantee eligibility to participate in the study.

A coding grid was drawn up for each interview, with the interview number, time and duration. An audio recorder was used and later the interviews were transcribed into a word document. We performed the content analysis by coding the data (Amado, 2000; Bardin 2009; Streubert, & Carpenter, 2002). That is, the relevant characteristics of the message content were transformed into units so as to allow their description and precise analysis. A careful reading of each interview was carried out, followed by a re-reading in the attempt to eliminate irrelevant information for the study and to better understand the material analysed in order to construct the categories. For each interview a code was assigned (M1 to M10 for mothers and P1 to P4 for fathers).

Findings

Our sample is composed of 14 participants, 10 mothers and 4 fathers. We found that 57.1% are between 31 and 40 years old. All parents are employed and 50% of the mothers, too. The majority of the participants (57.1%) has a level of schooling below secondary level, 28.6% completed the secondary level and 14.3% have a degree in higher education.

Regarding marital status, 78.6% of the participants are married and 21.4% live in a non-marital partnership. Half of the sample has 2 children, 35.8% have 1 child and 7.1% have 3 children and the same percentage has more than 3 children.

To what concerns children/adolescents with diabetes, 8 of them (57.1%) are boys and 6 (42.9%) are girls. The majority is between 6 and 10 years old (57.2%) and only 21.4% are between 11 and 15 years old. In the majority of the children, diabetes was diagnosed before the age of 5 (57.2%).

Regarding the elapsed time since the diagnosis was made, we verified that it had been performed more than 4 years ago in 42.9% of the children, between 2 and 4 years in 21.4% of the children, and between 6 months and 2 years in 35.7% of the children/adolescents.

On the following pages we present the content analysis of the interviews. Taking into account the process inherent in qualitative studies, the categories that are represented in the following tables with their indicators arose.

Impact Of Diabetes On The Family

It was verified that the diagnosis of diabetes ascends within the family, changing its dynamics. The parents' discourse reveals the existence of the impact of diabetes on the family (Table 1), giving rise to the need for a restructuring of the family life. We have verified the existence of seventeen enumeration units in this indicator. The parents report this fact as follows: "(...) *there were some repercussions, we had to change some habits (...)*" (M3), or even more significantly "*I had ... to stop working. P had to be pricked and I had no help (...)*" (M6).

In the implications on the parents' personal life, we witnessed the difficulties experienced and felt because of diabetes, both in terms of accepting it and in the repercussions that it entails. Examples of this are expressions such as "(...) *at first, I did not want to believe it (...) but then I accepted it, I had no choice (...). I tried to adapt to hospitals, to insulin (...)*" or even "(...) *sleep, forget it! I do not think I have slept a single night*" (M3).

In addition to the personal implications, the onset of diabetes in the family also affects the social life of the parents. The speech of the parents reflects this constraint especially with regard to their children's school and to them being a part of society when they state, "(...) *I wanted to take my child out of the nursery. I was afraid that they were not prepared to administer insulin and also because of the food (...)*" (M10), and also "*When we are sometimes socializing (...) and he/she wants to eat and we cannot allow it (...) people start to stare (...)*" (P1), or in the expressions "(...) *people are sometimes a bit uneducated in this aspect (...) I feel like using foul language!*" (P2).

Table 1 – Impact of diabetes on the family

Category	Indicators	Recording unit
Impact of diabetes on the family	Restructuring of family life	17
	Implications in personal life	12
	Implications in social life	8

Parents' Feelings/Emotions

The diagnosis of diabetes represents a milestone in the life of parents with a huge negative burden that provoked several feelings in the participants of this study (Table 2). The most expressed feeling by parents was fear/insecurity. "(...) *one is always afraid (...) always afraid that something will happen (...)*" (M3). As a consequence of fear, insecurity also arises "(...) *even when I was told "now you do not need to see it in the middle of the night", I would still see it, that is how it is..."*" (M3), or as participant M9 describes it "(...) *not showing my insecurity was very complicated (...)*".

The second feeling most referred to by parents was concern. The fact that the child has diabetes represents, for most parents, an increased responsibility (M1, M5, M6, M7, M8, M9) with a need for control, as M3 states: *"It is always that anxiety about whether or not everything is okay... it is that concern (...)"*. P2 and M10 also stress this idea when they say *"I am always more worried, I have to always be on top of him (...)"*.

We verified that sadness/anguish is also within the feelings that are the most visible by the participants in the study. Many times this sadness is manifested by crying: *"I got tired of crying in this hospital ... it was complicated!"* (M6, M4, M8, M9). In some of the parents, this feeling lingers and accompanies them on a day-to-day basis, as verbalized by P2 *"It took a toll on me and still does."*

Revolt/frustration was also reported by the parents. Participant M4 testifies this revolt when she says *"(...) why did it have to happen to our daughter? Why her?"*. Also, father P1 stresses this feeling when he says *"(...) I felt destroyed ... and revolted (...) I was outraged"*.

Feelings like guilt and denial also emerged in the analysis of the data. Initially, the non-acceptance of that reality *"(...) I did not believe it..."* (M2) and later the feeling of guilt when confronted with the diagnosis of diabetes *"(...) I am almost positive that I did not wash my hands well when I made her soup, or I did something wrong when she was a baby (...)"* (M4). Sometimes blame perpetuates, as expressed by P2 *"We always feel guilty (...)"*.

Table 2 – Parents' Feelings/Emotions

Category	Indicators	Recording unit
Parents' Feelings/Emotions	Fear/insecurity	12
	Concern	11
	Sadness/anguish	10
	Revolt/Frustration	8
	Guilt	4
	Denial/shock	4
	Disorientation	3

Changes in Family Life

The diagnosis of diabetes forced some changes in the family life of the study participants (Table 3). The change in eating habits was the most mentioned indicator: *"We learned how to eat better, to eat at certain times of the day."* (M5).

We also found that after the diagnosis had been made, the parents felt the need to monitor and supervise their child more. This fact can be verified through various expressions made by the parents: *"(...) to be more on top of her (...) the need to have to watch over her"* (M1, P2, M8). However, this need is closely related to the concern with the child's clinical situation, as can be seen in the following excerpts: *"(...) stressful day and night (...) we never let J. sleep alone at night (...)"* (M9); *"I always carry my mobile phone (...) then she calls me (...) to say (...) how she is doing"* (M10).

The verbalisation of the participants regarding the limitations of going out is also noticeable. *"We ... basically stopped going out, to restaurants"* (P1, P2); M9 says *"(...) we stopped doing some less important things, like going out, trips to the beach"*. This limitation is justified by P3 when stating that *"The disturbance had to do with him going to the house of his grandparents, uncles, because people do not want to be held responsible for such care."* Some parents also voiced the need for some changes related to diabetes, for instance: *"What changed was having to measure the amounts and give him insulin according to the amount"* (P3), and also *"(...) in the morning, there is always that precaution to get up early (...) and not enjoy what we are doing (...)"* (M10) and M6 points out *"I just had to stop working. P. had to be pricked and I had no help."*

Table 3 – Changes in Family Life

Category	Indicators	Recording Unit
Changes in Family Life	Change in eating habits	14
	Higher monitoring and supervision of son/daughter	13
	Limitations of going out	8
	Changes related with diabetes	7
	Limitations in shopping	3

Changes in family dietary

We can see in this category (Table 4), that the most mentioned change was related to the type of dietary. The parents stated that they had to reformulate the dietary according to the type of food and quantities, as M2 states *"(...) I removed the sweets but added more vegetables!"* and also M4 *"(...) we are much more careful with what we eat (...) "*. Faced with the care inherent in diabetes, meal times also changed. Thus, M10 and P4 convey *"(...) we started having schedules to eat"*, and M2 as well *"(...) the schedules to eat changed, because she did not have any schedules (...) she ate whenever she wanted."* We also noticed that some participants stated that they only had to make some adjustments, such as M3 when referring *"(...) we already had everything more or less set, fixed meal times, except for supper (...) now everybody has supper (...) "*, or even M6 *"The only thing he changed was that he would not eat at night (...) "*.

One of the mothers said *"(...) during meals, we would all eat together and now I have to cook food separately (...) "* (M7), and M8 says that *"(...) I sometimes make two types of soup ... but the rest of the food is the same for everyone."*

They mentioned some difficulties in eating habits, mainly introducing vegetables in the dietary. One of the mothers (M8) reports that *"He would not eat a bit of cabbage or lettuce."* Regarding the ingestion of certain food items or sweets by their children, M4 refers *"(...) we sometimes have to be strict. And sometimes she eats without us noticing (...) "*.

Table 4 – Changes in Family Dietary

Category	Indicators	Recording Unit
Changes in Family Dietary	Type of dietary	12
	Meal Times	11
	Family dietary	9
	Difficulties felt by parents	9

Parenting children with diabetes

Some indicators that reflect the readjustment of family life emerged (Table 5). In this context, the development of parental competences has become crucial to allow the readjustment of the parental role. The parents' commitment to acquiring these new skills is noticeable throughout the speeches, especially when M7 and M9 refer, *"(...) I did not understand, nor did I know what it was, diabetes (...) after that I got used to it (...) "*. Still, M9 adds *"I have read absolutely everything on it (...) I try to do everything that is within my reach."* Also, P2 says that *"(...) the first time I administered it, (referring to insulin) I had to bend down because I thought I would not be able to get back up" P2.*

Another one of the indicators refers to the difficulties in accepting diabetes. These are related to the parents' emotions as shown by P1 *"... there comes sadness from the bottom of the chest ... but it stays inside ... we try not to demonstrate it (...) "*, or M2 that says: *"It was a bit hard (...) because I was just a child (...) "*. In some cases this difficulty may be associated with parental perception as expressed by M10. *"As much as they say that she can live a normal life, she has to live a different life from everyone else,"* and P2 says *"He is more limited, he cannot play as much as he used to (...) "*.

Some positive aspects of the acceptance of diabetes, such as the fact that the child or adolescent has accepted his/her clinical condition, were perceived *"(...) he had enough strength for himself and for me "(P2). Another mother says "(...) but only because she reacted very well, she was not a girl who cried because she had to be pricked (...) I think we all adjusted well (...) "(M3).*

Some difficulties in the relationship are essentially related to the behaviour of the children, as we can see from the following excerpts: *"(...) we are still going through a phase ... everything is out of control ... we do not live well ... but we are living (...) "(P1). Also, M2 refers "(...) she will cry alone and not tell anyone anything (...) "*

Table 5 – Parenting children with diabetes

Category	Indicators	Recording Unit
Parenting children with diabetes	Development of parental competences	19
	Difficulty in accepting diabetes	6
	Favourable aspects for binding and accepting diabetes	7
	Difficulties in binding	5

Experiences with other children

In this category, the participants of the study mentioned behaviours and feelings related to the experiences of their children with other children (Table 6). We find that jealousy is felt among siblings of children or adolescents with diabetes, as P4 says. *"He was sometimes jealous, that I would pay more attention to her (...)"*.

On the other hand, some parents highlight the understanding and mutual help between siblings. M5 states that *"His brother very understands (...) if he wants something, he is careful enough so that the other does not see it."* M8 stresses this feeling by saying *"Her sister is very responsible (...) she helps out."*

However, some parents have expressed some difficulties in dealing with this situation given its peculiar characteristics. P4 says *"(...) it may not seem like it, but they are two children and sometimes I think that we are giving more affection to his sister than to him ... but we are not ..."* P2 reinforces this difficulty by referring *"One can and the other cannot; I think it's unfair (...) sometimes we try to avoid going out with them together just to avoid requests ..."*.

Table 6 – Experiences with other children

Category	Indicators	Recording Unit
Experiences with other children	Jealousy	5
	Understanding and mutual help	4
	Difficulties felt by parents	5

Fears experienced by parents

After the diagnosis of diabetes, the participants expressed some fears and anxieties regarding the future of their child (Table 7), namely fear of other pathologies appearing *"(...) there is always that fear that something else will happen with her health (...)"* (M4). Hypoglycaemia is also a cause for concern, and M5 points out *"(...) I am afraid because of his hypoglycaemia ..."*

Adolescence represents an important milestone in life, full of challenges, where autonomy is increasing and personality is created. Hence, this symbolizes one of the parents' yearnings about the future, as seen in the following excerpts: *"(...) when she goes to university, when she starts to go out at night and we can no longer say "do not eat that", "do not drink that", "do not do that", (...)"* (M4).

Vascular complications are a concern for some parents as witnessed in the expression: *"(...) losing a leg, (changes) of the eye sight (...) not being able to lead a normal life"* (M8).

Table 7 – Fears experienced by parents

Category	Indicators	Recording Unit
Fears experienced by parents	Diagnosis of other pathologies	5
	Hypoglycaemia	4
	Adolescence	4
	Vascular Complications	2
	Fear of making mistakes	1

Opinion on the health professionals and supports received

All of the parents expressed satisfaction considering the care of excellence provided. *"It's an excellent team (...). For both her and me, it helped a lot (...)"* (M2). Other parents also expressed their satisfaction: *"It was very good (...) our needs were fulfilled"* (P1, M9, P4).

Essentially, the study participants felt the support of the health professionals. Some examples of this are the expressions of M6 and M8 *"(...) the nurses, the doctor, in general"* and M9 *"(...) I liked it very much (...) and here in the consultation, we receive a lot of support"*. In addition to this support, the parents also mentioned the support of their child with diabetes *"(...) he had enough strength for himself and for me..."* (P2), and the support of other relatives as M5 states *"From my sister-in-law, from my other child (...) my sister-in-law (...) stays with him (...) if she didn't take care of him, I don't know how I would manage..."*.

Table 8 – Opinion on the health professionals and supports received

Category	Indicators	Recording Unit
Opinion on the health professionals	Satisfaction	14
Supports received	Support from health professionals	13
	Support of the child with diabetes	2
	Support from other family members	2
	Other supports	2

Discussion

The participants reported the difficulties felt when diabetes was diagnosed, as well as the need to restructure their family life, to establish new parental roles, and to take on the implications inherent in both their personal and social life.

Uncomfortable feelings such as a sadness, anguish, revolt, guilt and essentially fear, are present in the speeches of the participants in this study. The studies of Martins, Ataíde, Silva, & Frota (2013) also make it possible to perceive the suffering of the parents before their child's diabetes and the feeling of impotence before this diagnosis. Pilger, & Abreu (2007), point out that these feelings can be understood as a process through which parents face their child's illness and try to find a solution and to adapt to this new reality. At this stage, the role of the multidisciplinary team with the child or adolescent and their family is of the utmost importance, with the aim of providing them with the care needed to help them in this moment of change. In the study, the need that parents feel to supervise their child with diabetes is visible. This situation brings suffering and they feel a need for a greater dedication and vigilance. Some parents had to leave their professional activity in order to be entirely available to care of their child since they had no other support. This need was also verified in other studies. Leal, Fialho, Dias, Nascimento, & Arruda (2012) report that the difficulties experienced can comprise several dimensions and that the treatment of the disease requires special care and attention on behalf of the family.

Another change verbalised concerns social life. As in the study by Corrêa et al. (2012), when faced with diabetes, parents experience their social life with some limitations. At times, they stop going to places or participating in events and festivities, so that the child is not in contact with food that he/she should not consume. Martins et al. (2013) stress that even after adapting to the disease, families continue to avoid going out to social gatherings, which can lead to the family's social isolation.

The change in eating habits is perceived by the study participants as one of the main alterations, both with regard to the type of dietary as well as the need to establish meal times. Its restructuring implies changes that, in most cases, extend to the whole family. We also found that many parents see these changes as beneficial to the family's health, as food becomes healthier and there are meal times to follow.

With regard to the development of parental competencies, parents feel compromised in their parental role when faced with the difficulties inherent in diabetes. These adversities require developing skills and competences to become capable and to feel confident in caring for the child. The role of health professionals with the family is fundamental so as to contribute positively to the definition of the new parental roles, which is corroborated by Corrêa et al. (2012) and Martins et al. (2013).

We see an ambivalence of feelings in the relationship with other children. Parents perceive feelings of jealousy on behalf of the siblings, but also report understanding and mutual help. Sometimes they find it difficult to make decisions in relation to a healthy child and another child with a disease that implies certain limitations, mainly at the dietary level.

The analysis of the interviews shows the parents' yearning regarding the consequences and the risks of diabetes. The concomitant appearance of other pathologies and hypoglycaemia are the parents' most feared complications. We verified unanimity in parents' satisfaction with the care provided by health professionals. They mentioned the favourable contribution of the multidisciplinary team, especially the nursing team, in acquiring knowledge and skills on how to deal with diabetes. The interviewees said they felt the support, essentially from the health professionals, but did not rule out the pertinent support they felt from other family members, too.

Conclusions

The diagnosis of diabetes has repercussions in families with an enormous impact at a behavioural, personal and social level. The family faces a new reality and experience, new feelings and concerns, and the involvement of all its family members is necessary for the reorganization of the family dynamics.

Bearing in mind the starting points, we carried out a qualitative research in 10 mothers and 4 fathers to identify the feelings experienced with their children diagnosed with Type 1 Diabetes Mellitus, and to understand the most challenging experiences in the process of acceptance/adaptation in the caring for the child with diabetes.

Given the complexity of diabetes, parents' anguish, fear, and disorientation are understood after the diagnosis and throughout the process of acceptance and control of diabetes. In this sense, we sought to understand the extent to which the intervention of health professionals in the adaptation of the child and the family in this process of transition to diabetes was important.

From the feelings mentioned above, parents feel the need for greater vigilance and supervision of their children by dedicating much more attention and time to them. Given the characteristics of diabetes, the family needs to change eating habits, essentially with regard to the type of food and the meal times. Some of the respondents avoid participating in festivities or events so that the child does not have to be in contact with food that they cannot eat. When there are other children involved, parents face a daily challenge regarding decision-making in relation to a healthy child and another one with diabetes.

Some parents feel their parental role is compromised and seek to develop skills and abilities to become capable and confident to care for their child. Some parents feel disoriented, sad and sometimes guilty. Thus, they become very vulnerable, so the support provided to them is extremely important for parents to gain strength and to be able to care for their child.

All the interviewees mentioned the support of the health professionals as a valuable aid in the acceptance of diabetes, in the acquisition of skills and competences, and in the redefinition of the parental role.

With this study, we are better able to understand the experiences of the parents in relation to the child/adolescent with diabetes. In light of this data, health professionals will better understand the difficulties experienced by parents and thus foster good practices and improve the quality of life of the child and his/her family.

References

- Alencar, D., & Alencar, A. (2009). O papel da família na adaptação do adolescente diabético. *Revista da Rede de Enfermagem do Nordeste*, 10(1), 19-28.
- Almino, M., Queiroz, M., & Jorge, M. (2009). Diabetes Mellitus na adolescência: Experiências e sentimentos dos adolescentes e das mães com a doença. *Revista da Escola de Enfermagem da USP*, 43(4), 760-767.
- Amado, J. (2000). A técnica de análise de conteúdo. *Revista Referência*, 5, 53-63.
- Bardin, L. (2009). *Análise de conteúdo*. Lisboa: Edições 70.
- Boavida, J., Fragoso de Almeida, J., Massano Cardoso, S., Sequeira Duarte, J., Duarte, R., Ferreira, H.,... Raposo, J. (2012). *Diabetes: Factos e Números 2011 – Relatório Anual do Observatório Nacional da Diabetes*. Lisboa: Sociedade Portuguesa de Diabetologia.
- Corrêa, A., Franco, S., Demário, R., & Santos, E. (2012). Diabetes Mellitus na infância e adolescência: Vivência dos pais em relação à alimentação do seu filho. *Alim. Nutr.*, 23(4), 631-637.
- Correia, A. (2011). *Stress parental, perturbação emocional e estratégias de confronto em mães de crianças com fibrose quística e com diabetes* (Dissertação de Mestrado, Universidade de Lisboa). Lisboa, Portugal. Acedido em <http://repositorio.ul.pt/handle/10451/4855>
- Gregory, J., Moore, D., & Simmons, J. (2013). Type 1 Diabetes Mellitus. *Pediatrics in Review*, 34, 203-215.
- Leal, D., Fialho, F., Dias, I., Nascimento, L., & Arruda, W. (2012). A vivência dos familiares de crianças e adolescentes portadores de diabetes mellitus tipo 1. *Revista Eletrônica de Enfermagem*, 14(1), 189-196.
- Martins, E., Ataíde, M., Silva, D., & Frota, M. (2013). Vivência de mães no cuidado à criança diabética tipo 1. *Revrene*, 14(1), 42-49.
- Pilger, C., & Abreu, I. (2007). Diabetes Mellitus na infância: Repercussões no cotidiano da criança e da sua família. *Cogitare Enfermagem*, 12(4), 494-501.
- Sousa, P. (2012). *O exercício parental durante a hospitalização do filho: intencionalidades terapêuticas de enfermagem face à parceria de cuidados* (Tese de Doutoramento em Enfermagem, Universidade Católica Portuguesa). Porto, Portugal. Acedido em <http://repositorio.ucp.pt/handle/10400.14/13972>
- Streubert, H., & Carpenter, D. (2002). *Investigação qualitativa em enfermagem: Avançando o Imperativo Humanista* (2ª ed.). Loures: Lusociência.

Patient's Privacy and Satisfaction: Sociological Study

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Abstract

The concept of “patient satisfaction” which one of the most important indicators of service quality, has started to gain importance with the development and transformation of customer oriented quality approach in the health sector. Patient satisfaction is a much more comprehensive phenomenon, as well as a highly effective variation such as patient privacy that is neglected by authors or academics. Privacy from the point of sociological view is a reflection of the most basic human right that can be expressed as “staying on its own”. It refers to a specific field situation without sharing yourself with someone else, without exposing, externalizing or linking with the other. This situation can be expressed as “body privacy”. This situation, which is considered as patient privacy in the literature, is divided into two in our study. It will be discussed in the form of “data privacy” and “body privacy” by differentiating it for the protection of personal information and the physical body.

While data privacy is widely known and legal arrangements are made, legislative regulations and academic interest in body privacy are much more backwards. It is emphasized that the basis of patient satisfaction is satisfaction of patient expectations and a wide range of patient-doctors and nurses' unity constitute the level of compliance. However, given attention to body privacy is one of the most important criteria for the efficiency of the hospital organization and for effective communication between physician and patient.

Key words: *Medical Sociology, Patient Satisfaction, Patient Rights, Patient Privacy, Body Privacy*

Peace Education: The Excellent Property Of Humanity

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Abstract

The confrontation in the present day of the planet is dynamic planet since society has spontaneous the primitive society from the primitive to the modernization which be engaged from materialism, consumerism and informationism. Unfortunately, the violence and structural violence have been situated in the global phenomena. Peace education which is the excellent property of humanity will be taught in oneself and the others by the followings: 1) be faithful and respect in the goodness of yourself and the others. 2) be aware of conflict normality of learning. 3) be concerned in the individually differentiated ideology. 4) be understood of the changing and dynamic planet. 5) be taught in school by using the systematic thinking processes of all problems solution. Certainly given PEACE Model must be concerned as the followings, P= People those who understand in the human being differences, E=Education it should be run in every level of schooling, A=Activeness all of social institutions have to take effective actions, C=Community gaining the similarities and reduction of differences will be done, E=Earth the global will promote friendship, unity and fraternity both into direct and indirect ways.

Key words: Peace Education; the Excellent Property; Humanity; PEACE Mode

Introduction

In the wildly changing world science and technology play the major role of every dimension of development, politics, economics and socio-cultural, and also science and technology. Easiness of science is found possibly to accommodate human being prosperity. As we known already, materialism, consumerism and monetarism practically act on the social chaos, easily seen as in the present day. Selfish and actual violence is now impacting so what the damage of society decay. Peace which human being has been in the nostalgia will be taken place at all places. As the matter of fact, the binary of peace always shows in the social phenomena and the social condition, peace and conflict seem to be the homogeneous matter. However, peace and conflict is not the frozen phenomena of human being and is the open to challenge on ideological practice.

Peace Education: The Myth Of Being

The complexity of social phenomena in the present day rapidly spread out to human life especially self understanding together with the others understanding necessitated fruitful in the same doctrine. Based on the foregoing it should be declare with individual and interpersonal relation. The first element of conflict which is the primary of peace destroy is from one mind and his thinking negatively. Anyway, good mind and good thinking will be created for the better way of peace. (Strike, 1982)

Actually, the truth of peace is the metaphysics of global education. Education also takes part of gaining the habitant ideology of the nation development. Social order is also one category of discourse both of manifest or latent that be cultivated people for peace. Peace and conflict is naturally the binary opposition judged by people as the sides of good/bad. The myth and being of peace is projected into knowledge builder and knowledge acceptor.

What Is Peace?

Accordance to the definition of Peace by Webster's New Encyclopedic Dictionary is:

- 1: a state of tranquility or quiet as (Webster's New Encyclopedia Dictionary, 1993)
 - a: a freedom from civil disturbance or foreign war
 - b: a state of security or order within a community protected by law or custom
- 2: freedom from disquieting or oppressive thoughts or emotions
- 3: harmony in personal relations
- 4: a: a state or period of agreement between governments
 - b: a pact or agreement between combatant to end hostilities

Peace is very common sense of people since it covers a whole perspective of individual differences. People from their own culture sometime cannot get the full perspective and go not know why their behavior follows this grated pattern. Indeed, culture of peace is influential one's life from how they think and their practices. The ultimate action of peace is to create harmony and understanding clearly. With every community or organization's ideology or perspective, it is to create the great solution beyond the best solutions.

Why Peace Understanding?

There are some characteristics of peace which fulfills the humanity happiness. It is formed by the first small group in family. Individuals and community with complementary skills of basic under the differences are usually needed to form the prosperous happiness. Humanity is the recognition its global nature, the next step is the understanding to one another. Since we know that global is not the melting pot where all people blend in and become a homogenous mixture. People in the planet is also much more like a rich fruitcake where the yellow contrasts with the brightly colored strawberries and rich hues of the raisins. (McShane and Glino, 2005) The easy and high light of peace is education commitment. Education does not exist or act in a value free way, whatever it takes places in every space of learning. It must be formed by certain values. There is dividing between education and beliefs. Education normally embraces a commitment to 1) respect for the persons 2) the promoting of well-being 3) democracy 4) fairness and equality 5) opportunity and the last one 6 is the growth of all mental and physical body. (Somboon, 2003)

Understanding the principles of peace and for the citizenship is one thing. Putting the learners in active practice and manifesting them in order to behavior is quite another thing. It remains for us to examine the ways and means of training for good citizenship. However, the attainment of qualities and accomplishment envisaged the concept depends upon the, 1) innate abilities and capacities of learners 2) home influences and training 3) education program offered in the school for developing peace. (Tanej, 2001). All perspectives of mentioned are that developing peace programs out of learners' abilities, experience and know ledge will be and effective and interesting method of making them effective citizen in the future. Work selected or skill manifested should improve the learners' understanding of their role as civic people. Meanwhile, the first instructions of peace are imparted at home. It is the first lesson of living with the others. Here the learners become good considerate, thoughtful and well behaved. The civic responsibilities that begin at home extend in ever widening circle of school, community and the country.

Implication Of Peace For International Understanding

For the promotion of peace for international education is essential to

1. **Know** and understand how to people on other lands live;
2. **Recognize** the common humanity which underlines all differences in culture;
3. **Work** for fair and just world-order with security, freedom and fair-play for all people;
4. **Maintain** interest in the world affairs;
5. **Recognize** and help to solve world problems according to practices of democracy;
6. **Appreciate** the contribution of all people to world citizenship and that there is a human culture;
7. **Combine** love of one's own country with abroad social consciousness towards the problems of the world;
8. **Understanding** the economic and cultural factors which make the world inter- independent community of the nation;
9. **Respect** the dignity and worth of men by giving him equality of right and opportunities;
10. **Take** world one unit;
11. **Realize** the truth alone triumphs and leads to human progress and prosperity;
12. **Believe** in common values and goal for the world community;
13. **Understand** that victories of peace are greater than victories of war.(Taneja, V.R., 2001)

Once these basic concepts are realized by human being, achieve the goal of peace and world- understanding is very easily possible and practicable. Peace for international understanding we should try in our family firstly and then spread out to the community and other places conducted to men everywhere respective of different culture or nationality which we belong.

How to Handle Peace: Peace Model

Throughout the world, most of global citizen currently want peace since they are missing out of on education because they live in or come from conflict. Education is the fundament process for building up the global peace as urgently required. Overall picture of the world civil war and international conflict have completely devastated. Through socialization process, people are normally educated to follow norms, folkways and most people were not opposing it. In peace or homogeneous, norms reaching to “understanding the others” convention on how the human being should conduct themselves, approach things, as well as roles and requirement. It is also the process of reaching a balance.

PEACE Model is the one tool for gaining and developing the total happiness of the world.

1) **P = People**, the current world situation are conflicts. These are not to say, however, that the present study subscribes to the view that certain conflicts are rooted in primordial, ancient, or “tribal” hatreds that are incapable of resolution or change (see, for instance, Kaplan, 1994). The term of condition such as politics, economics and socio-cultural perspectives. In the “P” represented as people, all nations have to concerns about majority and minority in the slogan of “*reduce the differences and gaining the similarities*” as process of life with able to participate.

2) **E = Education**, Education is an important significant component for promoting interpersonal understanding. Normally education is divided into three types, formal education, informal and non-formal education, but their objectives totally put into the learners in cognitive domain, affective domain and psychomotor domain. Today’s learners will finish into the world where demand of individual differences, other understanding and societal live grow more every year. Thus, education must play the role of in creating or promoting the correct perspective of peace while they are in schooling. The skills to fuel peace are as the follows, participation, communication, connectivity, cooperation, coordination and collaboration (1P5C’s). As mentioned, education is wildly in the 21st century and learners who are civically literate, globally competency and digitally literate are better. Education especially national curriculum has to regularly emphasize peace studies in all levels. Curriculum must be paid interest in the personal development and can help them bridge the gap from childhood to adulthood with less pain than themselves perhaps experienced.

Thus, teacher is very essential key of education and knowledge distributed becomes “the power of academic status”. The task of teacher is to help learners and to facilitate their helping each others to comprehend that the future made. The way in which inquiry and debate or discussions are conducted in the classroom.

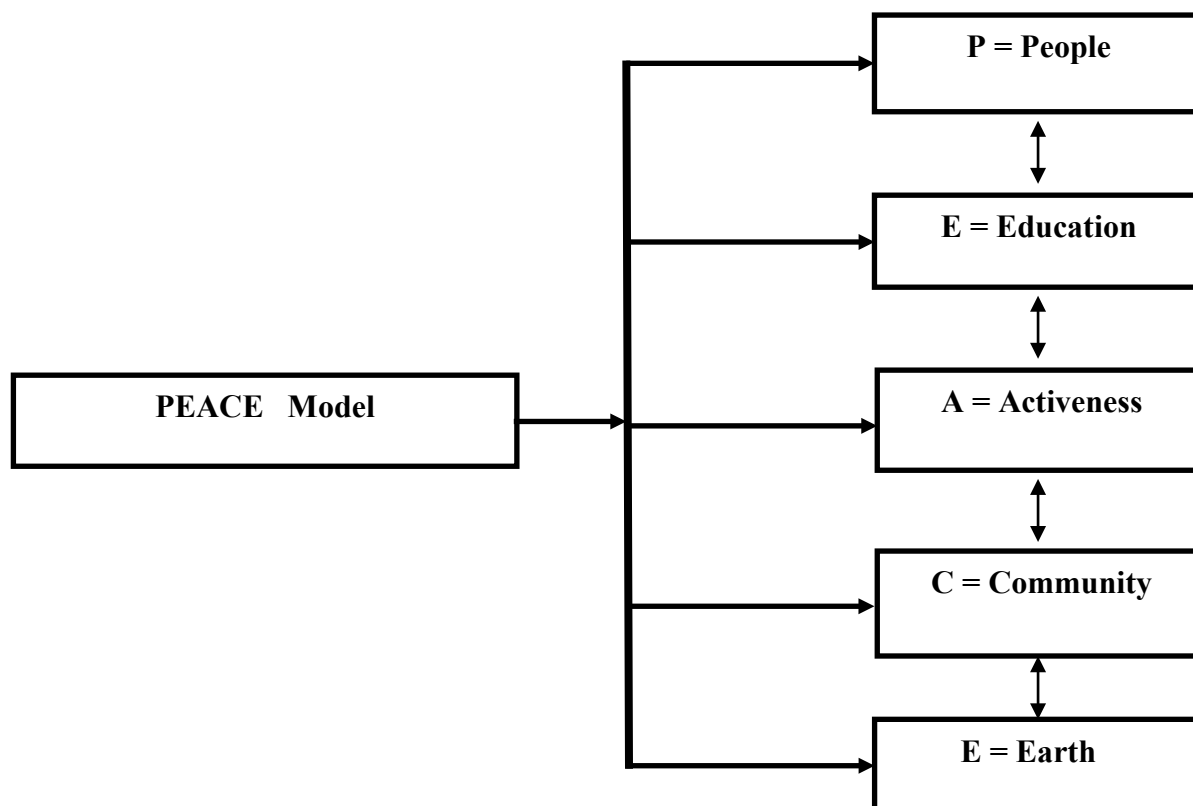
3) **A = Activeness**, both public sector and private sector will increase the involvement of all activities of public relations on promoting peace in policy, processes and operation. Responsible funding has to close every organization. Most of the traditional or historical views of the funding distribution experiences in only the private sector and sometime easily seen non beneficial usage.

In case of all activities promoted on peace must be practical frequently and public demands for accountability may results in more suits in the future.

5) **C = Community**, as known already community usually consisted of structure, format, pattern and members. The differentiated culture of community must be concerned because of its identity. The difficulty of much of this community, combined with an norms, rites or ritual which are formulated from community members. Issues on this perspective that particularly foster to the way of “Gaining of Similarity, Reduction of Differences”.

6) **E = Earth**, earth or the global is the same meaning, in today’s global community, teaching peace is very essential duty that must be undertaken by everybody. Happily cultural isolation is becoming a thing of the past. In order for the learners to be able to progress harmoniously through their life, restraints formally tolerated or imposed by societal attitude must be done away with. Everybody must seize the initiative and celebrate cultural diversity as the great quotation of Socrates that “*We are all citizens of the world*” People share the same universe, globe, country, cities and schooling places.

As mentioned already, peace can be taken place in every sphere and every level of society since we cannot refuse that happiness for all of those global people comes from peace earlier. Instead of looking the way when face the differences, all of people must seize the initiative and cerebrate cultural diversity. In summary PEACE can be projected as the chart following;



Conclusion

If communities are to help the growing generation to imbibe in them the art of living successfully and effectively, Peace education or education for peace should be the primary aim of the national education process which is the pillar of those who are in the nation happy. As the matter of fact, we are now living and spend our lives in the struggle and rivalry world. Human being is coming to realize, with disappointment and fear, war, scientific and technology progress, does not necessarily entail moral progress. Truly simplicity of living with care to each other and be understood the differences of culture among or in all contextualization of the world will become the global sustainable of peace.

References

- McShane,S., and Von Glinow,M. (2005). Organization Behavior Emerging Realities for the Workplaces: Boston McGraw-Hill.
- Somboon,T. (2003). "Multicultural Understanding: How does Education Help?" Ramkahamhaeng University Journal. Vol.20.No2 (July- December): pp.64-71.
- Taneja,V.R.,(2001). Education Thoughts And Practice. New Delhi: Sterling Publishers Pvt.Ltd.
- _____, (1993). Webster's New Encyclopedic Dictionary. Cologne: Black Dog & Levthal Publishers.
- Strike, K.A. (1982). Educational Policy and the Just Society. Chicago: University of Illinois Press.

Peer Bullying in Schools: Qualitative and Quantitative Study

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Abstract

This study was conducted in order to understand how peer bullying is handled by students and teachers, what can be done to prevent it, and how often students are exposed to it. The study area consists of 10 teachers and 366 students in the Hendek District of Sakarya. The research was a mixed study, the quantitative part was carried out by the adolescent students and the qualitative part by the teachers. In the qualitative part of the study, five questions were asked to teachers in order to identify teachers' views on peer bullying, what measures they took to prevent them, and how they responded to it. The research is based on semi-structured technique. Interview was first recorded by voice recording device, then converted into a written document and analyzed by means of descriptive analysis. In the second part of the study, scale adaptation was made. A total of 366 adolescents' views were reached about peer bullying. In the evaluation of quantitative findings, package programs were used. As a result of interviews with the teachers, the majority of the teachers who witnessed peer bullying responded that the first sensation was to try to understand the student, and the reasons were academic achievement, physical superiority or inferiority, family life and etc...factors were mentioned as the reasons for the students to push this behavior. Many of the teachers reported that in the face of peer bullying, it would be useful to first talk with the student, guide them to the guidance service, and be in collaboration with the family.

Abstract: *Peer Bullying, Qualitative, Quantitative Study.*

Introduction

Peer bullying is becoming an important problem that many people live, witness or individual cause in nowadays. Peer bullying is mentioned as a type of aggression in studies. Aggression means harmful and dangerous behavior in word definition. (Baron R.A., 1977). There is no universally accepted definition of bullying. Some researchers have seen bullying as 'harm' or 'desire to press someone' (Tattum, 1993). However, researchers admit that bullying involves negative or hurtful behaviors (Olweus, 1993). Most researchers add that, unlike wider definitions of aggression or violence, bullying must also include the concept of power imbalance, in which a less powerful person or group is repeatedly and unjustly attacked. (Rigby, 2002; Ross, 2002). This can be summarized as "systematic abuse of power" (Smith ve Sharp, 1994). Roland has described bullying as "the physical or mental suppression of a person who is strong enough to protect himself or herself, periodically and systematically, by a group that is more effective than itself".

Bullying among children is a major public health problem around the world. Bullying is most commonly defined as a repetitive, intentional aggression that is met by a stronger individual or group with a less powerful victim. It is known that exposure to the bullying is associated with a wide range of mental health problems. Victims are generally more anxious and insecure than other students. Some meta-analysis results show that victimization is linked to problems related to internalization. (Shetgiri, 2013)

Rigby (1999) reported that peer violence is caused by a power imbalance. 'Power imbalance can be in different forms. For example, imbalance may be related to differences in physical strength, verbal dominance of another person, or exclusion from groups. It should also be remembered that the bullying often points to repetitive aggression, or at least to anticipation of repetition of aggression. According to Shetgiri (2014), bullying often occurs in areas far from adult supervision, such as playgrounds and school corridors. Verbal and relational bullying can be more difficult to identify than physical bullying. Relational bullying may be more common among girls and lead to feelings of rejection at a critical time in social development. Compared to students who are bullied in school or out of school, whether they are victims or bullies, are not victims or are exposed to bullying; depression is at a significantly higher risk for serious suicidal thoughts (SSI) and suicide attempts. More frequent bullying behavior (as a victim or bully) increases the likelihood of the student becoming involved in depression or attempting suicide. (Smith, 2011)

Method

Semi-structured interviews with qualitative research methods was used in this research that is (Yıldırım and Şimşek, 2008) defined as "a qualitative research process in which qualitative data gathering methods such as observation, interview, document analysis are used and a qualitative process for revealing perceptions and events in a natural and realistic manner" In the study, the interview form, which was developed in order to determine the opinions of teachers about their experiences about peer bullying, was given the final form in the direction of expert opinions. There are five open-ended questions in the interview form.

Teachers' ideas about peer bullying, problems they faced, and suggestions for solutions were tried to be determined. In the quantitative part, which is the second stage of the research, a scale adaptation study was carried out. In this context, the validity and reliability studies of the "Peer Bullying Scale" developed by (Roberson and Renshaw, 2017) were conducted on the Turkish sample group. The Turkish version of the scale was administered to 366 Turkish adolescents and examined by reliability analysis and confirmatory factor analysis. The compliance indices obtained from confirmatory factor analysis of the scale ($\chi^2 = 223.97$, $sd = 44$, $p = 0.00$, $RMSEA = 0.10$, $NFI = .94$, $NNFI = .94$, $CFI = .95$, $IFI = .95$ and $RFI = .93$, $AGFI = .85$, $GFI = .90$, and $SRMR = .55$) suggest that the one-dimensional model is well suited. Reliability coefficient of the scale was 0.87. The scale consists of 11 items and 1 sub-dimension.

Participants

In the study, the study group was identified by an easily accessible sampling method. In the easily accessible sampling method, "the researcher determines the working area in the environment that is close to him/her in terms of economical and rapid results of the study" (Yıldırım and Şimşek, 2008). With the sampling method that is easily accessible in the research, 10 teachers working in Noksel Elementary School in Sakarya constitute the study group of the research. . There were 9 female and 1 male in the group of the teachers. The average age of teachers is 32.2 and the average age of seniority is 8.4.

Frequency and percentage distributions of the demographic information of teachers participating in the survey are presented in Table 1.

Table 1. Demographic characteristics of interviewed teachers

INTERVIEWERS	AGE	SENIORITY YEAR
Teacher 1	34	11
Teacher 2	25	3
Teacher 3	33	10
Teacher 4	26	3
Teacher 5	39	17
Teacher 6	40	18
Teacher 7	30	8
Teacher 8	27	4
Teacher 9	30	8
Teacher 10	38	2

As seen in Table 1, the average age of teachers participating in the interviews is 32.2 and the average age of seniority of the teachers is 8.4. When the ages of the participants were examined, it was determined that they were between 25 and 40 years of age. When participants' seniority years of employment were examined, it was determined that they were between 2 and 18 years.

Data Collection Tool

In the research, interview form was used as data collection tool. In the preparation phase of the interview questions, the literature was examined and 5 related open-ended questions were prepared and written in the interview form. Open-ended research questions "provide the researcher with a flexible and open-ended approach to the subject they wish to study" (Yıldırım and Şimşek, 2008).

Interviews were held with the teachers in Hendek, who made face-to-face interviews. Interviews were recorded by voice recording device in order to avoid loss of data and then transferred to the article. Verbal permission has been obtained from the teachers on voice recording. During the interview, the teachers responded to the five questions asked to them in response to the experiences they experienced and conveyed their thoughts.

Data Analysis

The data obtained from the interviews were analyzed by descriptive analysis method. Descriptive analysis; (Yıldırım ve Şimşek, 2008), which is composed of four stages: defining a framework for descriptive analysis, processing of data according to thematic framework, identification of findings and interpretation of findings. The thematic framework was defined by researchers for the analysis of data. In this context, the data are first coded separately by each investigator. Later co-codings were made on common themes with the view-union by comparing the data collected.

The written texts resulting from the interviews were reviewed repeatedly, the appropriate data for the purpose of the study was coded, and the themes describing at the general level the encoded data were determined. The findings were arranged in tables. The interviewed teachers were coded from T1 to T10. In the interpretation of the findings, a direct citation was given from the teachers' views.

Findings And Results

This section contains the findings of the research. Teacher views on peer bullying are shown below in tabular form. Table 2 shows the way in which teachers use their means to prevent peer violence.

Table 2. Teachers' views on preventing peer bullying

Theme (Categories)	Codes	n	%
Routes prevent the bullying	Talking to students (T1,T2,T3,T4,T5,T6,T7,T8,T9,T10)	10	100
	Directing Consultation service (T1,T2,T3,T4,T5,T6,T7,T8,T9,T10)	10	100
	Parent cooperation (T1,T2,T3,T4,T6,T7,T8,T9,T10)	9	90

When Table 2 is examined, 100% of the teachers stated that they can avoid these problems with the help of the guidance service, 100% of the teachers, by talking to the student to prevent peer bullying. 90% of teachers reported that they should cooperate with the parent and that this problem could be prevented. A list of individual statements from the teachers' views were given below.

"The first step to prevent a peer bullying is to listen to the child well and get to the root of the problem. If the reasons that push the child to bullying are well-defined, the solution will be so well-defined. In such cases, it directs the child to socialize in more positive environments, keeping away from any situation that would exacerbate the violence. " (T4)

"I would try to understand the emotion that caused the student to speak face-to-face with the student who was doing the bully. I tried to deter him from exhibiting such behavior by telling him that his behavior harmed him and the other person. " (T2)

"I am trying to create a good friendship environment in the classrooms where I am a class counselor. I pay particular attention to the fact that children are not excluded from games. I will intervene instantly as soon as I see the bullying. I try to prevent this issue by reporting to the class teacher first. " (T10)

teachers' views on why bullied people make bullying are presented in Table 3.

Table 3. teachers' views on why bullied people make bullying

Theme (Categories)	Codes	n	%
Reasons for bullying	Physical superiority / defect (T1, T2, T3, T4, T7, T8, T9, T10)	8	80
	Academic success (T1, T2, T3, T4, T5, T7, T10)	7	70
	Family experience (T2, T3, T4, T5, T6, T9, T10)	7	70
	Financial status (T1, T4)	2	20

When Table 3 is examined, 80% of teachers reported that physical reason or physical defect was among the causes of the bullying. And 70% of the teachers stated that academic success is among the reasons for the toughness. Another 70% of the teachers said that this could be the cause of family life, while 20% reported that it was the financial situation. A list of individual statements from the teachers' views are given below.

"Especially the envy of the successful students and the bullying done to the successful person in this direction is the reason I encountered the most. Another reason is that the other person is weaker or smaller than the other person. Particularly stuttering, eyeglass wearers or students with similar physical disadvantages are unfortunately victims of bullying (T10).

"Students often bullied with weak or silent characters. Children who experience violence in the family or those who experience negative consequences of divorce tend to be more inclined. People who are successful in their lessons, or those who have many failures, are another reason to be bullied or exposed. "(T7)

"Domestic violence, violent TV programs, and emotional situations within it can push children into this situation. Especially, they try to solve the problems of children who have lost their self-confidence by bullying. The financial situation is another dimension. "(T4)

"I think amongst the students' bullying reasons is the first feeling of jealousy. Successful students are often exposed to bullying because they are jealous. Children can often be classified as mental and emotional differences, which usually exclude what is different from them. "(T5)

The opinions of the teachers on what measures can be taken to prevent bullying are presented in table 4.

Table 4. Teachers' views on bullying prevention

Theme (Categories)	Codes	n	%
Suggestions for avoiding bullying	Guidance service (T1, T2, T3, T4, T5, T6, T7, T8, T8,T9,T10)	10	100
	Family cooperation (T1, T2, T3, T4, T5, T6, T7, T8, T8,T9,T10)	10	100
	Instilling sense of security (T5, T10)	2	20

When Table 4 is examined, the results of the teachers' opinions on the issue of bullying prevention are pointed out to be directed to the guidance service and the necessity of parental cooperation with a serious rate of 100%. 20% of the teachers stated that students who are exposed to bullying should be instilled with self-confidence in order to make them feel better. The teachers' views are given below.

"I try to talk to the students directly and get in contact to the related departments to prevent the problem. If necessary, I will contact the parent and try to control the child in every area. " (T2)

"The emotional and behavioral problems should be addressed, the family and the teachers should be cooperated, the child should be informed about the possible consequences of doing so and necessary guidance should be given to the students in need." (T3)

"I would like to discuss the problem with the classroom guidance teacher and school guide teacher and take steps in cooperation with the family. I try to make students feel that friendship can be established with those who are instilled with confidence and are bullied." (T10)

"This process must be quite long lasting. The necessary guidance work should be done in cooperation with the family. First of all, we should adopt what are the important virtues of love, compassion, understanding and interest in the home environment." (T9)

The opinions of the teachers about the sanctions imposed by the school administration against bullying are presented in table 5.

Table 5. Teachers' views on school administration sanctions against bullying

Theme (Categories)	Codes	n	%
School administrations' sanctions	Family cooperation (T1, T2, T4, T5, T6, T7)	6	60
	Directing consulting service (T1,T3,T4, T6,T9,T10)	6	60
	Warning (T5,T7,T10)	3	30
	Assigning tasks (T3, T7, T10)	3	30
	Punishments (T7, T10)	2	20

When Table 5 is examined, it is seen that the attitude of the school administration against peer bullying is with the rate of 60%, directed to guidance service and contact with parent. 30% of the teachers reported that administrators were alerted and tried to persuade their students, but 30% of the teachers stated that they were trying to reduce this

feeling of violence by giving certain tasks to the students. 20% of the teachers reported that some punishments were given by the administrations as the last stage. Quotations from the teachers' discourses are given below.

"Our school directs these kinds of students to the guidance service and informs the parents and tries to find solutions." (T4)

"Our school management is constructive towards peer bullying. It is desirable for pupils to come to an agreement among themselves, guided by their teachers. Punishment or similar sanctions are always on the second stage." (T9)

"School management announces to the upper classes that they are the pioneers of the lower classes in particular. He also explains that the upper classes are their brothers and sisters and that they need to protect them. He takes necessary precautions by assigning students against the bullying." (T10)

"Students are warned at regular intervals and recommendations are made for students not to exhibit such behavior.." (T8)

The opinions of teachers about how they react when they see someone who is bullied are presented in table 6.

Table 6. Opinions of teachers when they see someone who is suffering from bullying

Theme (Categories)	Codes	n	%
What they fell when they witness bullying	Empathy (T1,T2,T3,T4,T5,T6,T7,T8,T9)	9	90
	Trying to help (T1,T2,T3,T4,T6,T7,T8,T9)	8	80
	Pretend not to see (T5, T10)	2	20

When Table 6 is examined, 90% of the teachers have indicated that they are trying to understand and empathize the student who is exposed to the bully. 80% of them stated that they tried to help them 50% of the teachers said they were trying to ignore the fact that the student is not a student. Quotations from the teachers' discourses are given below.

"I have long talked about establishing empathy to understand, to be with you, and how to solve this problem together."(T9)

"I have observed that being overprotective, especially during adolescence, is disgraceful for the person who is bullied. It has been seen that the state tried to block emerged another bullying situation, such as mocking. For this reason, I try to wake up the notion that the child who is often in the process of being abused is not informed."(T10)

"I try to empathize with this kind of person and tell him that the situation can be overcome in terms of him. I gave examples of life and information on what should be done in such situations." (T4)

"I said that this situation that the student is experiencing can be experienced by others and I will give him the support that needs to be overcome. (T2)

Quantitative Findings

Participants

The scale study was performed on 366 adolescents. 174 (47%) female and 192 (53%) male students were included in the study. Students in the sample; 80 (21%) students are in the sixth grade, 174 (47%) are in the seventh grade and 112 (32%) students are in the eighth grade. The average age of the sample is 12.3. Bullying Scale (Based on the 2009-2010 report on health behaviors in school children) The bullying relationship among young people has consistently led to serious consequences for both the victims and the bullies. Empirically verified assessment tools are needed for the participation and characterization of adolescents to be used in research and practice.

Bullying Scale (Roberson and Renshaw, 2017), consisting of 11 items and a sub-dimension, is based on Likert with a rating of 5. The scores obtained from this scale are important for the adolescents to reveal the tendency to bully behavior. Scales include social exclusion, physical aggression, spread of lies, various forms of abuse and various types of cyber bullying. Factor loadings of the scale range from .77 to .95. The fit index of the scale χ^2 (208) = 3174.054, $p < .001$; CFI = .971; RMSEA = .053 (90% CI = [.052, .055]); SRMR = .064. Reliability of the original scale. 99.

Results

Item Analysis and Reliability

As a result of the analysis to determine the item separability of the scale, the corrected correlation coefficients were found to vary between .45 and .67. Table 1 shows the results of the analysis.

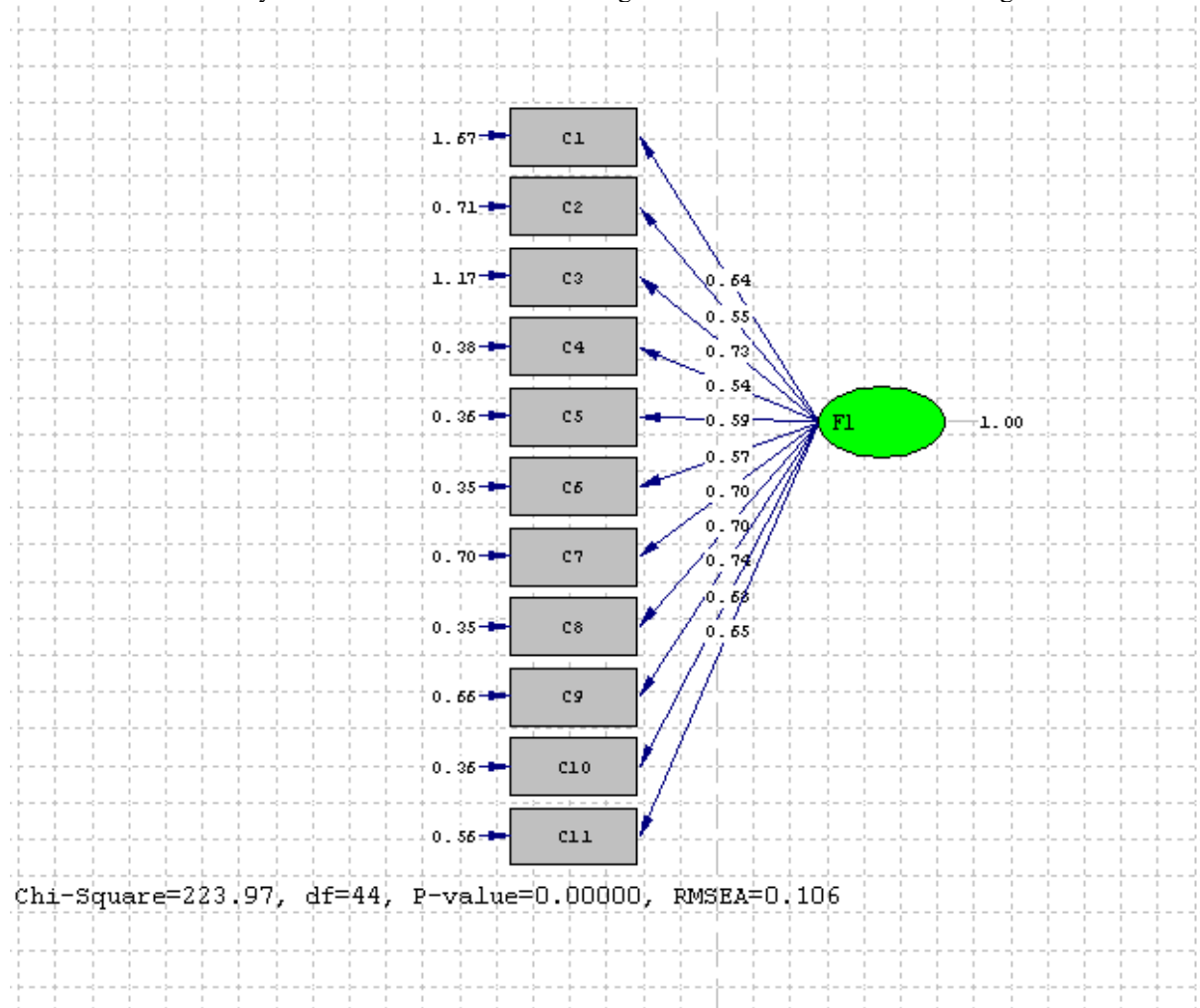
Table 1. Correlation Scores of Peer Bullying Scale Items

Item number	<i>r_{jx}</i>	Item number	<i>r_{jx}</i>
1	.45	7	.61
2	.52	8	.68
3	.56	9	.61
4	.61	10	.67
5	.65	11	.59
6	.63		

For all of the scale, Cronbach's (α) coefficient was found as .87.

Structure Validation

The compliance indices obtained from confirmatory factor analysis of the scale ($\chi^2 = 223.97$, $sd = 44$, $p = 0.00$, $RMSEA = 0.10$, $NFI = .94$, $NNFI = .94$, $CFI = .95$, $IFI = .95$ and $RFI = .93$, $AGFI = .85$, $GFI = .90$, and $SRMR = .55$) suggest that the one-dimensional model is well suited. Standardized regression weights of confirmatory factor analysis are given in figure 1:



Conclusion, Discussion And Recommendations

As a result of the qualitative study, 100% of the teachers stated that they can avoid these problems with the help of the guidance service and talking to the student about preventing peer bullying. 90% of teachers reported that they should cooperate with the parent and that this problem could be prevented. In the study of Holt (2009) on the prevention of bullying, it was reported that the family environment had an effect on the students and that family cooperation was essential for solving these problems. Roberts, (1996), Olweus (1993) found that individuals who had been subjected to bullying in their work were also subjected to pressures in their families, withdrawn to the corners, they are the result of pushing these attitudes, which is why these children are exposed to this behaviour. Parents should be provided with parental education.

80% of the teachers reported that physical reason or physical disability was among the causes of the bullying. And 70% of teachers stated that academic success is among the reasons for the bullying. Glew GM and others (2005) concluded that students' exposure to bullying in school was the first reason for their poor academic achievement. Schwartz (2003) reported that, when academic achievement fell, the risk of being bullied at school increased. In his study, Smokowski, P. R., & Kopasz, K. H. (2005) stated that bullies are more physically superior to the people they bullied, and more active and social in their personality traits. Another 70% of teachers said that this could be the cause of family life, while 20% of teachers reported that the financial situation of the student was also influenced. (Özkan, Çifçi, 2010) have reported that the academic achievement and the financial condition of the student are among the reasons of peer violence in their studies. Similar results have also been reported by Çuhadaroglu et al. (2004), indicating that the income level of the family and, consequently, the decline in educational levels have an effect on children's exposure to bullying. Shetgiri, R. (2013) has achieved results that will support these findings in his work. However, some teachers have expressed the opinion that students who are exposed to bullying should be instilled with self-confidence in order to make them feel better. Olweus (1993) 'The prevention of peer-bullying behaviors in schools is taught by the school guidance service, through a team of all staff (administrators, teachers, psychological counselors and services) in the school, including parents and students, a preventive program should be developed and implemented. In his work Gökler (2009), he reported that the attitude of the school administration towards peer bullying was directed to the guidance service and passed to the parent. Even though the administrators reported that they were trying to persuade their students by warning them, they also stated that they were trying to reduce the feeling of violence by giving certain tasks to the students. Some of the teachers reported that they resorted to punishment when they were desperate. It is indicated in the work done by Gökler (2009) that such punishments should not be implemented with the thought that they could trigger the bully or cause more harm on the victim.

According to other findings of the study, 90% of the teachers stated that they tried to understand the student who was exposed to the bully and empathize. Kallestad and Olweus (2003) describe their ability to empathize as a key factor how teachers characterize and respond to bullying behaviors.

As a result of the study, teachers see the way of talking to students in the case of peer bullying as a method and give guidance to the guidance service in fact show that teachers do not know exactly how to deal with bullying. This result is also striking in other researches. Research has reached the conclusion that neither experienced teachers nor prospective teachers know how to deal with bullying (Bauman and Del Rio, 2006; Yoon and Kerber, 2003). In addition, it has been shown that in the study, teachers need information about how to intervene with physical and verbal bullying, such as naming and physical disagreements (Bauman and Del Rio, 2006).

Limitations of work and suggestions; the qualitative step of the study may examine the opinions of 10 teachers in the province of Hendek in Sakarya, which may result in narrow scope of results. It is suggested that the sample of the study should be wider, and that more teachers and even parents should be consulted in cooperation. Regulation of in-service training programs on peer bullying for teachers may provide positive contributions to school practices. Relational studies on bullying show that school climate is effective. For this reason, the establishment of intervention studies for the entire school can be useful in preventing peer violence. It can be said that the educational activities to be done to the parents will be beneficial both in the appearance of tyrannical behavior and in the prevention of victimization.

References

- Baron R.A. (1977) The Prevention and Control of Human Aggression. In: Human Aggression. Perspectives in Social Psychology (A Series of Texts and Monographs). Springer, Boston, MA
- Baseg, Valerie E (1989) Bullies and Victims in Schools. A Guide to Understanding and Management. Open University Press, Buckingham, England.
- Bauman, S., & Del Rio, A. (2006). Preservice teachers' responses to bullying scenarios: Comparing physical, verbal, and relational bullying. *Journal of Educational Psychology*, 98(1), 219-231. <http://dx.doi.org/10.1037/0022-0663.98.1.219>.
- Çuhadaroglu Çetin F., Canat S., Kılıç E., Şenol S., Rugana N., Öncü B., Gündüz Hoşgör A., Işıklı S., Avcı A., 2004. TUBA, Adolescent and psychic Problems: Study of state determine, Turkey, Science Academy Reports. Sayı: 4. Ankara: TÜBİTAK Pres.

- Glew GM, Fan M, Katon W, Rivara FP, Kernic MA. Bullying, Psychosocial Adjustment, and Academic Performance in Elementary School. *Arch Pediatr Adolesc Med*. 2005;159(11):1026–1031. doi:10.1001/archpedi.159.11.1026
- Gökler, R. (2009). Peer bullying in schools. *Journal of Human Sciences*, 6(2), 511-537. Retrieved from <https://j-humansciences.com/ojs/index.php/IJHS/article/view/565/436>.
- Kallestad, J.H. & Olweus, D.A. (2003). Predicting Teachers' and Schools' Implementation of the Olweus Bullying Prevention Program: A Multilevel Study. *Prevention & Treatment* 6(1):No Pagination Specified Article 21 DOI: 10.1037/1522-3736.6.1.621a.
- Olweus. (1987). Bully/victim problems among school-children in Scandinavia. In J. P. Mvklebust, and R. Ommundsen (Eds). *Psykologprolesjonen mot ar 2000*. Oslo: Universitetsforlaget.
- Rigby, K. (1997). Reflections on Tom Brown's Schooldays and the problem of bullying today. *Australian Journal of Social Science*, 4, 85–96. (2002). New perspectives on bullying. London: Jessica Kingsley. (2003). *Stop the bullying: A handbook for schools*. Melbourne: Australian Council for Educational Research.
- Roberts, W. B. & Coursol, D. (1996). Strategies for intervention with childhood and adolescent victims of bullying, teasing and intimidation in school setting. *Elementary School Guidance and Counseling*, 30, 204-212.
- Roberson, A.J. & Renshaw, T.L. (2017). Structural Validity of the HBSC Bullying Measure: Self-Report Rating Scales of Youth Victimization and Perpetration Behavior. *Journal of Psychoeducational Assessment*, 1–16.
- Roland, E. (in prep.). Familia and school determinants on bullying in school. Contact: Stavanger College of Education
- Ross, D. M. (1996, 2nd edn. 2002). *Childhood bullying and teasing: what school personnel, other professionals and parents can do*. Alexandria, NA: American Counselling Association.
- Schwartz DG Gorman A Community violence exposure and children's academic functioning. *J Educ Psychol* 2003;95:163- 173
- Shetgiri, R. (2013). Bullying and Victimization Among Children. *Advances in Pediatrics*, 60(1), 33–51. <http://doi.org/10.1016/j.yapd.2013.04.004>
- Smith, P. K. (2011). Why interventions to reduce bullying and violence in schools may (or may not) succeed: Comments on this Special Section. *International journal of behavioral development*, 35(5), 419-423.
- Smith, P. K. and Sharp, S. (eds.) (1994). *School bullying: Insights and perspectives*. London: Routledge
- Smith, Peter. (2011). Why interventions to reduce bullying and violence in schools may (or may not) succeed: Comments on this Special Section. *International Journal of Behavioral Development - INT J BEHAV DEV*. 35. 419-423. 10.1177/0165025411407459
- Tattum, D. P. (1993). What is bullying? In D. Tattum (ed.), *Understanding and managing bullying*. London: Heinemann
- Undheim, A. M., & Sund, A. M. (2010). Prevalence of bullying and aggressive behavior and their relationship to mental health problems among 12-to 15-year-old Norwegian adolescents. *European child & adolescent psychiatry*, 19(11), 803-811.
- Yoon, J.S. & Kerber, K. (2003). Bullying: Elementary Teachers' Attitudes and Intervention Strategies. *Research in Education* 69(-1):27-35. DOI: 10.7227/RIE.69.3.

Akran Zorbalığı Ölçeği (1 = Son bir kaç ayda okulda zorbalık yapmadım, 2 = yalnızca bir veya iki kez oldu, 3 = ayda 2 veya 3 kez, 4 = haftada bir kez ve 5 = haftada birkaç kez oldu)

1	Arkadaşlarıma kötü isimler (lakap) taktım ya da can sıkıcı bir şekilde dalga geçtim	1	2	3	4	5
2	Diğer öğrencileri bilerek terk ettim, arkadaş grubundan çıkardım veya tamamen görmezden geldim	1	2	3	4	5
3	Arkadaşıma vurdum, tekmeledim, ittim ya da biryere kilitledim.	1	2	3	4	5
4	Arkadaşlarım arasında yalan söylentiler çıkarttım ve yalan söylentiler yayarak diğerlerinin onları sevmemesini sağladım	1	2	3	4	5
5	Diğer öğrencilerin ırkları hakkında yorumda bulunarak zorbalık yaptım	1	2	3	4	5
6	Diğer öğrencilerin dinleri hakkında yorumda bulunarak zorbalık yaptım	1	2	3	4	5
7	Diğer öğrencilere olumsuz içerikli şaka ve yorumlar yaptım	1	2	3	4	5
8	Başka bir öğrenciyi bilgisayar, e-posta mesajı veya resim kullanarak zorbalığa uğrattım	1	2	3	4	5
9	Başka bir öğrenciye bir cep telefonu kullanarak zorbalık ettim	1	2	3	4	5
10	Bir bilgisayar, e-posta mesajları veya resimler kullanarak okul dışındaki diğer kişilere zorbalık yaptım	1	2	3	4	5
11	Bir cep telefonu kullanarak okul dışındaki diğer insanlara zorbalık yaptım	1	2	3	4	5

Peer Victimization and Its Relationship To Self-Esteem And Loneliness In Primary And Middle School Students With Special Needs

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Abstract

Peer victimization can have short and long-term serious consequences on children's psychosocial adjustment. Several risk factors for peer bullying and victimization in children have been identified. Children with special needs are at an increased risk of being victimized in school. However, little research has addressed to investigate peer victimization and its relation to psychosocial functioning in children with special needs. The aims of this cross-sectional study were to identify the prevalence rates of peer victimization among students with and without special needs in inclusive classrooms; to compare both groups in terms of the levels of peer victimization; and to examine the relationships of peer victimization with self-esteem and loneliness in students with special needs. A total of 422 students (female=186, male=236) aged 7 to 14 participated in this study. Of these participants, 197 were students with special educational needs (SEN) and 225 were students without special educational needs (non-SEN) attending 2nd-4th grades of primary schools and 5th-6th grades of middle schools. Students' self-reports on peer victimization, self-esteem, and loneliness were collected using the Peer Bullying Scale, the Coopersmith Self-Esteem Inventory, and the Children's Loneliness Scale. In the findings of the study, the overall peer victimization rates were found to be %28 for non-SEN students and %45.6 for SEN students. While the most frequent type of victimization reported by the non-SEN students was verbal victimization, for the SEN students it was being socially isolated. Attack on property was the least common type of peer victimization reported by both groups. The results also revealed that SEN students were more victimized by all types of peer bullying investigated in this study when compared to typically developing students. Additionally, it was found that being socially isolated and physically bullied significantly predicted the self-esteem of SEN students, whereas being isolated and verbally bullied were found to be significant predictors of the feelings of loneliness in these students. The findings of the study were discussed regarding the related literature.

Keywords: *Peer bullying, peer victimization, self-esteem, loneliness, children with special needs*

Introduction

Peer bullying and victimization is a common problem among students in school. Bullying, which is a sub-form of aggression (Kubiszewski, Fontaine, Potard, & Gimenes, 2014), is defined as a situation in which a student is constantly subjected to negative behaviors by one or more people despite the fact that there is no provocation (Olweus, 1997; Piskin, 2003). Increasingly in recent years, it has been indicated that many students are exposed to or perpetrate aggression in school (Olweus, 1993, Piskin, 2003). In order for negative behaviors such as inappropriate physical contact, verbal harassment, spreading rumors, or exclusion to be considered as peer bullying, these behaviors must be repetitive and intentional; and there must be an imbalance in power among peers (Olweus, 1997). While the perpetrator who is bullying is defined as the bully and the one who is being bullied is defined as the victim, some children can be both bully and victim (Kapci, 2004).

The studies investigating peer bullying/victimization at school have revealed different prevalence rates. In a study involving 130,000 students in Norway, it was found that 15% of students aged 8-16 involved in bullying as a bully, a victim, or a bully/victim (Olweus, 1993). Piskin and Ayas (2011) indicated that there were several studies in various countries which have reported that the bullying rates were between 15-25% and the victimization rates were between 6-50%. Within the scope of the World Health Organization's project called "School Age Children's Health", which was carried out in 35 countries, among high school students in Turkey, 22% of them were found to be victims, 9.2% of them were to be bullies and 9.4% of them were both bully/victim (Alikasifoglu, Erginoz, Ercan & Ilter, 2006). In other studies conducted with Turkish children, it was indicated that 35% of primary school students were found to be victims, 30.2% were to be bullies, and 6.2% were both bullies/victims (Piskin, 2003) and about 40% of 4th and 5th grade students were exposed to peer bullying (Kapci, 2004).

Bullying can be either direct or indirect towards peers. Direct bullying consists of acts of physical violence, insults, humiliation, hand gestures, and ugly gesture mimicry whereas behaviors such as isolation, exclusion, and spreading rumor are called indirect bullying (Hong & Espelage, 2012). Indirect bullying is also referred to as "social bullying" since it involves "non-verbal aggression" (Underwood, 2003) or as "relational bullying" (Crick & Bigbee, 1998). Students who are directly exposed to bullying may know who the bully is, however in indirect bullying victim often does not know who the bully is and can only guess. This situation leads to difficulties in the identification and intervention of the peer bullying (Gultekin, 2003). Bullying behaviors have also been classified into different subcategories according to its form and characteristics in order to identify the peer bullying more clearly and to increase the effectiveness of the interventions. The most accepted classification in the literature is Olweus' (1993) classification which consists of three types of bullying such as physical bullying, social exclusion, and verbal bullying. Also, Mynard and Joseph's (2000) classification consists of four types of bullying; physical, verbal, relational, and attacks on personal belongings whereas Elliott (1997) defined four types of bullying as physical, verbal, emotional, and threatening. Moreover, Piskin (2005) described five types of bullying such as physical bullying, verbal bullying, isolation, rumor spreading, and attacks on property. In addition to these traditional types of bullying, studies on sexual bullying (Piskin and Ayas, 2005) and cyber bullying (Aydın-Gorucu, 2016) have also been conducted in the following years.

Several studies have revealed different prevalence rates for each type of peer bullying. Vlachou, Botsoglou and Andreou (2014) indicated that the prevalence rates are between 28-53% for physical bullying and social exclusion; between 12-50% for verbal bullying; and between 1.2-32.4% for rumor spreading. In a recent study conducted with 425 students aged 6-9 in the United States, 19.18% of children experienced direct bullying and 20.87% of them experienced indirect bullying (Studt & Renner, 2014). In another study conducted with 2,500 children in Sweden, it was determined that children were exposed to physical bullying most frequently (57.6%) and sexual bullying least frequently (11.0%) (Miller-Graff, Cater, Howell, & Graham-Bermann, 2015). Pellegrini (2002) stated that males are more likely to experience physical bullying and females are more likely to experience relational and indirect bullying. In several studies in Turkey, it is determined that victims are exposed to physical and verbal bullying most frequently and to emotional and sexual bullying least frequently (Çinkır & Karaman-Kepeneci, 2003; Kapci, 2004). In the study of Çinkır and Karaman-Kepeneci (2003), the peer victimization rates were found to be 44% for verbal bullying, 30% for physical bullying, 9% for sexual bullying, and 1% for emotional bullying. In a study conducted by Piskin (2003), 34% of the victims were found to be physically bullied, 29% to be verbally bullied, 21% to be exposed to indirect bullying and 11% to be exposed to property damage. In another study, it was found that students were exposed to pushing (63%) at the most, following by swearing (57%), name calling (56%), teasing (49%), damaging property (45%), and rumor spreading (%44) (Yurtal & Cenkseven, 2006).

In recent years, there has been an increasing effort in examining the relationship between peer victimization and psychosocial adjustment of children. Related studies indicate that peer victimization can have short- and long-term negative consequences for children's psychosocial adjustment (see Wolke & Lereya, 2015, for a review). Studies have shown that children/adolescents who are victimized tend to have lower self-esteem (Juvonen, Nishina, & Graham, 2000; Kapci, 2004; Piskin & Ayas, 2005), experience more peer rejection (Pekel-Uludagli & Ucanok, 2005) and loneliness (Boivin, Hymel, & Bukowski, 1995; Graham & Juvonen, 1998; Storch & Masia-Warner, 2004), have higher levels of anxiety and depression (Juvonen, Graham, & Schuster, 2004; Kapci, 2004; Fleming & Jacobsen, 2009), and have more frequent school related problems (Çinkır, 2006; Karaca, 2018).

Findings of the studies on consequences of peer bullying have led researchers to investigate the risk factors associated with the bullying involvement (as a bully, as a victim, or as a bully/victim). In these studies, personal characteristics such as gender, age, grade, and ethnicity have been examined as well as social contexts such as family, peer group, and school, and various psychosocial variables in relation to bullying involvement (see, Craig, Peters, & Konarski, 1998; Dake, Price, & Telljohann, 2003; Card and Hodges, 2008, for reviews). It was indicated that bullies had a negative family environment, had a tendency to be delinquent and substance abuse, were aggressive, had problems in social relations, and had low academic achievement. On the other hand, the review articles mentioned above also reported that victims were tend to be physically weak and were not able to protect themselves, they were more sensitive, shy, had difficulties in social relations, had lower self-esteem and social competence, experienced internalizing problems such as loneliness, depression, anxiety, and also displayed some externalizing problems such as hyperactivity and emotional dysregulation.

When the risk factors identified for peer victimization among typically developing children mentioned earlier are taken into consideration, it is reasonable to state that children with disabilities or special educational needs are at an increased risk for peer victimization in school. Some circumstances associated with the disability (e.g. visibility of disability; Rose, Monda-Amaya, & Espelage, 2011), and the social and behavioral characteristics of children with special needs such as social skills deficits, behavioral problems, difficulties in peer relations (Kucuker &

Cifci-Tekinarslan, 2015), and peer rejection (Kavale & Forness, 1996) may leave them vulnerable to peer bullying/victimization. Baumeister, Storch, and Geffken (2008) reported that peer victimization was also positively correlated with thought problems, attention problems, disruptive behavior, and social problems of children with learning disabilities. Research indicated that the peer victimization rate among children with special needs was higher than typically developing peers (Bear, Mantz, Glutting, Yang, & Boyer, 2015; Wiener & Mak, 2009). In a recent review of studies on peer bullying and victimization among students with special needs (Rose et al., 2011), the victimization rates were reported to be in excess of 50% which indicated that children with special needs became targets of peer victimization more frequently than their typical peers.

In the literature, although there have been a considerable number of studies on peer bullying and victimization among typically developing children, empirical studies investigating this topic in children with special needs are still rather limited. In Turkey, there have also been only a few studies on peer victimization of children with special needs (Orengul, 2013, Aydın-Gorucu, 2016). Studies involving children with special needs have focused on examining the differences in peer bullying and victimization rates among these children regarding the type and severity of their disability, different educational settings, and also comparing their bullying and victimization rates with those of typical peers (see Rose et al., 2011; Sentenac et al., 2012, for reviews). However, there is a need for further research on peer victimization and its relation to psychosocial adjustment in children with special needs since there have been a limited number of studies on this subject. Therefore, the aims of this study are to identify the types and prevalence of peer victimization among students with and without special needs in inclusive classrooms, to compare both groups in terms of the levels of various peer victimization types, and to examine the relationships of peer victimization with self-esteem and loneliness, as indicators of psychosocial adjustment, in students with special needs. The results of this study may add valuable information to guide the planning of appropriate anti-bullying interventions for children with special needs.

Answers to the following questions are sought in the study:

- 1) What are the types and prevalence rates of peer victimization among students with and without special educational needs in inclusive primary and middle school classrooms?
- 2) Are there any significant differences between students with and without special educational needs in inclusive classrooms in terms of the levels of peer victimization types they experience?
- 3) Are the various types of peer victimization significant predictors of self-esteem of students with special educational needs in inclusive classrooms?
- 4) Are the various types of peer victimization significant predictors of loneliness levels of students with special educational needs in inclusive classrooms?

Method

Participants

Students with and without special educational needs (SEN students, $n=197$; non-SEN students, $n=225$) from 2nd, 3rd, and 4th grades of regular primary schools and from 5th and 6th grades of regular middle schools in the province of Denizli, Turkey participated in this cross-sectional study. Of these 422 students, 186 were female (44.1%) and 236 (55.9%) were male. A hundred and three of the students were in the 2nd grade, 92 were in the 3rd grade, 79 were in the 4th grade, 61 were in the 5th grade, and 87 were in the 6th grade. The ages of the non-SEN students are between 7-13 ($x = 10.02$, $sd = 1.468$) and the ages of the SEN students are between 7-14 ($x = 9.79$, $sd = 1.595$). Non-SEN students that participated in the study as a comparison group were recruited from a total of 15 classes in 3 primary and 3 middle schools that were randomly selected from schools in the province of Denizli in order to represent different socio-economic levels. On the other hand, a sufficient number of SEN students can be recruited from a large number of primary and middle schools because of the small number of special needs students attending inclusive classrooms in regular schools. Based on the information gathered from the teachers, SEN students who have gained literacy skills were included in the study. A total of 111 (56.3%) of the SEN students were diagnosed with learning disability, 78 (39.6%) were diagnosed with mild intellectual disability, and 8 (4.1%) with autism spectrum disorder according to the assessment procedures officially done by Guidance and Research Centers. Demographic characteristics of the SEN and non-SEN students are presented in Table 1.

Table 1. *Demographic Characteristics of the Students with and without Special Needs*

		SEN* Students ($n=197$)		non-SEN** Students ($n=225$)	
		n	%	n	%
Gender	Female	77	39.1	109	48.4
	Male	120	60.9	116	51.6
Grade	2	59	29.9	44	19.6
	3	44	22.3	48	21.3
	4	36	18.3	43	19.1

	5	23	11.7	38	16.9
	6	35	17.8	52	23.1
Type of disability	Learning disability	111	56.3		
	Intellectual disability	78	39.6		
	Autism spectrum disorders	8	4.1		

*SEN: Students with special needs

**non-SEN: Students without special needs

Measures

Peer Bullying Scale-Child Form, Coopersmith Self-Esteem Inventory, Children's Loneliness Scale and a demographic information questionnaire were used to collect data in the study.

Peer bullying/victimization scale (PB/VS): In this study, the Peer Bullying/Victimization Scale (PB/VS)-Child Form developed by Piskin and Ayas (2007, 2011) was used to assess the victimization experienced by students with and without special needs. The PB/VS has both child and adolescent forms. In both forms, participant is responding to the same items in two separate dimensions. The children are instructed to answer how often they are bullied by other children in the first dimension (the Victim Scale-VS) and how often they bully others in the second dimension (the Bully Scale-BS). In the PB/VS, bullying behaviors described under five categories as follows: physical bullying (hitting, kicking, pushing etc.), verbal bullying (insulting, calling names, making fun of somebody, teasing, swearing etc.), isolation/ exclusion (isolating, ignoring etc.), rumor spreading (telling bad things behind their back, telling false stories etc.), and attack on property (taking things or money, stealing, deliberately damaging property of others etc.). There are a total of 37 items in the PB/VS-Child Form. A short explanation is given about what bullying or being bullied means on the first page of the instrument. Children are asked to respond to the scale items on a five-point scale for each dimension: "almost every day=4", "at least once a week=3", "once a month=2", "once a term=1" or "never=0" (Piskin & Ayas, 2011). The total score ranges from 0 to 148, with higher scores indicating higher levels of peer bullying /victimization. Piskin and Ayas (2011) conducted confirmatory factor analysis (CFA) to examine the construct validity of the PB/VS-Child Form in students attending 3rd, 4th, and 5th grades; the results showed that the five-factor model was confirmed for both the VS and the BS subscales. The Cronbach's alpha coefficients for the VS and the BS scales were found to be .90 and .87, respectively. In the current study, only the Victim Scale (VS) was used to assess the peer victimization of the SEN and non-SEN students, and Cronbach's alpha coefficient for the SEN students was calculated as .93 (n=197) and for the non-SEN students as .87 (n=225).

Coopersmith Self-Esteem Inventory (CSEI): The Coopersmith Self-Esteem Inventory (CSEI, Coopersmith, 1991) was used to assess global self-esteem of the SEN students. There are many studies that support the validity and reliability of the widely used CSEI to evaluate the self-esteem of children and adolescents that are older than 8 years of age (Coopersmith, 1991; Piskin, 1996). Eight out of 58 items in the CSEI are indicative of defensive attitudes (the lie subscale) and are not included in the scoring. Participants are asked to respond to scale items in the form of "like me" or "unlike me". Responses pointing to high self-esteem are given 1 point, and those pointing to low self-esteem are given 0 point. A total score (a global self-esteem evaluation) and five subscale scores (General Self-esteem, Social-Peers Self, Home-Parents, School-Academic, and Lie) are obtained from the scale (Piskin, 1996). Scores ranged from 0 to 50, and the increase in points indicates higher self-esteem (Kapci, 2004). It is suggested that CSEI can be used for assessment in both primary schools (with 3rd, 4th, and 5th grade students; Gucray, 1989) and high schools (Piskin, 1996). The internal consistency coefficient of the scale was found to be higher than .80 and the test-retest reliability coefficient of .70 was obtained with an interval of two-weeks in the study conducted by Gucray (1989) with children of various ages and genders. In the same study, the correlation of the CSEI with the Piers-Harris Self-Concept Scale was found to be .72. In the present study, the Cronbach alpha coefficient of the CSEI was found to be .87 for the SEN students (n = 197).

Children's Loneliness Scale (CLS): In this study, The Children's Loneliness Scale (CLS) was used to assess the loneliness levels of SEN students. Asher, Hymel and Renshaw (1984) developed the CLS to evaluate 3rd-6th graders' levels of loneliness and dissatisfaction from social relationships, and Asher and Wheeler (1985) had made modifications in some of the items of the CLS in order to reflect school-based loneliness (e.g. 'I feel alone at school' instead of 'I feel alone'). The scale has 24 items, 16 of them are related to the feelings of loneliness, perceptions of social competence, and status among peers. The CLS includes eight "filler" items that focus on hobbies and interests (e.g., "I like music") and are not to be included in the scoring. The children respond to the items on a five-point scale (always true = 5, not true at all = 1). The total scores ranged from 16 to 80, and higher scores indicate higher levels of loneliness (Cifci-Tekinarslan & Kucuker, 2015). Several studies have reported that the CLS consisted of a single factor (Asher & Wheeler, 1985; Cassidy & Asher, 1992; Kaya, 2005; Cifci-Tekinarslan & Kucuker, 2015.) The internal consistency coefficients of CLS are reported as .78-.90 (Asher et al., 1984; Galanaki, Polychronopoulou & Babalis, 2008; Kaya, 2005). In Turkey, the psychometric properties of the

CLS were investigated on the typically developing students attending 3rd-8th grades (Kaya, 2005), and on the 4th-5th graders with and without special needs (Cifci-Tekinarslan & Kucuker, 2015). In these studies, CLS has demonstrated a one-factor structure; high internal consistency ($\alpha = .87$) and test-retest reliability (.76-.87). In the present study, the Cronbach alpha coefficient of the CLS was found to be .88 for the SEN students ($n = 197$).

Procedure

At the spring semester of the 2017-2018 school year, a list of primary and middle schools that have students with special needs and legal permission to conduct the study were obtained from the National Education Directorate. Information about the purpose of the present study was given to the school principals and teachers of primary and middle schools that were randomly selected from the regions, representing different socio-economic levels of the province of Denizli, and their approvals for the study were obtained. Also, participating students were informed about the study before the administration of the instruments. It is stated that students will be asked some questions about themselves, about their friendships, and about the difficulties they may have in school, that information they are going to give will be confidential, and participation in this study is voluntary. Non-SEN students filled in self-reported instruments in their own class as a group. For SEN students, the instruments were individually administered by the researchers in an out-of-class environment and necessary explanations and assistance were provided to the students who requested it. After the administration of the instruments was finished, the students were thanked for their participation.

Data Analysis

Concerning the first question of the study, descriptive statistics such as frequency and percentage, were calculated to find out the prevalence of the types of peer victimization for the SEN and non-SEN students. In order to determine whether the both groups differed in the levels of peer victimization types, the VS total and subscales scores of both groups were examined regarding the assumptions of parametric tests. The results of the Levene's test showed that variances for the VS total and subscales scores of SEN and non-SEN students were not equal. The distributions of the VS scores for both groups were also checked for normality assumptions. Skewness and kurtosis values for the VS scores of non-SEN students were found to be higher than 1 indicated that the scores did not normally distributed. Therefore, the non-parametric Mann Whitney-U test for unrelated samples was used to compare the VS scores of SEN and non-SEN students. To address the third and fourth questions of the present study, analyzes were conducted with the group of SEN students ($n=197$). Stepwise multiple regression analyzes were performed to determine the predictive powers of the types of peer bullying victimization on self-esteem (CSEI total score) and loneliness levels of SEN students. Prior to the analysis, the data sets related to self-esteem and loneliness of SEN students were examined for the assumptions of multiple linear regression analysis. The outliers were examined via calculation of Mahalanobis distance values, and no outlier was found in both data sets. Pearson correlation coefficients between the predictive (independent) variables, tolerance values, and VIF (variance inflation factor) values indicated that there was no multicollinearity among predictive variables (Cokluk, Sekercioglu, and Buyukozturk, 2014). Based on these findings, the data were analyzed using a stepwise multiple linear regression method.

Results

The findings of the research questions are presented in this section.

1. Types and Prevalence Rates of Peer Victimization among Students with and without Special Needs

In order to find out the types and the prevalence rates of bullying behaviors experienced by primary and middle school students with and without special needs in inclusive classrooms, the frequencies and percentages of the students' responses to the items in the VS subscales were calculated. The findings are presented in Table 2.

Table 2. *The prevalence rates of bullying behaviors experienced by SEN and non-SEN students*

Types of bullying	Bullying behaviors	SEN Students	Non-SEN Students
		n (%)	n (%)
Physical bullying	1. Attacking with cutting instruments	20 (10.2)	8 (3.6)
	2. Stabbing with sharp objects	35 (17.8)	39 (17.3)
	3. Kicking or punching	75 (38.1)	81 (36.0)
	4. Hitting with an object	57 (31.0)	37 (16.4)
	5. Pushing with shoulder, hitting with elbow	88 (44.7)	83 (36.9)
	6. Pulling hair or ears, pinching or biting	95 (48.2)	65 (28.9)
	7. Pulling down by pushing or twisting arms	82 (41.6)	42 (18.7)
	8. Throwing objects or water	111 (56.3)	73 (32.4)
	9. Disturbing by touching with hands or tickling	126 (64.0)	117 (52.0)

	10. Putting an uncomfortable object underneath	48 (24.4)	30 (13.3)
	Physical victimization	37.6%	25.5%
	11. Swearing or telling insulting words like stupid, idiot etc.	121 (61.4)	110 (48.9)
Verbal bullying	12. Unpleasant name-calling	117 (59.4)	106 (46.1)
	13. Making fun about physical appearance	94 (47.8)	61 (26.1)
	14. Making fun of accent, pronunciation or stuttering	81 (41.1)	42 (18.7)
	15. Teasing or annoying him/her	147 (74.6)	137 (60.9)
	16. Threatening	74 (36.0)	52 (23.1)
	Verbal victimization	53.4%	37.3%
Isolation	17. Doesn't include in games	122 (61.9)	116 (51.6)
	18. Isolating, not accepting in the group	117 (59.4)	66 (29.3)
	19. Not speaking to, not answering to questions	118 (59.9)	89 (39.6)
	20. Prevent other students making friends with	88 (44.7)	29 (12.9)
	21. Deliberately not giving the pass, while playing football	113 (57.4)	80 (35.6)
	Victimization by isolation /exclusion	56.7%	33.8%
Rumor spreading	22. Spreading rumors/gossip	78 (41.6)	66 (29.3)
	23. Accusing for things he/she hasn't done	100 (50.8)	72 (32.0)
	24. Undermine relationship among friends by spreading gossips	72 (36.6)	63 (28.0)
	25. Writing ugly words about him/her	59 (29.9)	39 (17.3)
	26. Complaining to teacher for something he/she hasn't done.	129 (65.5)	45 (20.0)
	27. Telling someone's secrets to others	76 (38.6)	53 (23.6)
	28. Snitching	127 (64.5)	77 (34.2)
	Victimization by rumor spreading	46.8%	26.4%
Attack on property	29. Taking his/her money or belongings forcibly	23 (26.9)	19 (8.4)
	30. Stealing his/her money or belongings	40 (20.3)	21 (9.3)
	31. Purposefully damage to his/her belongings	80 (39.6)	48 (21.3)
	32. Scribble or blacken books or notebooks	110 (55.8)	57 (25.3)
	33. Taking someone's ball and run away	96 (48.7)	66 (29.4)
	34. Tearing or soiling the clothes	48 (24.4)	20 (8.9)
	35. Sneaking through his/her bag or personal items	56 (29.0)	38 (16.9)
	36. Forcing to buy goods from the canteen	44 (22.3)	24 (10.7)
	37. Not giving back the borrowed money / items	68 (34.5)	47 (20.9)
	Victimization by attack on property	33.5%	16.8%
	Overall victimization	45.6%	28%

*SEN: Students with special needs

**non-SEN: Students without special needs

As seen in Table 2, while the overall victimization rate was found to be 28% for non-SEN students, it was found as 45.6% for SEN students. These results indicated that more than one-quarter of the non-SEN students and about half of the SEN students experienced some forms of peer bullying at frequencies varying from “once a term” to “almost every day”. Similar to the overall victimization rate, the SEN students' rates of victimization by isolation (56.7% vs. 33.8%), verbal bullying (53.4% vs. 37.3%), rumor spreading (46.8% vs. 26.4%), physical bullying (37.6% vs. 25.5%), and attacks on property (33.5% vs. 16.8%), were higher than the rates of non-SEN students. The most frequent type of peer victimization reported by non-SEN students was by verbal bullying, followed by isolation, rumor spreading, physical bullying, and attacks on property. On the other hand, the most common type of peer victimization reported by SEN students was victimization by social isolation/exclusion, followed by verbal bullying, rumor spreading, physical bullying, and attacks on property. The attacks on property was the least common type of peer victimization experienced by both SEN and non-SEN students. Among the verbal bullying behaviors, both of SEN and non-SEN students reported that they were subjected to teasing, annoying, swearing, name-calling or insulting (words like stupid, silly or idiot, etc.) the most frequently. In terms of the isolation dimension, while about half of the non-SEN students only reported that they were not taken into the games (51.6%), more than half of the SEN students reported that they were not taken into the games (61.9%), they were not talked to (59.9%), and they were not accepted to the group (59.4%). Among the rumor spreading behaviors, while non-SEN students reported most frequently that they were exposed to snitching (34.2%), majority of the SEN students reported most frequently that they were subjected to snitching (64.5%) and complaining to the teacher (65.5%). It was found that both SEN and non-SEN students were most exposed to disturbing by touching with hands or tickling among physical bullying behaviors. In *attacks on property* dimension, it was found that SEN students were more exposed to scribbling or blackening books or notebooks.

2. Comparison of the Students with and without Special Needs Regarding the Levels of Peer Victimization Types

The second objective of the study was to determine whether there were significant differences between students with and without special needs regarding the levels of peer victimization types. For this purpose, the Victimization Scale total scores and the subscales scores of the two groups were compared with the non-parametric Mann-Whitney U test for unrelated samples. Descriptive statistics of the SEN and non-SEN students' Victimization Scale scores by bullying types are presented in Table 3, and the results of Mann Whitney-U test are presented in Table 4.

Table 3. Descriptive Statistics of the VS Total Scale and Subscale Scores of the SEN* and non-SEN** Students

Variables	SEN Students (n=197)		non-SEN Students (n=225)	
	x	sd	x	sd
Physical bullying	7.15	6.80	5.04	5.42
Verbal bullying	7.71	5.63	5.70	4.97
Isolation	6.69	5.10	3.80	3.49
Rumor spreading	7.12	5.86	3.50	4.30
Attacks on property	5.95	6.40	2.70	3.34
VS total scale	34.63	23.99	20.74	16.17

*SEN: Students with special needs

**non-SEN: Students without special needs

As seen in Table 4, significant differences were found between the students with and without special needs in terms of the victimization by physical bullying ($U = 18289.50$, $p = .002$), verbal bullying ($U = 1.75$, $p = .000$), isolation ($U = 1.49$, $p = .000$), rumor spreading ($U = 1.35$, $p = .000$), attacks on property ($U = 15271.50$, $p = .000$) and the VS total scale ($U = 1.44$, $p = .000$). Compared to non-SEN students, SEN students reported more victimization of verbal bullying, physical bullying, isolation, rumor spreading, attacks on property, and overall victimization.

Table 4. Mann Whitney-U Test Results to Compare the VS Total and Subscales Scores of the SEN* and non-SEN** Students

Variables	SEN Students (n=197)		non-SEN Students (n=225)		U	z	p
	Mean rank	Sum of Ranks	Mean Rank	Sum of Ranks			
Physical bullying	231.16	45538.5	194.29	43714.5	18289.5	-3.12	.002
Verbal bullying	235.10	46314	190.84	42939.0	1.75	-3.73	.000
Isolation	248.40	48935.5	179.19	40317.5	1.49	-5.85	.000
Rumor spreading	255.47	50328	173.00	38925.0	1.35	-6.99	.000
Attacks on property	246.48	48556.5	180.87	40696.5	15271.5	-5.59	.000
VS total scale	250.87	49420.5	177.03	39832.5	1.44	-6.20	.000

*SEN: Students with special needs

**non-SEN: Students without special needs

3. The role of peer victimization in predicting self-esteem of students with special needs

A stepwise regression analysis was conducted to determine the predictive powers of the types of peer bullying victimization on self-esteem of SEN students in inclusive classrooms. The relationships between the independent variables (*physical bullying, verbal bullying, isolation, rumor spreading and attacks on property*) and the dependent variable (*self-esteem*) were examined by the Pearson product moment correlation analysis and the correlation coefficients obtained are presented in Table 5.

Table 5. Correlations between Self-Esteem and Independent Variables

Variables	1	2	3	4	5	6	7
1. Physical bullying	-						
2. Verbal bullying	.50**	-					
3. Isolation	.40**	.56**	-				
4. Rumor spreading	.55**	.65**	.57**	-			
5. Attack on property	.65**	.54**	.52**	.65**	-		
6. VS total score	.79**	.80**	.74**	.84**	.85**	-	

7.CSEI Global self-esteem	-.33**	-.35**	-.50**	-.38**	-.35**	-.47**	-
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N=197, p<0.01

As seen in Table 5, there was a significant negative correlation between the CSEI global self-esteem and the VS total score of SEN students ($r=-.47$, $p<.01$). While the highest negative correlation was found between isolation and self-esteem ($r=-.50$, $p<.01$); rumor spreading ($r=-.38$, $p<.01$), verbal bullying ($r=-.35$, $p<.01$), attacks on property ($r=-.35$, $p<.01$), and physical bullying ($r=-.33$, $p<.01$) also showed significant relationships with self-esteem negatively. As the VS total score had correlations greater than .70 with the Victimization subscales, the VS total score was not included in the regression analysis, only the subscale scores of physical bullying, verbal bullying, isolation, rumor spreading, and attacks on property were taken.

Stepwise multiple regression analysis was performed to determine the predictive powers of independent variables on self-esteem of SEN students. As seen in Table 6, the variables *verbal bullying*, *rumor spreading*, and *attacks on property* were not processed in stepwise regression analysis because they did not significantly predict the self-esteem of the SEN students, hence the other two variables, *isolation* and *physical bullying* were included into the regression model. In the first step of the analysis, the *isolation* variable was introduced to the regression model. The standardized regression coefficient for the *isolation* variable in predicting the self-esteem of SEN students was found as $\beta=-.502$. The *isolation* variable significantly predicted the self-esteem of SEN students ($t=-8.114$, $p<.01$), and explained 25% of the total variance of the self-esteem scores alone ($R^2=.252$, $F_{\text{reg}}(1,195) = 65.840$, $p=.000$).

Table 6. Stepwise Regression Analysis Results to Predict Self-Esteem of Students with Special Needs

Model	B	Std. error	β	t	p	Zero-order r	Partial r	R	R ²	F
1 (constant)	37.461	.870		43.08	.000			.502	.252	65.84**
Isolation	-.839	.103	-.502	-8.11	.000	-.502	-.502			
2 (constant)	38.126	.911		41.84	.000					
Isolation	-.738	.112	-.442	-6.60	.000	-.502	-.428	.521	.271	36.07**
Physical bullying	-.187	.084	-.149	-2.23	.027	-.328	-.158			

**p<.01

In the second step of the Stepwise regression analysis, the *physical bullying* variable was included into the model. When the other variables explaining self-esteem held constant, the variables *isolation* and *physical bullying* together explained 27% of the total variance in the self-esteem scores ($R^2=.271$, $F_{\text{reg}}(2,194) = 36.072$, $p = .000$). According to these results, the *physical bullying* variable made a significant contribution to the total variance of the self-esteem scores by about 2% ($\Delta R^2=.019$, $F_{\text{change}}(1,194) = 4.965$, $p=.000$). In this step, the standardized regression coefficients in predicting the self-esteem of SEN students were found to be $\beta = -.442$ for the *isolation* variable and $\beta=-.149$ for the *physical bullying* variable. Isolation/exclusion by peers ($t=-6.60$, $p=.000$) and exposure to physical bullying ($t=-2.23$, $p=.027$) significantly predicted the self-esteem of SEN students. It was found that the most important predictor of self-esteem was *isolation*, followed by *physical bullying*, and both variables were negatively related to self-esteem.

4. The role of peer bullying on predicting loneliness levels of students with special needs

A stepwise regression analysis was performed to determine the predictive powers of the types of bullying victimization on loneliness levels of SEN students in inclusive classrooms. Prior to the regression analysis, the relationships between the types of bullying victimization (independent variables) and loneliness (dependent variable) were examined by the Pearson product moment correlation analysis and the correlation coefficients obtained are presented in Table 7.

Table 7. Correlations between Loneliness and Independent Variables

Variables	1	2	3	4	5	6	7
1. Physical bullying	-						
2. Verbal bullying	.50**	-					
3. Isolation	.40**	.56**	-				
4. Rumor spreading	.55**	.65**	.57**	-			
5. Attack on property	.65**	.54**	.52**	.65**	-		

6.VS total score	.79**	.80**	.74**	.84**	.85**	-	
7.Loneliness	.33**	.42**	.53**	.40**	.35**	.50**	-

N=197 p<.01

As seen in Table 7, there was a significant positive correlation between the loneliness and the VS total score of SEN students ($r=.50, p<.01$). When the subscales were examined, the highest correlation with loneliness was found between *isolation* score ($r=.53, p<.01$) and *verbal bullying* score ($r=.42, p<.01$); *rumor spreading* ($r=.40, p<.01$), *attacks on property* ($r=.35, p<.01$), and *physical bullying* ($r=.33, p<.01$) also showed significant relationships with loneliness positively. As the VS total score had correlations greater than .70 with the VS subscales, the VS total score was not included in the regression analysis, only the subscale scores of *physical bullying*, *verbal bullying*, *isolation*, *rumor spreading*, and *attacks on property* were taken. Stepwise multiple regression analysis was performed to determine the predictive powers of independent variables on the loneliness levels of SEN students and the results are given in Table 8.

Table 8. Stepwise Regression Analysis Results to Predict Loneliness in SEN Students

Model	B	Std. Hata	β	t	p	Zero- order r	Partial r	R	R ²	F
1 (constant)	28.664	1.149		24.94	.000			.533	.284	77.38**
Isolation	1.202	.137	.533	8.79	.000	.533	.533			
2 (constant)	27.372	1.250		21.89	.000					
Isolation	.975	.163	.432	5.97	.000	.533	.394	.553	.306	42.72**
Verbal bullying	.364	.148	.178	2.46	.015	.328	.174			

**p<.01

As seen in Table 8, the variables *physical bullying*, *rumor spreading*, and *attacks on property* were not included in the stepwise regression analysis because they did not significantly predict the loneliness in SEN students, hence the other two independent variables, *isolation* and *verbal bullying* were included into the regression analysis. In the first step of the analysis, the *isolation* variable was introduced to the regression model. The standardized regression coefficient for the *isolation* variable in predicting the loneliness levels of SEN students was found as $\beta=.533$. The *isolation* variable significantly predicted the loneliness levels of SEN students ($t=8.79, p<.01$), and explained 28.4% of the total variance of the loneliness scores alone ($R^2=.284, F_{reg}(1,195)=77.38, p=.000$).

In the second step of the stepwise regression analysis, the *verbal bullying* variable was included into the model. When the other variables explaining loneliness were held constant, the variables *isolation* and *verbal bullying* together explained 30.6% of the total variance in the loneliness scores ($R^2=.306, F_{reg}(2,194)=42.72, p=.000$). According to these results, the *verbal bullying* variable made a significant contribution to the total variance of loneliness scores by 2% ($\Delta R^2=.022, F_{change}(1,194)=6.054, p=.000$). In this step, the standardized regression coefficients in predicting the loneliness levels of SEN students were found to be $\beta=.432$ for the *isolation* variable and $\beta=.178$ for the *verbal bullying* variable. Isolation/exclusion by peers ($t=5.97, p=.000$) and exposure to verbal bullying ($t=2.46, p=.015$) significantly predicted the loneliness levels of SEN students. When the relative importance of the predictive variables on loneliness was examined according to the standardized regression coefficient (β), it was found that the most important predictor of loneliness was the *isolation* variable, followed by *verbal bullying*, and both variables were positively correlated with loneliness.

Discussion

In this study, firstly the prevalence of peer victimization in students with (SEN) and without special needs (non-SEN) in inclusive classrooms were examined and then two groups were compared in terms of the levels of various peer victimization forms they experienced. Additionally, the predictive relationships of different types of peer victimization with self-esteem and loneliness levels of students with special needs were investigated. When the overall peer victimization rates for SEN students and non-SEN students were examined, the results indicated that more than a quarter of non-SEN students (28%) and about half (45.6%) of SEN students with special needs were exposed to some forms of peer bullying. As well as the overall rate of peer victimization, SEN students were found to have higher rates of victimization by social isolation/exclusion, verbal bullying, physical bullying, rumor spreading, and attacks on property than their non-SEN peers. The overall victimization rate for the SEN students in the current study is similar to the results of previous studies. In a review of related literature, Rose et al. (2011) reported that studies generally revealed the victimization rates to be in excess of 50% for children with disabilities.

In the second part of the present study, significant differences were found between SEN and non-SEN students in terms of the levels of overall and different types of victimization. These findings indicated that SEN students in inclusive classrooms were more victimized by verbal bullying, physical bullying, isolation, rumor spreading, and attacks on property as well as overall bullying than their typical peers. Several studies on peer victimization in children with disabilities also reported similar findings (Sabornie, 1994; Nabuzoka, 2003; Wiener & Mak, 2009; Bear et al., 2015). In the current study, it was found that SEN students have been most frequently exposed to social isolation/exclusion, followed by verbal bullying, rumor spreading, physical bullying, and attacks on property. More than half of the SEN students reported that they were not taken into the games (61.9%), they were not talked to them (59.9%), and they were not accepted to peer group (59.4%), moreover they were also subjected to verbal bullying in the form of teasing, annoying, swearing, name-calling or insulting (words such as stupid, silly or idiot, etc.). Previous studies also pointed out that students with special needs attending inclusive classrooms tend to be more exposed to social isolation/exclusion (Kavale & Forness, 1996; Llewellyn, 2000; Pavri, 2015), verbal and physical bullying (O'Moore & Hillary, 1989; Ziegler & Rosenstein-Manner, 1991; Llewellyn, 2000; Rose et al. 2011) than their typically developing peers. One of the reasons why students with special needs are more victimized than their typical peers may be related to their behavioral characteristics associated with the disability (Rose et al., 2011; Pavri, 2015). Children with disabilities have more peer-related social skills deficits and more problem behaviors than their typical peers (Kucuker & Cifci-Tekinarslan, 2015; Sucuoglu & Ozokcu, 2005); thus, they can have difficulties in developing and maintaining positive social relations (Sabornie & Beard, 1990), they receive less acceptance, more social exclusion/rejection, and are exposed to more peer bullying compared to typically developing peers (Kavale & Forness 1996; Gresham & MacMillan, 1997). Similar to the findings above, Reiter and Lapidot-Lefler (2007) reported that exposure to peer bullying among students with intellectual disabilities was correlated with emotional and interpersonal problems. Baumeister et al. (2008) also reported that thought problems, attention problems, disruptive behavior, and social problems in children with learning disabilities were positively correlated with peer victimization.

This study was also examined the relative contributions of the different types of peer victimization (*physical victimization, verbal victimization, isolation, rumor spreading, and attacks on property*) in predicting the self-esteem and loneliness in students with special needs (SEN). In the study, while all types of peer victimization under-investigation had a significant negative relationship with self-esteem of SEN students; being socially isolated /excluded (namely relational or indirect victimization) and physically bullied (namely overt or direct victimization) by their peers were found to be significant predictors of self-esteem. These findings suggest that negative experiences in peer relations (i.e. victimization experiences) may adversely affect students' opinions about themselves. Several other studies show that children/adolescents who are victimized by peer bullying tend to have lower self-esteem (Egan & Perry, 1998; Graham & Juvonen, 1998; Juvonen, Nishina, & Graham, 2000; Kapci, 2004; Piskin & Ayas, 2005). In the formation of self-concept, the role of social experiences is emphasized (Bandura, 1986; cited in Egan & Perry, 1998). While positive and supportive behaviors from important others, including peers, and self-observation of competent and effective functioning contribute to the formation of a healthy self-concept, the experience of being victimized may lead to a decrease in self-esteem over time by weakening the effects of these positive factors (Egan & Perry, 1998). Longitudinal studies suggest that children exposed to sustained peer bullying report themselves to have lower social competence and generally lower self-worth (Olweus, 1992).

Among the other main findings of this study, it was found that there were significant positive correlations between the different forms of peer victimization and loneliness, and it was also found that being socially isolated/excluded and being verbally victimized by peers were predictive of loneliness in students with special needs. Several studies in the literature showed that children who were victimized, experienced more loneliness (Boivin et al., 1995; Kochenderfer & Ladd, 1996; Graham & Juvonen, 1998; Hawker & Boulton, 2000; Juvonen et al., 2000; Pekel-Uludagli & Ucanok, 2005). In a longitudinal study, Kochenderfer-Ladd and Wardrop (2001) grouped children with respect to the timing and duration of peer victimization and examined the relationship between peer victimization and loneliness. It was found that when children moved to victim classification from non-victim group over time, their feelings of loneliness increased and their social satisfaction decreased. In the present study, being socially isolated/excluded by peers was found to be the most significant predictor of loneliness in the SEN students. It has been stated that being less accepted, more rejected, ignored or socially isolated by the peer group may lead to loneliness (Asher, Parkhurst, Hymel, & Williams, 1990; Pavri & Luftig, 2001; Bakkaloglu, 2010; Papoutsaki, Gena, & Kalyva, 2013). When compared to their typical peers, children with special needs are more exposed to social isolation / exclusion (Llewellyn, 2000; Gresham & McMillan, 1997), which may make them more vulnerable to experience loneliness (Bakkaloglu, 2010). Pavri (2015) indicated that although there has been considerable empirical evidence to support loneliness as a common result in children who are victimized from peer bullying; research findings had also indicated that children/adolescents who experience loneliness are more susceptible to persistent peer victimization than their typically developing peers.

Previous studies showed that having better social skills and forming positive relationships with others were related to receiving more peer acceptance, experiencing less social isolation/exclusion (Baydik & Bakkaloglu, 2009) and loneliness (Asher et al., 1990; Boivin, et al., 1995; Pavri & Luftig, 2001). In addition, children who have higher social competence may receive positive feedback for their social interactions from others and develop positive opinions about themselves (Sucuoglu & Cifci, 2001). It has been suggested that inclusive education can provide children with disabilities the opportunity to develop their social skills, to establish positive social relationships, and to be a part of the peer group (Odom, Buysse, & Soukakou, 2011). Several studies have shown that inclusive education leads to positive outcomes in terms of communication, social skills, and behavior for students with disabilities (see Katz & Mirenda, 2002, for a review). However, a number of studies have demonstrated that students with special needs attending in inclusive classrooms had poor social skills (Sucuoglu & Ozokcu, 2005; Kucuker & Cifci-Tekinarslan, 2015) which constitute a common risk factor for increased peer rejection and victimization (Kavale & Forness 1996; Gresham & MacMillan, 1997; Llewellyn, 2000). The findings of the present study also supported that the children with special needs in inclusive classrooms were more being victimized by various forms of peer bullying than their typical peers. Additionally, it was found that the perception of being isolated/excluded by peer group was predictive of lower self-esteem and greater feelings of loneliness in these students. These findings indicate the need for anti-bullying interventions to prevent or reduce peer bullying and victimization in schools. School administrators, especially teachers have the responsibility to take measures to prevent students from being subjected to peer bullying. The implementation of individualized positive behavioral supports such as social skills training into the regular curriculum may contribute increasing peer social acceptance and prevent or reduce peer victimization (Rose et al., 2011). Teachers in inclusive classrooms should follow proactive prevention strategies for at risk students, develop awareness towards social interactions among their students with and without special needs, and create a positive social climate which promotes acceptance of individual differences. As schoolwide prevention strategies considered, school administrators should create opportunities for teacher trainings, staff trainings, and teacher-parent collaborations to prevent or reduce peer victimization (Baker & Donnelly, 2001). Programs for prevention and intervention of peer bullying/victimization should include necessary modifications for students with special needs (Raskauskas, 2010).

Although the present study contributes to the existing literature on peer victimization in students with disabilities, some limitations should be kept in mind when interpreting the findings. In related literature, it is indicated that peer victimization's relationship with self-esteem and loneliness may be bidirectional and it may be an antecedent or a consequence of low self-esteem (Egan & Perry, 1998; Lohbeck & Petermann, 2016) and high level of loneliness (Pavri, 2015). The present study provides findings about the current correlates of peer victimization with self-esteem and loneliness in students with special needs. Cross-sectional studies, as in the present study, do not allow us to identify whether peer bullying is the cause or consequence of psychosocial adjustment problems (Wolke & Lereya, 2015). Therefore, it may be expected that carefully controlled prospective studies to provide more valuable information about the long-term effects of peer victimization on psychosocial functioning of children with special needs.

The majority of students with special needs who participated in this study had learning disabilities (56.3%), mild intellectual disabilities (39.6%), and a small group (4.1%) had autism spectrum disorders. This situation limits the generalizability of the findings. Thus, this study can be repeated on more representative samples in which students with other disabilities also participate. In addition, further studies may investigate the prevalence of peer victimization and its relationship with psychosocial adjustment in students with different disability groups. Finally, assessing peer victimization only by self-report method may be regarded as another limitation of the current study. Using multiple sources of information (e.g. self, peer, teacher, or observer) may provide a more comprehensive approach to understand peer victimization in students with disabilities.

References

- Alikasifoglu, M., Erginöz, E., Ercan, O., Uysal, O., & Kaymak-Albayrak, D. (2007). Bullying behaviours and psychosocial health: results from a cross-sectional survey among high school students in Istanbul, Turkey. *European Journal of Pediatrics*, 166, 1253-1260.
- Asher, S. R., Hymel, S., & Renshaw, P. D. (1984). Loneliness in children. *Child Development*, 55, 1456-1464.
- Asher, S. R., & Wheeler, V. A. (1985). Children's loneliness: A comparison of rejected and neglected peer status. *Journal of Consulting and Clinical Psychology*, 53, 500-505.
- Asher, S. R., Parkhurst, J. T., Hymel, S., & Williams, G. A. (1990). Peer rejection and loneliness in childhood. In S. R. Asher, J. D. Cole (Eds.), *Peer rejection in childhood* (pp. 253- 273). New York, NY: Cambridge University Press.

- Aydın-Gorucu, R. (2016). *Dikkat eksikliği ve hiperaktivite bozukluğu olan çocuk ve ergenlerin siber zorbalık ve mağduriyeti ile ilişkili etmenlerin araştırılması*. Yayınlanmamış tıpta uzmanlık tezi, Ankara: Ankara Üniversitesi.
- Baumeister, A. L., Storch, E. A., & Geffken, G. R. (2008). Peer victimization in children with learning disabilities. *Child and Adolescent Social Work Journal*, 25(1), 11-23.
- Baydik, B., & Bakkaloglu, H. (2009). Predictors of sociometric status for low socioeconomic status elementary mainstreamed students with and without special needs. *Educational Sciences: Theory & Practice*, 9, 401-447.
- Baker, K., & Donnelly, M. (2001). The social experiences of children with disability and the influence of environment: A framework for intervention. *Disability & Society*, 16(1), 71-85.
- Bakkaloglu, H. (2010). A comparison of the loneliness levels of mainstreamed primary students according to their sociometric status. *Procedia-Social and Behavioral Sciences*, 2, 330-336.
- Bear, G.G., Mantz, L.S., Glutting, J.J., Yang, C., & Boyer, D.E. (2015). Differences in bullying victimization between students with and without disabilities. *School Psychology Review*, 44(1), 98-16.
- Boivin, M., Hymel, S., & Bukowski, W. M. (1995). The roles of social withdrawal, peer rejection, and victimization by peers in predicting loneliness and depressed mood in childhood. *Development & Psychopathology*, 7, 765-785.
- Card, N.A., & Hodges, E.V. (2008). Peer victimization among school children: Correlations, causes, consequences, and considerations in assessment and intervention. *School Psychology Quarterly*, 23, 451-461.
- Cassidy, J., & Asher, S. (1992). Loneliness and peer relations in young children. *Child Development*, 63, 350-365.
- Cifci-Tekinarslan, I., & Kucuker, S. (2015). Examination of the psychometric properties of the children's loneliness scale for students with and without special needs in inclusive classrooms. *Educational Sciences: Theory and Practice*, 15, 709-721.
- Coopersmith, S. (1991). *Self-esteem inventories*. Palo Alto: Consulting Psychologist Press, Inc.
- Craig, W. M., Peters, R. D., & Konarski, R. (1998). Bullying and victimization among Canadian school children. *Applied Research Branch Strategic Policy Human Resources Development*. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.489.6922&rep=rep1&type=pdf>
- Crick, N.R., & Ladd, G.W. (1993). Children's perceptions of their peer experiences: Attributions, loneliness, social anxiety, and social avoidance. *Developmental Psychology*, 29, 244-254.
- Çinkır, Ş., & Karaman-Kepenekci, Y. (2003). Öğrenciler arası zorbalık. *Kuram ve Uygulamada Eğitim Yönetimi*, 34, 236-253.
- Çinkır, Ş., & Karaman-Kepenekçi, Y. (2006). Bullying among Turkish high school students. *Child Abuse and Neglect*, 30, 193-204.
- Cokluk, O. S., Sekercioglu, G., & Buyukozturk, S. (2012). *Sosyal bilimler için çok değişkenli istatistik: Spss ve lisrel uygulamaları*. Ankara: Pegem Akademi Yayıncılık.
- Dake, J.A., Price, J. H., & Telljohann, J. K. (2003). The nature and extent of bullying at school. *Journal of School Health*, 73(5), 173-181.
- Egan, S.K., & Perry, D.G. (1998). Does low self-regard invite victimization? *Developmental Psychology*, 34, 299-309.
- Fleming, L.C., & Jacobsen, K.H. (2009). Bullying and symptoms of depression in Chilean middle school students. *School Health*, 79(3), 130-137.
- Galanaki, E., P., & Kalantzi-Azizi, A. (1999). Loneliness and social dissatisfaction: Its relation with children's self-efficacy for peer interaction. *Child Study Journal*, 29(1), 1-21.
- Graham, S., & Juvonen, J. (1998). Self-blame and peer victimization in middle school: an attributional analysis. *Developmental Psychology*, 34, 587-599.
- Gresham, F. M., & McMillan, D. L. (1997). Social competence and affective characteristics of students with mild disabilities. *Review of Educational Research*, 67, 377-415.
- Gucray, S. (1989) *Çocuk yuvasında ve ailelerinin yanında kalan 9-10-11 yaşlarındaki çocukların benlik saygısını etkileyen bazı faktörler*. Yayınlanmamış doktora tezi, Ankara: Hacettepe Üniversitesi.
- Gultekin, Z. (2003). *Akran zorbalığı belirleme ölçeği geliştirme çalışması*. Yayınlanmamış yüksek lisans tezi, Ankara: Hacettepe Üniversitesi.
- Hawker, D., & Boulton, M. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry*, 41, 441-455.
- Holmberg, K., & Hjern, A. (2008). Bullying and attention deficit-hyperactivity disorder in 10 year olds in a Swedish community. *Developmental Medicine & Child Neurology*. 50(2), 134-138.
- Hong, J.S., & Espelage, D.L. (2012). A review of research on bullying and peer victimization in school: An ecological system analysis. *Aggression and Violent Behavior*, 17, 311-322.

- Hugh-Jones, S. & Smith, P.K. (1999). Self-reports of short-and long-term effects of bullying on children who stammer. *British Journal of Educational Psychology*, 69, 141-158.
- Juvonen, J., Graham, S., & Schuster, M. A. (2003). Bullying among young adolescents: the strong, the weak, and the troubled, *Pediatrics*, 112, 1231-1237.
- Juvonen, J., Nishina, A., & Graham, S. (2000). Peer harassment, psychological adjustment, and school functioning in early adolescence. *Journal of Educational Psychology*, 92, 349–359.
- Kapci, E. G. (2004). İlköğretim öğrencilerinin zorbalığa maruz kalma türünün ve sıklığının depresyon, kaygı ve benlik saygısıyla ilişkisi. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 37(1), 1-13.
- Katz, J., & Mirenda, P. (2002). Including students with developmental disabilities in general education classrooms: Social benefits. *International Journal of Special Education*, 17(2), 26-36.
- Kaukiainen, A., Salmivalli, C., Lagerspetz, K., Tamminen, M., Vauras, M., & Maki, H. (2002). Learning difficulties, social intelligence, and self-concept: connections to bully-victim problems. *Scandinavian Journal of Psychology*, 43, 269-278.
- Kavale, K. A., & Forness, S. R. (1996). Social skill deficits and learning disabilities: A meta-analysis. *Journal of Learning Disabilities*, 29, 226-257.
- Kaya, A. (2005). Çocuklar için yalnızlık ölçeği'nin Türkçe formu'nun geçerlik ve güvenirlik çalışması. *Eurasian Journal of Educational Research*, 19, 220-237.
- Knox, E. & Conti-Ramsden, G. (2003). Bullying risks of 11-year-old children with specific language impairment (SLI): does school placement matter? *International Journal of Language and Communication Disorders*, 38(1), 1-12.
- Kubiszewski, V., Fontaine, R., Potard, C., & Gimenes, G. (2014). Bullying, sleep/wake patterns and subjective sleep disorders: Findings from a cross-sectional survey. *Chronobiology International*, 31, 542-553.
- Kochenderfer, B. J., & Ladd, G. W. (1996). Peer victimization: Cause or consequence of school maladjustment? *Child Development*, 67, 1305–1317.
- Kochenderfer-Ladd, B., & Wardrop, J.L. (2001). Chronicity and instability of children's peer victimization experiences as predictors of loneliness and social satisfaction trajectories. *Child Development*, 72(1), 134-151.
- Kucuker, S., & Tekinarslan, I. C. (2015). Comparison of the self-concepts, social skills, problem behaviors, and loneliness levels of students with special needs in inclusive classrooms. *Educational Sciences: Theory and Practice*, 15, 1559-1573.
- Llewellyn, A. (2000). Perceptions of mainstreaming: A systems approach. *Developmental Medicine and Child Neurology*, 42, 106–115.
- Lohbeck, A., & Petermann, F. (2016). Peer victimization, self-concept, and grades: the mediating role of self-concept. *Deviant Behavior*, <http://dx.doi.org/10.1080/01639625.2016.1197654>
- Luciano, S., & Savage, R. S. (2007). Bullying risk in children with learning difficulties in inclusive educational settings. *Canadian Journal of School Psychology*, 22, 14-31.
- Miller-Graff, L.E., Cater, A.K., Howell, K.H., & Graham-Bermann, S.A. (2015). Parent-child warmth as a potential mediator of childhood exposure to intimate partner violence and positive adulthood functioning. *Anxiety, Stress, and Coping*, 29, 259-273.
- Moore, S. E., Norman, R. E., Suetani, S., Thomas, H. J., Sly, P. D., & Scott, J. G. (2017). Consequences of bullying victimization in childhood and adolescence: A systematic review and meta-analysis. *World Journal of Psychiatry*, 7(1), 60-76.
- Mynard, H., & Joseph, S. (2000). Development of the multidimensional peer victimization scale. *Aggressive Behavior*, 26, 169-178.
- Nabuzoka, D. (2003). Experiences of bullying-related behaviours by English and Zambian pupils: A comparative study. *Educational Research*, 45, 95-104.
- Odom, S.L., Buysse, V., & Soukakou, E. (2011). Inclusion for young children with disabilities: A quarter century of research perspectives. *Journal of Early Intervention*, 23 (4), 344-356.
- Olweus, D. (1992). Victimization by peers: Antecedents and long-term outcomes. In K. H. Rubin & J. B. Asendorpf (Eds.), *Social withdrawal, inhibition, and shyness in childhood* (pp. 315-341). Hillsdale, NJ: Erlbaum.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Malden, MA: Blackwell Publishing.
- Olweus, D. (1997). Bully/victim problems in school: Facts and intervention. *European Journal of Psychology of Education*, 12, 495-510.
- O'Moore, A.M. & Hillary, B. (1989). Bullying in Dublin schools. *Irish Journal of Psychology*, 10(3), 426–441.
- Orengul, A. C. (2013). *Dikkat eksikliği hiperaktivite bozukluğu tanısıyla izlenmekte olan çocuklarda akran örselemesi/zorbalık*. Yayınlanmamış tıpta uzmanlık tezi, İstanbul: Marmara Üniversitesi.
- Papoutsaki, K., Gena, G., & Kalyva, E. (2013). How do children with mild intellectual disabilities perceive loneliness? *Europe's Journal of Psychology*, 9(1), 1-7.

- Pavri, S., & Luftig, R. (2001). The social face of inclusive education: Are students with learning disabilities really included in the classroom? *Preventing School Failure*, 45, 8–14.
- Pavri, S. (2015). Loneliness: The cause or consequence of peer victimization in children and youth. *The Open Psychology Journal*, 8, 78-84.
- Pekel-Uludagli, N., & Ucanok, Z. (2005). Akran zorbalığı gruplarında yalnızlık ve akademik başarı ile sosyometrik statüye göre zorba/kurban davranışı türleri. *Türk Psikoloji Dergisi*, 20(56), 77-92.
- Pellegrini, A.D. (2002). Bullying, victimization, and sexual harassment during the transition to middle school. *Educational Psychologist*, 37, 151-163.
- Piskin, M. (1996). *Self-Esteem and locus of control of secondary school children both in England and Turkey*. Unpublished dissertation thesis, Leicester: University of Leicester.
- Piskin, M. (2003). *Okullarda yaygın bir sorun: akran zorbalığı*. VII. Ulusal Psikolojik Danışma ve Rehberlik Kongresi. Malatya: İnönü Üniversitesi.
- Piskin, M., & Ayas T. (2005). *Zorba ve kurban öğrencilerin utangaçlık, içedönüklük, dışa dönüklük ve öz saygı değişkenleri bakımından incelenmesi*. VIII. Ulusal Psikolojik Danışma ve Rehberlik Kongresi. İstanbul: Marmara Üniversitesi.
- Piskin, M. & Ayas, T. (2011). Akran zorbalığı ölçeği: Çocuk formu. *Akademik Bakış Dergisi*, 23, 1-12.
- Raskauskas, J. (2010). Multiple peer victimization among elementary school students: Relations with social-emotional problems. *Social Psychology of Education*, 13, 523-539.
- Reiss, A., & Roth, J.A. (Ed.) (1993). *Understanding and preventing violence*. Washington, DC: National Academy Press.
- Reiter, S., & Lapidot-Leffer, N. (2007). Bullying among special education students with intellectual disabilities: Differences in social adjustment and social skills. *Intellectual and Developmental Disabilities*, 3, 174-181.
- Rose, C. A., Monda-Amaya, L. E., & Espelage, D. L. (2011). Bullying perpetration and victimization in special education: A review of the literature. *Remedial and Special Education*, 32(2), 114-130.
- Sabornie, E. J. (1994). Social-affective characteristics in early adolescents identified as learning disabled and nondisabled. *Learning Disability Quarterly*, 17, 268–279.
- Sabornie, E. J., & Beard, G. H. (1990). Teaching social skills to students with mild handicaps. *Teaching Exceptional Children*, 23(1), 35-38.
- Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behavior*, 15(2), 112-120.
- Salmon, G., James, A., Cassidy, E. L., & Javaloyes, M. A. (2000). Bullying a review: presentations to an adolescent psychiatric service and within a school for emotionally and behaviorally disturbed children. *Clinical Child Psychology and Psychiatry*, 5, 563-579.
- Sentenac, M., Arnaud, C., Gavin, A., Molcho, M., Gabhainn, S.N., & Godeau, E. (2012). Peer victimization among school-aged children with chronic conditions. *Epidemiologic Reviews*, 34, 120-128.
- Singer, E. (2005). The strategies adopted by Dutch children with dyslexia to maintain their self-esteem when teased at school. *Journal of Learning Disabilities*, 38, 411-423.
- Snyder, M. (2005). What parents can do about childhood bullying. <http://www.schwablearning.org/articles.asp?r>
- Storch, E. A., & Masia-Warner, C. L. (2004). The relationship of peer victimization to social anxiety and loneliness in adolescent females. *Journal of Adolescence*, 27, 351–362.
- Sucuoglu, B., & Cifci, I. (2001). *Yapamıyor mu? Yapmıyor mu? Zihin engelli çocuklar için sosyal beceri öğretimi* [Can't or won't? Teaching social skills for children with intellectual disabilities]. Ankara, Turkey: Ankara Üniversitesi Basımevi.
- Sucuoglu, B., & Ozokcu, O. (2005). *Kaynaştırma öğrencilerinin sosyal becerilerinin değerlendirilmesi* [Examination of the social skills of inclusion students]. Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi, 6(1), 41–58.
- Underwood, M. K. (2003). *Social Aggression Among Girls*. New York: Guilford.
- Unnever, J.D., & Cornell, D.G. (2003). Bullying, self-control, and ADHD. *Journal of Interpersonal Violence*, 18(2), 129-147.
- Whitney, I., Smith, P.K., & Thompson, D. (1994). Bullying and children with special educational needs. In P. K. Smith ve S. Sharp (Eds.), *School Bullying: Insights and Perspectives* (pp.213-240). London: Routledge.
- Wiener, J., & Mak, M. (2009). Peer victimization in children with attention-deficit/hyperactivity disorder. *Psychology in the Schools*, 46, 116-131.
- Wolke, D., & Lereya, S. T. (2015). Long-term effects of bullying. *Archives of Disease in Childhood*, 100, 879-885.
- Yurtal, F., & Cenkseven, F. (2006). *İlköğretim okullarında zorbalığın incelenmesi*. 1. Şiddet ve Okul: Okul ve Çevresinde Çocuğa Yönelik Şiddet ve Alınabilecek Tedbirler Sempozyumu, İstanbul.
- Ziegler, S., & Rosenstein-Manner, M. (1991). *Bullying at School: Toronto in an International Context*. Research Services No. 196.

Perception Of Corporate Advertising As A Communication Vehicle, And Its Effect On Corporate Image: A Case Study

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Abstract

Corporate advertising, which is a type of communication activity that institutions carry out with the purpose of making themselves and their activities known and improving corporate image, is an advertising method that has long been used in the world but has started to be preferred in recent years in Turkey. The aim of this study is to reveal how corporate advertisements are perceived and whether corporate image is influenced by corporate advertisements or not, if it is, in what way it is influenced. In this context, first of all, the concept of corporate advertising was touched upon, its relation with the corporate image was tried to be revealed and a case analysis was conducted through Akbank's 70th anniversary advertisement. In order to measure the perception of the advertisement and its effect on corporate image, a pre-test application was carried out with 60 subjects via face-to-face questionnaires, then the corporate advertising film of Akbank was followed and post-test application was performed. The questionnaire consists of three parts: semi-structured questions, the 'Corporate Image Scale' adapted from the work of Kissel and Büttgen (2015) and demographic characteristics. The universe of the research consists of university students and the sample of the study is Selçuk University, Silifke-Taşucu Vocational School and Tourist Guidance Program students. At the end of the study, a positive interaction between corporate advertising and corporate image has been observed.

Keywords: Corporate Advertising, Corporate Image, Communication

Introduction

There is a rapid change in many areas of life, and it is impossible for companies not to be affected by the progress of technology and globalization. While giving great opportunities to institutions in the financial sector, developing technology also aggravates the competition among themselves from the other side. For a consumer, the probability that any product can be found in another competitor company is much more possible today than it was in the past, and the products have begun to resemble each other. Competition has moved beyond elements such as trust, speed and economy. Recently, economic crises in global and local scale have further refined the attitudes of consumers to banks. At this point, the corporate identities of the banks and the attitudes of consumers have become an important element of competition. In other words, how a bank is perceived in the context of customer preference has become even more important. For this reason, it is necessary for businesses to go beyond the structure of producing and marketing goods and services by approaching the target mass and establishing a rational and even emotional connection with them. One of the factors that determine how a bank is perceived is, of course, ads that are part of direct communication. Advertising, which enables companies to communicate directly with the consumer and has become a powerful marketing tool for the last century, is a powerful tool used to positively influence the customer's view. In the advertisements of the banks, they are aiming to draw attention, to show the advantageous and superior sides of the institution, to give confidence and to create a good image (Demir and et al, 2013). Becoming increasingly more important, corporate advertising is one of the most suitable tools for this. Every business benefits from corporate advertisements as a means of communication to communicate the elements of corporate identity to the target audience, to make it easier to keep in mind, to create a positive image for corporate and thus to make itself preferred on the market. Corporate's philosophy, corporate behavior and corporate culture information reach the target audience through corporate advertisements.

The aim of this study is to reveal how corporate advertisements are perceived and whether corporate image is influenced by corporate advertisements or not; if it is, in what way it is influenced. In this context, first of all, the concept of corporate advertising was touched upon, its relation with the corporate image was tried to be revealed and a case analysis was conducted through Akbank's 70th anniversary advertisement.

Corporate Advertising

Corporate advertising, which is confronted as "corporate advertising" or "institutional advertising" in different sources, can be defined;

-as the use of paid media, which is trying to benefit the image of the organization itself instead of its products and services(Okay,2016:344).

- also be described as a method of public relations that affects the reputation of institutions and distinguishes institutions from others in the target audience.

The purpose of corporate advertising is to contribute to the reputation and image of businesses rather than to advertise a specific product or service (Peltekoğlu, 2010: 18). Within advertising, Romaniuk and Nicholls (2006:179) emphasize that one of the key objectives of advertising is to influence the perceptions consumers hold about a brand in their memory .

In the study of Patti and McDonald (1985:45), which was conducted with mailing, 232 usable questionnaires, it was stated that 'image' and 'identity' advertising are the two most popular terms used to identify corporate advertising. This is due to the image-oriented nature of corporate advertising, which reflects corporate identity. The corporate identity and corporate image have always been important in the communication strategies of organizations.

On a general level, Webster's New Universal Unabridged Dictionary (1983, 907) defines image as: (a) A mental picture of something; conception; idea; impression,

(b) A concept of a person, product, institution etc. held by the general public, often one deliberately created or modified by publicity, advertising etc. (Webster's New Universal Unabridged Dictionary 1983, 907).

Institutional image is intellectual images in people's minds about various organizations. The organization's image was described as developing from an image construction process where audience members utilize any and all information they can access from advertising, the organization's buildings to passing conversations with acquaintances (Williams and Moffitt,1997).

Another important concept in the context of the image is the identity of the institution. The corporate identity defined as the path that a corporate chooses to express itself to the world has a wide list of elements ranging from institution's philosophy to visual elements such as logos and symbols (Brassington & Pettitt,2003:810). For banks, visual identity covers the areas of corporate print, including promotional material, the logo and typeface, corporate advertising and bank branch design. Corporate advertising is of great importance in terms of understanding the identity of the institution.

The concept of corporate identity has undergone a major change from the First World War to the present day. The first institutional advertisements are considered to have been made in the United States in the 1920s (Herbert, 1987, 2). Industrialization and the serious crises that have taken place have led to the need for public relations so that the institutions can get a good place in the eyes of the public, which led to the birth of corporate advertising. Corporate advertising has developed as one of the tools of creating image(Yücel, 2017: 46). Institutional advertising aiming to transfer corporate values is important for corporations as a form of convincing communication, and many companies resort to corporate advertising, although it doesn't cause a direct yield.

Bank provide array of services for the customers. It is hence necessary, to communicate information about these service, their benefit and new features a customer considering the financial aspect of the banking services, bank also have to build up an image of respect ability and viability through corporate advertising .

When confidence reposed in banks the customers would be better disposed to have dealings with them. Hence a bank has to constantly inform its customers. (Present and potential) about its services and about itself in order to build an image.

Akbank In Brief

Akbank was founded as a privately-owned commercial bank in Adana on January 30, 1948. Established originally with the core objective of providing funding to local cotton growers, the bank opened its first branch in the Sirkeci district of Istanbul on July 14, 1950. With a strong and extensive domestic distribution network of 800 branches and more than 14 thousand employees, Akbank operates from its Head Office in Istanbul and 22 regional directorates across Turkey. Akbank also serves more than 16.5 million customers through the Akbank Direkt Internet Branches, Akbank Direkt Mobile, the Call Center, 4,400 ATMs and more than 510 thousand POS terminals as well as other hightech channels. A digital banking pioneer in Turkey, Akbank gathered all its efforts in this flourishing area under the roof of Akbank Direkt. In a world with fast advances in technology and increasingly demanding customers, Akbank Direkt strives to satisfy client needs without time or physical location limitations while pioneering technological innovations in both the sector and in Turkey. Widely known for anticipating changes in trends and customer dynamics to develop new products and channels for meeting the individual financial needs of clients, Akbank has introduced many innovations to the Turkish banking industry. Committed to creating sustainable value for Turkey's economy, Akbank expanded its total loan portfolio to TL 209 billion (<https://www.akbank.com/en-us/investor-relations/Pages/Akbank-In-Brief.aspx>).

Methodology

In order to measure the perception of the advertisement and its effect on corporate image, a pre-test application was carried out with 60 subjects via face-to-face questionnaires, then the corporate advertising film of Akbank

was followed and post-test application was performed. The questionnaire consists of three parts: semi-structured questions adapted from Yücel's study (2017), the 'Corporate Image Scale' adapted from the work of Kissel and Büttgen (2015) and demographic characteristics. The universe of the research consists of university students and the sample of the study is Selçuk University, Silifke-Taşucu Vocational School ,Tourist Guiding Program students.

Corporate Advertisement Of Akbank



Findings

1.Demographic Information

Table 1: Demographic Information

age			gender			residence			
Frequency		Percent	Frequency		Percent	Frequency		Percent	
16-25	48	80,0	female	26	43,3	Valid	city center	21	35,0
26-35	12	20,0	male	34	56,7		subcity	32	53,3
Total	60	100,0	Total	60	100,0		village	7	11,7
							Total	60	100,0

It is seen that 80% of participant was between 16-25 years old and just 12 of hem were older than 25. Also, there seem a balance in terms of gender.

2.Account Information

We asked to participants if they had Akbank account or not, and they said ;

Table 2: Account Information

HavethebanksAccount

	Frequency	Percent	Valid Percent
YES	6	10,0	10,0
NO	54	90,0	90,0
Total	60	100,0	100,0

Then they were asked why they didn't have account the answerd were as following.

		why	
		Frequency	Percent
Valid	I DIDN'T NEED	14	23,3
	I DONT PREFER	37	61,7
	I HAVE ANOTHER BANK'S ACCOUNT	3	5,0
	TO SAVE MONEY	1	1,7
	PRESTIGE OF THE BANK	1	1,7
	Total	56	93,3
Missing	System	4	6,7
Total		60	100,0

3. Difference Between Pretest And Posttest

Pretest

Posttest

Table 3: Definition

define			Redefine		
	Frequency	Percent		Frequency	Percent
IT BRINGS IN	1	1,7	supportive	15	25,0
MONEY LENDER	3	5,0	Reliable	10	16,7
INNOVATIVE	4	6,7	art lover	5	8,3
PURE	4	6,7	stable	10	16,7
RELIABLE	16	26,7	adequate	5	8,3
STABLE	8	13,3	innovative	5	8,3
POWERFUL	5	8,3	patriotic	10	16,7
ESTABLISHED BANK	5	8,3	Total	60	100,0
MONEY LOVER	7	11,7			
I DONT HAVE INFORMATION ON IT	7	11,7			
Total	60	100,0			

Participants were asked to define Akbank with a word before watching advertisement and most of them said it is reliable bank. After watching the ad, participants redefined the bank as stable, reliable and supportive.

4. Results About Advertisement

Did you like the ad?				most liked		
	Frequency	Percent	Valid Percent		Frequency	Percent
YES	60	100,0	100,0	scene	20	33,3
				message	5	8,3
				narration	10	16,7
				music	25	41,7
				Total	60	100,0

According to results all of the participants liked the ad and they said music is the most remarkable dimension of the ad.

When participants were asked what the most remarkable thing was in the ad, they said it touches upon the sensitivities of society. Another question was ; What impressions and emotions did this ad inspire in you? The answer which was given most was unity and solidarity.

the most remarkable thing			impression / emotion		
	Frequency	Percent		Frequency	Percent
touches upon the sensitivities of the country	15	25,0	stability	5	8,3
appeals to many segments of society	10	16,7	enthusiasm	10	16,7
Teacher and children painting school	15	25,0	sensitiveness	15	25,0
Flag	10	16,7	unity and solidarity	20	33,3
Its exiting in the every corner of the country	5	8,3	charitableness	5	8,3
the man walking on the snow	5	8,3	reliability	5	8,3
Total	60	100,0	Total	60	100,0

5. The Most Remarkable Scenes Of The Ad



6. Main Message Of The Advertisement

Main Message of the Ad

	Frequency	Percent
support for working people	5	8,3
Achievements from past to present	5	8,3
The aim of the bank is to support the country in every field	5	8,3
70th anniversary celebration	20	33,3
Introduce yourself	5	8,3
To say that it is a well-established bank	15	25,0
This bank serves beyond traditional banking	5	8,3
Total	60	100,0

20 people said '70th anniversary celebration' was main message, and yes, it is main purpose of the ad. So, we can say that we got very reflective and right results. Another remarkable item is 'To say that it is well-established bank' with 15 participants. Other statements shows equal distribution. It is clear that the ad is prospering as it transmitted messages successfully.

7. Distribution of Factors

Distribution of Factors**Eigen Values, Variances & Factor Weights**

Distribution of Factors	6,623	3,481	2,178	1,957
	36,79%	19,33%	12,10%	10,87%
	Factor 1	Factor 2	Factor 3	Factor 4
I trust this company. 1	1,896			
I admire this company.1	1,738			
I respect this company.1	1,542			
I have a good feeling about this company.1	1,447			
Develops innovative products and services.2		0,851		
Offers products and services that are good value for money.2		0,824		
Stands behind its products and services.2		0,781		
Offers high quality products and services.2		0,547		
Has an excellent reputation due to its products and services.2		0,478		
Has a strong record of profitability.3			0,631	
Tends to outperform its competitors.3			0,402	
Has a clear vision for its future.3			0,345	
Recognizes and takes advantage of market opportunities.3			0,283	
Is financially stable. 3			0,265	
Has excellent leadership.3			0,252	
Is an environmentally responsible company.4				0,834
Supports environmentally friendly projects.4				0,794
Maintains high standards in the way it treats people and nature.4				0,328
Total Factor Ratio Explained	79,09%			
Kaiser-Meyer-Olkin	0,651			
Bartlett	(df. 561; p< 0.001)			
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				

1: The emotional 2: strategic 3: product 4: sustainable image facets

We used the 'Corporate Image Scale' adapted from the study of Kissel and Büttgen (2015) and our study confirmed their corporate image dimensions as follows:

- 1: The emotional
- 2: strategic
- 3: product
- 4: sustainable image facets

8.Descriptive Statistics of Advertisement

Pretest

Posttest

Descriptive Statistics				Descriptive Statistics			
	N	Sum	Mean		N	Sum	Mean
I have a good feeling about this company.	60	195,00	3,2500	I have a good feeling about this company.	60	270,00	4,5000
I trust this company.	60	188,00	3,1333	I trust this company.	60	250,00	4,1667
I admire this company.	60	152,00	2,5333	I admire this company.	60	205,00	3,4167
I respect this company.	60	198,00	3,3000	I respect this company.	60	275,00	4,5833
Offers high quality products and services.	60	206,00	3,4333	Offers high quality products and services.	60	250,00	4,1667
Develops innovative products and services.	60	188,00	3,1333	Develops innovative products and services.	60	260,00	4,3333
Has an excellent reputation due to its products and services.	60	179,00	2,9833	Has an excellent reputation due to its products and services.	60	225,00	3,7500
Stands behind its products and services.	60	211,00	3,5167	Stands behind its products and services.	60	225,00	3,7500
Offers products and services that are good value for money.	60	218,00	3,6333	Offers products and services that are good value for money.	60	260,00	4,3333
Has excellent leadership.	60	191,00	3,1833	Has excellent leadership.	60	270,00	4,5000
Has a clear vision for its future.	60	217,00	3,6167	Has a clear vision for its future.	60	265,00	4,4167
Recognizes and takes advantage of market opportunities.	60	199,00	3,3167	Recognizes and takes advantage of market opportunities.	60	265,00	4,4167
Is financially stable.	60	206,00	3,4333	Is financially stable.	60	280,00	4,6667
Has a strong record of profitability.	60	201,00	3,3500	Has a strong record of profitability.	60	245,00	4,0833
Tends to outperform its competitors	60	183,00	3,0500	Tends to outperform its competitors	60	270,00	4,5000
Is an environmentally responsible company.	60	187,00	3,1167	Is an environmentally responsible company.	60	235,00	3,9167
Maintains high standards in the way it treats people and nature.	60	225,00	3,7500	Maintains high standards in the way it treats people and nature.	60	250,00	4,1667
Supports environmentally friendly projects.	60	205,00	3,4167	Supports environmentally friendly projects.	60	235,00	3,9167
Valid N (listwise)	60			Valid N (listwise)	60		

Average image value is 3,28.

Average image value is 4,19.

In last two tables ,we see variables affecting corporate image and mean scores for the factors that are formed by variables. Interpretation of the arithmetic meanings of the findings obtained in the study is based on the following intervals (Özdamar, 2003):

$1,00 \leq \text{arithmetic mean} \leq 2,60$: Low

$2,60 < \text{arithmetic mean} \leq 3,40$: Medium

$3,40 < \text{arithmetic mean} \leq 5,00$: High

According to average scores, it is clear that scores of all variables increased. Also, while corporate image perception was medium (3,28) before watching the advertisement, it rises up to 4,19 which is accepted as high value.

Conclusion

Briefly, banks ,like all other corporates, benefit from corporate advertising in order to develop positive corporate image. In the light of obtained data, it is clear that Akbank's 70th anniversary advertisement is very successful.

The messages intended to be delivered with the advertisement have been successfully transmitted to the target group and the desired perception has been provided to the target group.

Lastly and mainly, corporate advertising has a positive effect on corporate image when it is performed in a right way.

References

- Bakan, Ö. (2005). Kurumsal İmaj, Tablet Yayınları, Konya.
- Brassington, F. & Pettitt, S. (2003) Principles of Marketing, London: Pearson Education.
- Canöz, N. (2016). Kurumsal Reklamcılık. Konya: Palet Yayınları.
- Demir, Y., Eroğlu, A. & Bayraktar, S. (2013). "Bankaların Kurumsal Reklam Uygulamalarının Kurum İmajına Etkisi", Trakya Üniversitesi İktisadi ve İdari Bilimler Fakültesi E-Dergi, Volume 2 , Number 1, Pages (1-25).
- Dowling, G. R. (1986). "Managing your corporate images. Industrial Marketing Management", 15, 109–115.
- Elden, M. & Yeygel, S. (2006). Kurumsal Reklamın Anlattıkları. İstanbul: Beta
- Ennew, C., Watkins, T & Wright, M (1995) Marketing Financial Services, Second Edition, https://books.google.com.tr/books?id=PUNyWl_vRFUC&pg=PA343&lpg=PA343&dq=corporate+advertising+bank&source=bl&ots=beZaZXp-Kp&sig=2xOG7iPIPLYeyf15j_QptpzDzX8&hl=tr&sa=X&ved=0ahUKewiLuuDV7ZvcAhWwiaYKHe4AC-k4ChDoAQhCMAU#v=onepage&q=corporate%20advertising&f=false
- Frances Brassington, Stephan Pettitt, (2003) Principles of Marketing, London: Pearson Education, s.810.
- Herbert, N. (1987). L'entreprise et son image. Paris: Dunod.
- Meral, P. (2008). "Bankacılık Sektöründe Kurumsal Reklam Uygulamaları: Hsbc Ve Türkiye İş Bankası Örneği", Kadir Has Üniversitesi, Sosyal Bilimler Dergisi, Number 20, pages, 77-94.
- Okay, Ayla (2013) Kurum Kimliği, Derin Yayınları.
- Okay, A. & Okay, A. (2016). Halkla İlişkiler: Kavram, Strateji ve Uygulamaları. İstanbul: Der Yayınları.

- Patti, Charles H. and John P. McDonald (1985), "Corporate Advertising: Process, Practices, and Perspectives," *Journal of Advertising*, 14 (1), 42-49.
- Peltekoğlu, F. (2010). *Kavram ve Kuramlarıyla Reklam*. İstanbul: Beta Yayınları.
- Romaniuk, J. and E. Nicholls (2006). "Evaluating advertising effects on brand perceptions: incorporating prior knowledge." *International Journal of Market Research* 48(2): 179-192.
- Williams, S.L. and Moffitt, M. (1997), "Corporate image as an impression formation process: prioritizing personal, organizational, and environmental audience factors", *Journal of Public Relations Research*, Vol. 9 No. 4, pp. 237-58.
- Yücel, H. (2017). "Kurumsal Reklamcılık Algılamasına Yönelik Bir Araştırma: Ziraat Bankası Örneği", *Erciyes İletişim Dergisi*, Cilt (Volume): 5, Sayı (Number): 2, (44-59).
- <https://www.akbank.com/en-us/investor-relations/Pages/Akbank-In-Brief.aspx>

Perceptions Of Academic Staff And Teachers About The Utility And Contribution Of Educational Technology

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Abstract

This study investigated the current state of instructional technology utilization and contribution to education in higher education and K-12 schools in Cyprus and Turkey. The study intended to reveal perceptions of teachers and academic staff about technology utilization and contribution. The participants of the study constitutes 200 teachers and academic staff from different departments. A questionnaire was prepared and sent to the participants via the Internet and e-mail. The items of the questionnaire were answered by the respondents online from their mobile phones, tablets or computers. The results of the study will be analyzed to find out the differences in the perceptions of academic staff and teachers about the utility and contribution of classical and modern educational technology.

Performance Management In Higher Education: A Reflexive Approach To Heads Of Department's As Accountable For Academics' Performance

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Abstract

Performance management in higher education has been critiqued for enabling the encroachment of neoliberalism in public institutions, producing high performance expectations and surveillance practices that subjugate academics and managers. Caught up in the romanticism of leadership as a “solution to all ills” and hoping to mediate undesirable effects on performance management, I was moved to explore a different and appropriate academic HODs’ leadership for performance management. However, following a reflexive breakdown, seeing the blind spot in my study’s assumption that critical leadership is necessary to change academics’ performance conditions, I questioned the rationality of seeking it when HODs are barely doing the leading. This suggests the possibility of seeking alternative modes of organising (management, power, autonomy, peer influencing) that HODs are using or could undertake in universities within the confines of their contextually embedded roles.

Keywords: *Critical leadership, reflexive leadership, performance management, heads of department*

Introduction

Following the growing and rationalised encroachment of neoliberalism in higher education (HE), accountability mechanisms such as quality assurance and performance management (PM) are gaining ground. These mechanisms are necessary tools to foster a performative culture that responds to globalisation, national mandates, competition, diminishing resources and technological advances (Johnson, 2002). However, observations and literature point to PM as a problematic process that is rather a surveillance tool, policing academics as well as threatening education quality (Clarke & Knights, 2015). At the same time, the monetary rewards related to performance excellence are “not worth the sweat” (Seyama & Smith, 2015). In its attempt to enable alignment of institutional performance goals, PM effects a disciplinary power, subjugating HE managers and academics (Ball, 2015).

Scholars have raised strong objections against the seeming compliance and complicitness of academics in their own subjugation (Alvesson & Spicer, 2016; Ball, 2015; Clarke & Knights, 2015). Despite the risk of subjugated academics failing to fulfil their role of conscientising students and facilitating their growth as critical active citizens, there is evidence that academics do not resist repressive and subjugating PM practices.

As middle managers, academic heads of department (HODs, directors, chairpersons) are central to the implementation of PM in universities. Positioned as custodians of institutional vision and strategic goals, their role is to ensure that senior management’s (deans) performance targets filter down the hierarchy. However, as important as their HOD’s role is, it is difficult and ambiguous. They are confronted with divergent expectations from senior management and academics respectively (Cilliers & Pienaar, 2014). On the one-hand, senior management demands specific and higher performance targets and on the other hand, academics want HODs to create an amenable environment for them to achieve academic success and to protect them against unrealistic performance demands (Seyama & Smith, 2016).

In the light of HE’s increasing challenges and HODs’ changing roles, university senior managers and leadership scholars are explicit about the need for HODs to be leaders that transcend traditional managerial and administrative roles (Jones, 2011). Taylor and Machado (2006) observe that, “the complementary roles of leaders and managers with necessary planning expertise may provide the most productive higher education environment for advancement and progress” (p. 139).

Against this background, I was seduced by the idea of leadership as a “solution to all ills” (Meindl, 1995) and I embarked on a journey to explore a different and more appropriate leadership for PM, namely, critical leadership. I undertook a critical socio-constructionist case study with 25 HODs and academics to examine how SA universities’ academic HODs lead staff PM and why their leadership has come to take the form it has. In view of mainstream leadership studies’ neglect of leadership power dynamics in organisations (Collinson, 2011), critical leadership seemed a relevant approach to deconstruct power asymmetries dominating PM relations in universities. However, following a reflexive breakdown where I saw the blind spot in my study’s assumption that critical leadership is necessary to change academics’ repressive performance conditions, I had to regroup and dig deeper into my thinking about leadership.

With most HODs and academics reporting that HODs do not engage in leadership, I questioned the rationality of arguing for critical leadership when HODs are barely doing any leading.

Alvesson, Blom and Sveningsson's (2016) contend that amidst much talk and research about leadership, the act of leading tends to disappear in the organisational performance milieu. I argue in this paper that it is fallacious and limiting to focus only on leadership even if it is an important aspect of an organisation. This involved identifying alternative modes of organising that HODs use or can use within the confines of their contextually embedded roles. Hopefully, such modes can transform the current neoliberal performative context in universities and result in a non-subjecting PM.

I present critical meanings of leadership and the empirical evidence, both of which caution us against focusing only on HODs' leadership to address the problematic of PM in order to create less repressive working conditions for academics. Thus, in this paper, I analyse the dichotomous role of HODs and offer meanings of critical leadership and reflexive leadership approaches. I then present participants' views on HODs' leadership in the light of my re-interpretation of my data that offers a 'fresher' and more cautious perspective. Finally, I conclude with the meanings of leadership within academic institutions, followed by implications of my study for future research.

Context

I admit that I am guilty as charged for succumbing to the romanticism of leadership (Meindl, Ehrlich & Dukerich, 1985) when thinking of a possible solution to PM challenges in universities. Alvesson and Spicer (2014) clarify the reason for such a trap:

In many instances, embracing the idea of leadership does not involve any significant change to practice but merely indicates an interest in relabeling managerial work as "leadership" to make it sound more fashionable and impressive. The term *leadership* is seductive, has a strong rhetorical appeal, and is therefore heavily overused. (p. 40)

Learmonth and Morrell (2017) are also troubled by critical leadership scholars' display of leadership romanticism in their "*a priori*" use of the terms leadership or leader-follower dualism instead of management or manager-worker to refer to hierarchical distinctions in organisations. They argue that this threatens to weaken critical leadership studies' (CLS) position in confronting hegemonic power relations in organisations. Alvesson et al. (2016) also contend that the dominance of leadership discourse entangles researchers in a pigeon paradigm mode; consequently:

Nuances involved in the efforts to revise "leadership" are easily lost as the major framing reinforces an understanding that the alternatives to leadership is leadership, not peer relations, professionalism, autonomy, co-workership, organizing processes, or mutual adjustment offering alternative framings and understanding than what the leadership vocabulary invites. (p. 265)

As PM is a fairly 'new' practice in SA universities, the overwhelming empirical evidence that alludes to implementation complexities (Ngcamu, 2013; Seyama, 2013; Seyama & Smith, 2015) meant that I needed to be creative in the way I searched for a 'solution'. It was important that such a solution be sufficiently persuasive to get a buy-in from 'powerful' university stakeholders. Hence, perhaps, my ideological commitment to leadership. Following my earlier study, where academics argued strongly about HODs' lack of positional authority and competence to effect meaningful PM, I embarked on critical socio-constructivism study in search of critical leadership. I deduced that the first point of departure in conceptualising an emancipatory leadership of PM is an understanding of how power constitutes academic neoliberal subjectivities and its ramifications for academic activities. This would then provide the basis for academics and HODs to construct critical leadership perspectives of PM as an emancipatory project.

Early in my study, having interviewed almost half of the selected participants, I observed the seeming absence of critical leadership perspectives among HODs in their engagement with PM in their university. However, I understood this merely to be a limitation of critical leadership perspectives due to the academics being ready followers and willing to comply. And that HODs were still caught up in mainstream leadership thinking or post heroic leadership. These HODs did not provide the rich empirical material on possible critical leadership perspectives that I was probing and that some activist HODs were surely enacting. I even wrote a conference paper focusing on PM as a panoptic and governmentality practice, that subjugates academic and HODs' agency and that creates intellectually repressive conditions in educational spaces. In my discussion and conclusion I lamented HODs absent critical leadership perspectives. At one conference presentation, the renowned Professor Phillip Hallinger asked me if I knew why there

was no critical leadership. I did not know what to say. In fact, I was confused. I thought I had missed an important step in my study. However, he pointed out that it was because HODs, and academics in general, do not have the courage to do it or are afraid of reprisals for critiquing the system or going against the grain.

I continued with my study as planned. I recruited participant academics and HODs who are perceived to be activists, critical of neoliberal inflections in their university. Of course, they were in the minority. Since my assumptions for my study were founded on academics and HODs subjugation, I justified the absence of critical perspectives as an absence of critical leadership, which ideally should mediate against untenable performance conditions. The question then is, had I not initially searched for leadership, would I have understood my data differently and understood why both academics and HODs were evidently hesitant to refer to HODs' roles as those of leadership? Would I have recognised that I had boxed myself into 'leadership' spaces where the probability is very high that there are no answers or the answers are band-aid solutions?

Role Of Academic Heads Of Department

By its very nature, the department chairship is a series of interruptions and interactions with many people at multiple levels of the institution. (Wolverton, Ackerman & Holt, 2005, p. 229)

Wolverton et al. (2005) point out that an HODs' role is multifaceted, requires incumbents to interact with people at all levels in a university and is characterised by unclear and conflicting expectations of managerial vs. leadership roles (Cilliers & Pienaar, 2014). This plethora of roles means that the place of middle managers in HE is murky, resulting in it being difficult for HODs to fulfill the expectations of their role (Clegg & McAuley, 2005). While HODs as middle managers in universities are vital to the function of a university, their position is still vague (Nguyen, 2013). Essentially, academic middle managers are perceived to be intermediaries between senior managers and academics. They are expected to communicate university decisions to the personnel below them and at the same time ease tensions that could emanate from those decisions (Gleeson & Shain, 1999).

It is difficult to provide a comprehensive list of HODs' roles, duties and accountabilities (Nguyen, 2013), particularly with the growing calls for HODs to fulfil the leadership role necessitated by the current difficult context of HE. HODs are now required to employ managerial leadership, which is a "leadership exercised by people holding a managerial (appointed or elected, but formally superior) position, targeting formal subordinates" (Blom & Alvesson, 2014, p. 1). For instance, Rowley (1997) argues that HODs' leadership of academic work primarily involves managing the achievement of institutional strategic goals, thrusts and targets in the realm of teaching, research and community service, as these are regarded as the key pillars of HE. HODs have to "combine routine maintenance, long-term planning and performance review with encouragement for department growth, development and collaboration" (Middlehurst, 1993, p. 134). Consequently, their roles are diverse and determined mainly by their institutional contexts, especially how their universities respond to national and global forces as informed by the omnipresent neoliberal ideology (Johnson, 2002). To clarify the complex and dual nature of HODs' roles, Prichard (2000) distinguishes between two types of 'knowledge', namely, management and professional knowledge, which underpin HODs' roles:

Management knowledge - seeks to constitute the department as strategically focused, customer orientated, excellent in teaching and research and effectively managed. 'Professional Knowledge' – seeks to constitute departments as student-centred, teaching and/or research focused, collegially organised and possibly politically active. (p. 28-29)

This conceptualisation demonstrates the tenuous position of HODs in steering their departments. These knowledges can be seen as the essence of the role conflicts that HODs experience. An HOD's role is also determined by how individual HODs conceive of themselves in terms of their, "specific research groups, their sub-disciplines, or their area of professional expertise, which influences the roles they emphasise for themselves" (Bolden, Gosling, O'Brien, Peters, Ryan & Haslam, 2012, p. 5). Knight and Trowler (2001) posit that the following six aspects within a 'given framework' constructed by a university determine HODs' engagement with their positional roles:

Firstly, the nature of the activity as defined by the participants; secondly, the community of practice in which they operate; thirdly, the identity of the individual which is likely to be multiple, dynamic and situational contingent; fourthly, the meaning attributed to the role; fifthly, the discourse in which they operate; and finally, the technology available which will affect practice. (p. 49)

Nguyen (2013) observes that:

The Western-focused studies found six generic groups of duties of middle-level academic managers. These broad categories of tasks are department governance (mission, goals, policies, climate), programme management (tuition, research, service), human resource management, budget and resources, external communication and office management (supervision). (p. 2)

While the above responsibilities show that an HODs' role encompasses both management and leadership, the administrative role takes priority. HODs are accountable for operations, policy implementation and quality, and by default become burdened with administration (London, 2011). Research has shown that most HODs spend more than 50% of their time tackling ever-increasing administrative tasks (Nguyen, 2013); their leadership role is increasingly minimised (London, 2011; Murphy & Curtis, 2013). Having to juggle academic and management responsibilities makes an HOD's role particularly complex.

In this study, I recognise the duality of HODs' managerial and leadership roles but, most importantly, I acknowledge the inevitable call for HODs' leadership. However, leadership is a fundamentally contested notion (Grint, 2005). Varied opinions have been put forth about the meaning of leadership in HE, especially as HODs have not traditionally been regarded as leaders. As "reference to leadership inevitably raises the specter of the managerial role of HODs" (Jones, 2011, p. 280), academic dialogue and literature on HODs' leadership positions have become robust, provoking questions on what these leadership positions are or what they ought to be. Collinson's (2014) position on dialectical thinking could point us in the right direction when researching the role of HODs, as the above dichotomisation in roles overlooks the difficult leadership dynamics and their interconnectedness with management.

Critical Leadership: A Reflexive Approach

Critical leadership offers alternative leadership perspectives that aim to critically examine the normalised leadership power asymmetries in organisations. As a move from mainstream leadership studies (MLS), "critical leadership studies (CLS) explicitly recognize that, for good and/or ill, leaders and leadership dynamics (defined here as the shifting, asymmetrical interrelations between leaders, followers and contexts) also exercise significant power and influence over contemporary organizational and societal processes" (Collinson, 2011, p. 181). Critical leadership disentangles leadership's understanding or meaning from concise, constant and objective definitions or descriptions to a more adaptable social organisational practice that is given meaning by those experiencing it, within a particular setting and under specific circumstances. Critical leadership focuses on non leader-centric notions of leadership, acknowledging follower agency and its influence on enabling or disabling leadership (Collinson, 2011). CLS critiques the romanticism of leadership, which gives it cult-like status as the only mode of organising that can solve all organisational problems (Meindl et al., 1985). It cautions one against the liberal and popular use of leadership at the expense of management (Collinson, 2014). According to Alvesson et al. (2016):

Sometimes leadership may be central, but so might management, the use of power and less hierarchical modes of organizing, including people being supported by teams, autonomy and professional networks rather than a leader. All this may be indirectly influenced by leadership that is, for example, focused on developing teams or encouraging people to use a broad set of contacts, but various modes of organizing often grow organically and are influenced by cultures, groups and individuals other than leaders. (p. 4)

A reflexive leadership approach within CLS reveals the shortcomings of leader-centric notions of leadership. In addition, reflexivity furthers these studies' objective by seeking to offer extant alternative organisational practices that also contribute to organisational performance. Alvesson and Kärreman (2016) suggest these as "peer relations, professionalism, autonomy, co-workership, organizing processes, or mutual adjustment" (p. 142). Guiding my re-thinking in seeking a solution for problematic and unfeasible PM practices in leadership is Alvesson and Kärreman's (2013) conception of reflexivity as "being about challenging different perspectives and vocabularies and avoiding being caught in a specific view or way of understanding phenomena, but seeing shortcomings and being open for alternatives" (p. 35). I am moving away from the tendency to accept unquestioningly theoretical assumptions founded on specific empirical contexts. In order to present my argument for a reflexive approach to leadership to interrogate PM in HE, I subscribe to Meindl et al.'s (1985) notion that "leadership is in the eye of the beholder" (p. 79). I critically examine leadership meanings, within their context of those being led. I therefore interrogate how academics as positional subordinates with the possibility of 'receiving' HODs' leadership construct and examine such leadership. From this perspective, we might gain an insight on their 'demand' for leadership (Blom & Alvesson, 2014). Opening

up HODs' leadership as a demanded leadership, positions academics as fundamental to granting or legitimising HODs' leadership, if they receive it (DeRue & Ashford, 2010). At the same time, academics can deligitimise HODs' leadership if they reject it (DeRue & Ashford, 2010). In this sense, leaders and followers engage in a leadership relationship out of their own volition as opposed to a managerial relationship where positional authority compels subordinates' compliance (Blom & Alvesson, 2018).

I am re-looking at my empirical material, which reveals academics and HODs' hesitation to refer to HODs' leadership, or their lack of capacity to lead because of the university's constraining environment. Yet, SU is reported to be one of the top performing universities' in SA. Academics are still performing despite the absence of HODs' influence, direction or guidance, which are typical of leadership. Arguably, in this setting, HODs leadership could be inconsequential. Therefore, I am re-reading my data to remove my blinkers and to see that leadership is not central to performance. Rather, I am searching for what *is* stimulating academics' performance.

In my study, I assumed that leadership is present in academic-HODs' dynamic even if it is minimal. The focus of my study's data interpretation was on how academics perceive HODs', as their line managers, leadership. Reflecting on this assumption in the light of my data, that is, absent HOD leadership, was fundamental to my assumption's breaking down. By adopting a reflexive approach, I have shifted from the conventional understanding of leadership that largely perceives it to be an all-encompassing organisational practice that is pivotal to all aspects of organisational functioning and success (Alvesson et al., 2016). This understanding that leadership always serves the best interests of the organisation, attributes such a powerful position to leadership that all other organisational practices are relegated to the background, if acknowledged at all (Alvesson et al., 2016). As a consequence:

...managers think that they need to exercise leadership and that a solution to many/most organizational problems is more/better/ different leadership. For formal subordinates, the reinforcement of leadership ideology may result in a lack of autonomy and initiative since leadership is supposed to be the source of visions, values, inspiration and meaning at work. (Blom & Alvesson, 2015, p. 486)

With leadership as the primary focus of analysis, opportunities to deepen our understanding of how organisations and people work outside of leadership, are lost. As noted above, this thinking creates conditions that enables leaders to uphold unequal power relations, thereby subjugating followers. As Wilson (2014) points out, "leadership has been repeatedly constructed as the necessary and appropriate response to the 'problem' of the follower, thereby contributing to the continuing prevalence of a leader-centric understanding of leadership" (p. 1). I take the position that leadership is more than a social construction or communicative process. I acknowledge the importance of authorising or granting the leader-follower dynamic in leadership, as espoused by Alvesson and Blom (2015) who state that "leadership is not follower-free, and followership seldom means blind obedience" (p. 272). Accordingly, leadership is also contingent upon followers' demand for it.

I am re-interpreting my data as I explore academics' views of HODs' role from a leadership perspective, that is, "understanding how managers become leaders in the eyes of their followers" (Chiu, Balkundi & Weinberg, 2017, p. 335). In keeping with social constructionists' position, leadership is not only the domain of positional managers, but also that of subordinates. Therefore, leadership is flexible. It emerges within the continuum of leader and followers, where there is "mutual influencing or switched roles over time" (Blom & Alvesson, 2015, p. 487). Also, depending on the situation, leaders lead from behind and followers follow from the front (Moore, 2012).

As leadership is relational (DeRue & Ashford, 2010), it is important to consider that "the nature of leader-follower relationships (either positive or negative) could affect how followers judge their manager thus influence their leadership perceptions" (Chiu et al., 2017, p. 335). A leadership relationship between managers and subordinates is perceived to benefit both parties in that "managers are more likely to have positive evaluations, build constructive relationships with followers, and access more resources, all of which benefit manager performance" (Lord & Maher, 1990 cited in Chiu et al., 2017, p. 336). Described as an influencing organisational mode or practice, leadership is therefore not dependent on the power of formal authority as is the case in the relationship between managers and subordinates (Blom & Alvesson, 2014).

In making leadership the focus of my study, I believe that I ended up being blind to, ignoring or disregarding other aspects of organisational work life that are already bubbling beneath the surface and that could inform one about what

makes the university successful in the dichotomous, autonomous-collegial and managerial-autocratic terrains. As Blom and Alvesson (2015) suggest:

Also ‘horizontal’ modes of organizing – peer influencing, teamwork and autonomy – may to some extent be an outcome of or dependent on leadership support (and thereby less horizontal). But even if leadership sometimes can be important for, and overlap, other modes of organizing, this does not motivate that leadership as a term is invoked so broadly so that it covers more or less all forms of organizing. (p. 488)

Methodology

I conducted the research using a qualitative case study method premised on a critical socio-constructionist paradigm (Hosking, 2008). The study focused on understanding participants’ attribution of meaning to the leadership of PM and, importantly, how their contexts influenced its implementation and impact on stakeholders. Data were collected from personal interviews with HODs and academics. The centrality of power dynamics in the process was interrogated. Participants responded to questions about their experience of PM at SU. Twenty-five 45-60 minutes interviews were conducted. With the participants’ approval, each interview was audio-recorded. All the interviews were transcribed verbatim. To ensure anonymity of participants, pseudonyms were used to represent participants’ voices.

My analysis of data followed an “exploratory analysis [which] is the classic content-driven, inductive approach that most people associate with qualitative research” (Guest, MacQueen & Namey, 2012, p. 49). Following an iterative process, I first coded and categorised my data. This included recognising, analysing and reporting patterns within the data (Saldaña, 2009). The content was then critically interpreted and reflected upon in relation to ideology, power and social reproduction using critical performativity tactics of affirmative care, progressive pragmatism and presenting potentialities (Alvesson & Spicer, 2012). This resulted in critical accounts of the HODs’ role in academics’ PM that uncovered the research participants’ attribution of meaning to leadership.

Findings

Heads Of Departments’ Leadership In The Eyes Of The Beholders (Academics)

While the aim of this study was to offer a critical reading of PM practices at a university in order to reveal extant critical leadership perspectives, dialogue with participants exposed a reluctant leader-follower dynamic between HODs and academics. Academics do not fit into the conventional conception of followers as willing and ready to be led. Empirical studies also suggest that leadership does not always exist within HOD-academics relations. Positioning academics’ perspectives outside leader-centric notions of leadership, the findings offer a critical reading of HODs’ managerial leadership at SU that suggests a fragile existence of leader-follower relations. Alternatively, if one takes Learmonth and Morrell’s (2017) caution against overuse of the term leadership, the HOD-academic relations are more manager-worker relations, which infers non-influential relations. Participants expressed a persistent view that points to a neoliberal managerialist approach in HE that result in HODs operating under some executive deans’ autocratic and instructive leadership. This compromises HODs’ influence and power standing perceptions among their subordinates. For this reason, academics are disinclined to accept HODs’ leadership. For Shane (academic):

You see, as I have indicated, I’m just getting a sense that HODs are not professionally empowered in terms of performance management. Because I was under the impression that...once you’ve agreed with your line manager, the dean has to just approve and send everything to the HR...But now it looks like the dean has no full confidence on HODs as line managers.

Jay (academic) also offered his observation of his HOD as someone under the dean’s power:

...most times she takes instructions from the dean that should have been interrogated first by HODs at their level as executive...before they come to us. But you can’t bring the idea to me...and I know it’s personal...and you tell me, no, because the dean has said it. Did you ask? No, the dean insisted we should do it.

Sandy (academic) alluded to the deans yielding power in more nuanced and probably unintended ways. However, it has the same silencing impact. She described her dean’s influence among the faculty’s HODs:

He being a... strong character, because I think that my line manager is a very strong person. You...learn also that there are bad things about being strong. Because that tends to...lend itself to...the perception that you might be domineering. So you tend to have an effect where people would actually suppress what they feel

because they are scared. Or, not scared. I think scared is...a bad word. I think sort of intimidated or sort of unsure because of how well versed or how well knowledgeable you are as a leader. So, I think for me that...is the one aspect of leadership that I will look at that maybe...that's not such a good thing...

Sandy's observation reflects Learmonth and Morrell's (2017) view that leadership can become a manipulative and controlling tool:

This is because the cultural valences associated with the language of leadership imply neither struggle between leader and follower nor anything else that might be particularly oppressive or oppositional. Rather, they suggest that the norm is friendly relations, and that a person's (i.e. a so-called follower's) primary allegiance is (or should be) to her leader – not solidarity with other workers. (p. 266)

Both participants place HODs in follower positions but agentially subordinated to their deans. This situation places HODs on a shaky ground for exercising leadership. In this respect, academics are evidently not inclined to grant HODs a leader identity or leadership role. HODs also alluded to the unhealthy hierarchy that stifles them from exercising leadership in managing staff's performance:

So, if you're working in an environment where you have very autocratic top management, you don't allow any room for thought or anything. We just do what you say. You'll then have people below that tend to treat the staff the same way, because they know it's futile to try something new or something different. (Carter, HOD)

PM consistency meetings, where final performance appraisal ratings are determined, appear to place a severe constraint on HODs' possibilities for leadership. At SU, the rating scale ranges between five and one, with five indicating exceptional performance and four excellent performance. These signal that employees' performance has attained more than the contracted performance targets. A rating of three indicates adequate performance, which signals achievement of the contracted targets. Ratings of two and one signal poor performance and non-performance respectively. Charles (HOD) and Noel (HOD) related their experiences of appraising their colleagues' performance at the end of the year. Their ratings were overruled at their faculties' consistency meetings directed by the deans. Noel (HOD) tried to approach the ratings realistically by taking into consideration the academics' context and the authenticity of their performance as opposed to seeking the 'high performer' who can play the game:

Here is a person who can't play the game but still managed to publish one article. So, when I rate them...I actually try to rate them higher. The issue now becomes...but then how am I going to justify that to the dean? The problem is always trying to justify. So I've consistently rated my staff higher than the dean approves. So, last year for instance, the dean did reduce the ratings for many in the department and generally across the faculty.

Charles found himself in a difficult position when he had to explain to a staff member the consistency meeting's decision to reverse a rating of four:

I mean, the worst for me...I gave a person a [rating of] four and it went to a [consistency] meeting and they felt that it wasn't a four. And that responsibility became mine to communicate back to the staff member. And I have a problem with that because that's not me that decided that. The dean should actually bring those staff members in and say, "unfortunately the committee felt that...wasn't a four. Your HOD defended it and unfortunately the committee overruled it". Because now it comes back to I've said yes...and that's not good for relationships. (Charles, HOD)

Rosemary (HOD) was similarly conflicted in having to relay the dean's message of a lowered rating:

Also feeling too bad to tell them that you haven't got quite there yet. Because I know they've worked really hard to get there. So then, it's easy to shift the blame then saying, "well, it was not awarded". Rather than saying, "you need to push so much more harder" because I really know they're working to their max [maximum].

Cameron (academic) made an insightful comment:

Now, I look at my remuneration for my performance appraisal...for now the HOD doesn't have a foot to stand on because the dean has overruled him. So the HOD comes back to me and says the dean said, "I have to give you a [rating of] two". What is that saying to my confidence in my line manager/HOD? So it's going to affect my performance next. So, that means I'm going to say to you, "I'll just do the bare minimum because I got a two". I'll just do a two because even if I do a five, if I do so much, the dean still got the ultimate decision-making power, which doesn't work with me. He doesn't see me perform. He was getting the processes and seeing a, b, c, d, but now the dean is subjective because you might have a run in with the dean.

In the examples reported above, HODs' PM decisions were overruled. This demonstrates how the PM process at SU negatively affects academics' confidence in their HODs. These examples show how HODs find themselves in an ambivalent position. On the one hand, they are obliged to follow their deans' instructions while on the other hand, HODs are aware that this undermines their colleagues' confidence in them. Managerialism holds sway in these circumstances. Any power that HODs may have is nullified. HODs are caught in a difficult situation. Their superiors in the hierarchy expect them to safeguard the university's interests, whilst at the same time their departmental academic staff expect their HODs to be their representatives and to shield them from executive power (Cilliers & Pienaar, 2014; Johnson, 2002). Academics' perceptions of the power that HODs can or cannot wield shapes or constructs their acceptance or rejection of HODs' leadership. In this study, participants perceive HODs to have limited power and therefore question their leadership. The research participants' experience suggests that HODs' positional authority is merely rhetorical (Middlehurst, 1993) and rests on a shaky ground. Although it is assumed that managers have more power than subordinates (Blom & Alvesson, 2018), which provides a premise from which managers can lead, in my study it appears that academics do not regard their HODs as being more influential than them. This closes the door on HODs' leadership.

Participants made little reference to leadership in their accounts of their experience of PM, except when I prodded. Even then, there was a hesitation in providing 'leadership' accounts. I ought to have understood this as an indication of HODs' negligible leadership practice. Alvesson and Sveningsson (2003) refer to the disappearance of leadership, although in my study, perhaps, it is a case of leadership in absentia. Academics recognise HODs as managers of their departments but that leadership is not an inherent outcome of their HOD's role. With increasing managerialism and complex challenges in HE, it is incumbent on HODs to exercise leadership (Bolden et al., 2012). Academics expect HODs to demonstrate leadership. However, that leadership seems to be largely contingent upon how HODs deal with PM. Academics' concerns point to a need for HODs' to exercise leadership by proactively intervening in or confronting PM issues, in relation to decisions about performance rewards in particular. This relates to Blom and Alvesson's (2013) notion of leadership on demand, where:

Demand indicates an interest in 'receiving' managerial leadership, i.e. taking a clear (but possibly temporal, conditional or situation-specific) followership position in relation to a formerly superior manager and viewing him/her as a leader, i.e. a significant source of meaning-making, support, and/or direction. (p. 1)

Typical of knowledge intensive organisations, where subordinates' work is driven autonomously (Alvesson & Sveningsson, 2003), academics in this study have preferences as to when and under what circumstances HODs should lead. So "the need and space for leadership is limited" (Alvesson & Sveningsson, 2003, p. 376). Leadership in this context is an unstable notion. It prompts questions such as, "who is regarded as being a leader, where leadership is seen to be done or needed, how leadership is thought to be done, and what exactly leadership is thought to be" (Alvesson & Spicer, 2012, p. 374).

Academics' perceptions that HODs' hierarchical authority is undermined by their deans' power reflects that HODs have been stripped of their formal leadership influence. Consequently, these academics do not recognise their HODs as leaders. In SU's constraining PM context, reported on by both academics and HODs, one would assume that power would be the focal point of contestation and that there would be an exploration of alternative modes of exercising power. Research could examine modes that enable the practice of freedom. For instance, formal hierarchical authority is not the only means through which HODs can enable their departments to function. They could explore their social or informal networks that give them social power (Chiu et al., 2017). It is patent here that "managers' influence and power helps followers see them as leaders or not" (Chiu et al., 2017, p. 335).

As Wilson (2014) suggests, "the positioning of followers is contingent on the assumptions made about both leaders

and followers” (p. 27). In positioning academics from a non-leader-centric perspective, “... we rethink followers as knowledgeable agents, we can begin to see them as proactive, self-aware and knowing subjects who have at their disposal a repertoire of possible agencies within the workplace” (Collinson, 2011, p. 185). The data reported above provide evidence of SU academics’ non-leadership assumptions about HODs. The academics are not willing followers and they have not relinquished their agency. Their positioning is not passive. They do not regard their HODs to be worthy of their followership. There is negligible evidence to support a vertical or top-down reading of HODs’ influence on academics. It is arguable then that there is no HOD leadership, let alone critical leadership. In the same vein, HODs also are not ready and willing leaders.

This finding aligns with the de-romantisation of leadership that de-emphasises leader-centric organisational relationships. These academics as followers prompt organisational modes beyond the traditional confines of leadership. While there is a distinction between positional authority and leadership, in this study the academics view authority as important to HODs’ leadership. It suggests that power is situated in positional authority. Collinson (2014) posits, “it is leaders who typically exercise considerable control over: scarce resources; decision making; structures, rules and regulations; formal communications; strategies and visions; corporate cultures; performance management; rewards and sanctions; and hiring and firing” (p. 37).

Conclusion

My aim in this paper was to problematise the conventional understanding of leadership as a necessary and all-encompassing organisation mode that is inherently good or worthy and superior to all other organising practices. Fundamental to this paper is my question: “Why did I look to leadership as a solution for PM problems at a university?” People in organisations and leadership scholars alike treat leadership as a priceless currency that is immune from economic fluctuations. To disturb its stability or enduring value is like disturbing a snake in its hole, that one will regret. Why would one risk causing such a disturbance? The discourse of leadership has had an overbearing and enduring influence on human relations in organisations and in society. Leadership is regarded as the premise upon which all organisational purposes, functions and activities are defined and given meaning. Over time, leadership has become deeply interwoven in all aspects of organisational thinking and practice. Unfortunately, this state of affairs has largely trapped us in a web of fallacies about the unquestionable need or value of leadership in organisations. We then fail to take into account the possibility of other ways or modes that effect organisational success or that prevent leadership failure.

An interrogation of academic HODs’ role in PM is not simply about leadership. As I argued earlier, HODs’ role in PM is a complex phenomenon and, depending on the context and identities of the parties in the PM process, other organising modes should be examined in understanding PM dynamics and, importantly, in making it a non-subjugating and amenable process. For the academics in the study, HOD leadership is not on demand. The data point to subjugated HODs with little or no influence over the academics in their departments. This points to the non-centrality of leadership in academics’ daily performance. Autonomy appears to be the precipitator of PM as a tool to achieve performance ‘outcomes’. In the context of my study, such a leadership demand is determined by or dependent on how HODs engage with PM from a non-subjugating or neoliberally dubious perspective. HODs’ leadership is good only insofar as they are conscious of academics’ limited need for leadership. This is due to academics’ performance being supported by their own autonomy and peer networking.

Further emphasised in the study is the distinction between management and leadership in HODs’ complex positions in universities. These are not always mutually exclusive, as is often inferred in how we talk about them. In these organisational spaces, the power dynamics among leaders and followers is unbounded, interchangeable and complex. The discussion also illuminates the need to interrogate HODs’ informal networks as possible sources of social power, since their hierarchical authority is diminished or annihilated even by the deans’ power.

The reflexive leadership approach adopted in this study highlights the limited role of leadership in the HOD-academic dynamic. It confirms academics as knowledgeable professionals, reliant on their own expertise or peers instead of leadership, which is often perceived to be a hindrance. Importantly, the reflexive approach provides opportunities to critically review multiple and diverse organising modes in the contemporary university. It offers an understanding of existing organising modes’ dichotomies and highlights their value in organisational life. However, a reflexive approach does not argue against the importance of leadership in university departments, save for taking heed that an exaggerated dependence on leadership can blind one to alternative work-organising practices. Leadership should not be a mode that is thrown at every work situation, as there is a place and time for leadership in knowledge intensive organisations such

as universities. Of particular importance is the positioning of HODs in the eyes of academics, where HODs' leadership becomes contingent on a situation.

In a context where leadership reflects followers' needs for independence, such leadership is the overarching mode under which other modes are enabled. It diverts us away from predominantly hierarchical descriptions of relations in organisations. It clarifies the distinction between vertical and horizontal hierarchy. In adopting a reflexive approach, I have examined a romanticised view of leadership, which constrains a critical understanding of how followers influence leadership. In the HOD-academic dynamic, I suggest that followership is an important variable in understanding leadership in academic spaces. The lesson in this study is that one has to avoid overplaying a leadership discourse, which reifies its excessive power; thereby giving it more latitude than it is due.

References

- Alvesson, M. & Blom, M. (2015). *Unplugged* - "Carte blanche" Less followership, less leadership? An inquiry into the basic but seemingly forgotten downsides of leadership. *Management*, 18(3), 266-282.
- Alvesson, M., Blom, M., & Sveningsson, S. (2016). *Reflexive Leadership*. London: Sage.
- Alvesson, M. & Kärreman, D. (2013). The closing of critique, pluralism and reflexivity: A response to Hardy and Grant and some wider reflections. *Human Relations*, 66(10), 1353-1371.
- Alvesson, M. & Kärreman, D. (2016). Intellectual failure and ideological success in organization studies: The case of transformational leadership. *Journal of Management Inquiry*, 25(2), 139-152.
- Alvesson, M. & Spicer, A. (2012). Critical leadership studies: the case for critical performativity. *Human Relations*, 65, 367-390.
- Alvesson, M. & Spicer, A. (2014). Critical perspectives on leadership. In: Day DV (ed.) *The Oxford Handbook of Leadership and Organizations* (pp. 40-56). Oxford: Oxford University Press.
- Alvesson, M. & Sveningsson, S. (2003). The great disappearing act: difficulties in doing "leadership". *The Leadership Quarterly*, 14, 359-381.
- Ball, S.J. (2015). Subjectivity as a site of struggle: Refusing neoliberalism? *British Journal of Sociology of Education*, DOI: 10.1080/01425692.2015.1044072
- Blom, M. & Alvesson, M. (2014). Leadership on demand: Followers as initiators and inhibitors of managerial leadership. *Scandinavian Journal of Management*, 30, 344-357.
- Blom, M. & Alvesson, M. (2015). All-inclusive and all good: The hegemonic ambiguity of leadership. *Scandinavian Journal of Management*, 31, 480-492.
- Blom, M. & Alvesson, M. (2018). Beyond leadership and followers: working with a variety of modes of organizing. *Organizational Dynamics* <https://doi.org/10.1016/j.orgdyn.2017.12.001>
- Bolden, R., Gosling, J., O'Brien, A., Peters, K., Ryan, M., & Haslam, A. (2012). *Academic Leadership: Changing conceptions, identities and experiences in UK higher education*. Leadership Foundation for Higher Education, Final Report Research Development Series 3(4). London: University of Exeter.
- Chiu, C., Balkundi, P. & Weinberg, F. (2017). When managers become leaders: The role of manager network centralities, social power, and followers' perception of leadership. *The Leadership Quarterly*, 28, 334-348.
- Cilliers, F. & Pienaar, J.W. (2014). The career psychological experiences of academic department chairpersons at a South African university. *Southern African Business Review*, 18(3), 22-45.
- Clarke, C.A. & Knights, D. (2015). Career through academia: Securing identities or engaging ethical subjectivities? *Human Relations*, 68(12), 1865-1888.
- Clegg, S. & McAuley, J. (2005). Conceptualising middle management in higher education: A multi-faceted discourse. *Journal of Higher Education Policy and Management*, 27, 19-34.
- Collinson, D. (2011). Critical leadership studies. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.). *The Sage handbook of leadership* (pp. 181-194). London: Sage.
- Collinson, D. (2014). Dichotomies, dialectics and dilemmas: New directions for critical leadership studies? *Leadership*, 10(1), 36-55.
- DeRue, S. & Ashford, S. (2010). Who will lead and who will follow? A social process of leadership identity constructions in organizations. *Academy of Management Review*, 35(4), 627-647.
- Gleeson, D. & Shain, F. (1999). Managing ambiguity: between markets and managerialism - a case study of "middle" managers in further education. *The Sociological Review*, 47(3), 461-490.
- Grint, K. (2005). Problems, problems, problems: The social construction of leadership. *Human Relations*, 58(11), 1467-1494.

- Guest, G., MacQueen, K. & Namey, E. (2012). *Applied thematic analysis*. Los Angeles: Sage.
- Hosking, D. M. (2008). Can constructionism be critical? In J. A. Holstein & J. Gubrium (Eds.), *The handbook of constructionist research* (pp. 669-686). New York: Guilford Press.
- Johnson, R. (2002). Learning to manage the university: tales of training and experience. *Higher Education Quarterly*, 56(1), 33-51.
- Knight, P. & Trowler, P. (2001). *Departmental leadership in higher education*. Buckingham: SRHE and Open University Press.
- Learmonth, M. & Morrell, K. (2017). Is critical leadership studies 'critical'? *Leadership*, 13(3), 257-271.
- London, C. (2011). Measuring how the head of department measures up: Development of an evaluation framework for the head of department role. *Quality in Higher Education*, 17(10), 37-51.
- Meindl, J.R. (1995). The romance of leadership as a follower-centric theory: a social constructionist approach. *Leadership Quarterly*, 6(3), 329-341.
- Meindl, J.R., Ehrlich, S.B & Dukerich, J.M. (1985). The romance of leadership. *Administrative Science Quarterly*, 30, 78-102.
- Middlehurst, R. (1993). *Leading academics*. Buckingham: Open University Press and The Society for Research into Higher Education.
- Moore, A. (2012). Following from the front: Theorizing deliberative facilitation. *Critical policy studies*, 6(2), 146-162.
- Murphy, M. & Curtis, W. (2013). The micro-politics of micro-leadership: exploring the role of programme leader in English universities. *Journal of Higher Education Policy and Management*, 35(1), 34-44.
- Ngcamu, B. S. (2013). The Empirical Analysis of Performance Management System: A Case Study of a University in South Africa. *Journal of Economics and Behavioural Sciences*, 5(5), 316-324.
- Nguyen, H. (2013). Middle-level academic management: A case study on the roles of the heads of department at a Vietnamese university. *Tertiary Education and Management*, 19(1), 1-15.
- Prichard, C. (2000). *Making managers in universities and colleges*. Buckingham: SRHE and Open University Press.
- Rowley, J. (1997). Academic leaders: Made or born? *Industrial and Commercial Training*, 29(3), 78-84.
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.
- Seama, S. (2013). An exploration of the University of Johannesburg Heads of Departments' experiences and perceptions of the University's performance management system. In F. Gouws & C. Wolhuter (Eds.), *Educational research in South Africa: Practices and perspectives*, (pp 223-244). Cape Town: Oxford University Press.
- Seyama, S.M. & Smith, C. (2015). "Not worth the sweat": Performance management rewards at a South African university. *Indo-Pacific Journal of Phenomenology*, 15(2), 1-13.
- Seyama, S. & Smith, C. (2016). Performance management as panopticism: Embedding intellectually repressive conditions in academia. *Socioeconomica: The Scientific Journal for Theory and Practice of Socio-economic Development*, 5(10), 171-188.
- Taylor, J. & Machado, M. (2006). Higher education leadership and management: From conflict to interdependence through strategic planning. *Tertiary Education and Management*, 12(2), 137-160.
- Wilson, S. (2014). *The maintenance of leader-centricity via the discursive subjugation of the follower*. A paper submitted to the Critical Management Studies Division for the Scholarly Program of the 74th Annual Meeting of the Academy of Management.
- Wolverton, M., Ackerman, R. & Holt, S. (2005). Preparing for leadership: What academic department chairs need to know. *Journal of Higher Education Policy and Management*, 27, 227-238.

Philosophy As A Basis Of Education And Formation. An Essay On Behalf Human Happiness

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Abstract

We start by a genealogical exploration of the philosophical attitude as the basis of "Paideia", trying to show how the philosopher enthusiastically launches himself in search of wisdom, while at the same time giving himself up to the care of his soul addressed to attaining an ontological harmony. Such dynamic implies an act of conversion or metamorphosis that endows human existence with a radicalization of the gaze capable of opening the door of conceptual creation, simultaneously, parrhesiastic and critical, which affirms philosophy as the basis of education and training. But these are understood as teleologically committed to forming the person, which is a task that goes beyond the current drift of the mainstreaming utilitarian reason.

Portrayal Of Perception Of Women In Domestic Series And Its Comparison With The Real-Life Woman's Figure, From Woman's Perspective

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Abstract

Aim and Importance of the Study: TV series play a key role in shaping the society. In this study, the aim is to identify the authenticity of the woman's roles portrayed in the series with the real life and make comparison of with the real-life woman's figure as well as to review the image of woman from woman's perspective, which is represented to the public and determine to what extent this image can be perceived as role model. This study intends to raise awareness in resetting and redesigning women's roles in TV series.

The Research Method: In this study, out of Qualitative Research Methods, the method of interviewing was applied. Stewart and Cash (1985) described interviewing as "*a process of dyadic, relational communication with a predetermined and serious purpose designed to interchange behavior and involving the asking and answering of questions*". From woman's perspective, 10 women professionals got involved in the research conducted on the portrayal of perception of women and its comparison with the real-life woman's figure and their responses were analyzed using the qualitative research methods. The relevant resources in literature were also reviewed and the woman's figure in TV series was examined.

The Study's Aim and Research Questions: In today's broadcasting, TV series have great importance. This study aims to assess the perception of woman in TV series followed by a great majority of public from woman's perspective and examine the presented perception through comparison with the real-life woman's figure, and these research questions were asked such below:

- 1) How do you think are women portrayed in domestic TV series?
- 2) What extent is that model of woman authentic with the real life?
- 3) What would you say when asked to characterize the women that you have viewed in the series?
- 4) Do the economic statuses of the women portrayed in TV series correspond to those in the real life?
- 5) How should the woman's figure be in those series when considering its potential implications in the society?

Findings and Conclusion: As a result of this study, it was observed that there are limited similarities between the serial female characters and the real life figures. It is observed that they are portrayed as powerless, weak, whiny and under male dominance, or class- and power-focused, wealthy, ambitious, dominant and intriguing and with beautiful physicalities.

Keywords: *Perception of women, domestic series, television*

Introduction

Women have a very powerful, important and determinant role in society. To identify social attitudes and behaviors, education given within the family or in the education system undoubtedly has great importance. Education might be very determinant of the social structural analysis, particularly family education. Another concept of these determinants is media, one of the key figures in social engineering.

In any individual's whole life or only specific part of it, women have always played a vital role. They shaped a big part of the physical, psychological and educational development of each of us, regardless of gender. The women, as mother, sister, and/or partner, are moulders of the set of human behaviors that these social determinants are often learnt unconsciously and transformed into characteristic structures.

The female role is very critical that they are one of the key determinants in family or society because every individual is grown up with a female model. However, we need to mention another dynamics that are moulded by women within the community. Undoubtedly that is media which is one of the main factors shaping the society whether deliberately or unintentionally.

Since 1950's, media has emerged as the principal actor in the formation of social dynamics including the investigation of the ideological structure and behavioral pattern of the public and the role model structures of the individuals. Out of various media instruments, television is major one with its influencing power. In this sense, the fact that TV programs are shaping our society has for long been taken as given.

In TV broadcasting, the series and the behaviors referred to the female characters in these, and the extent to which their characteristics correspond to the real life woman's image can be designed as a research topic. It has been mostly recognized that TV has the dominant role in the opinion leadership for society or the thought determinant, however one of the key contributing factors is rating and audience measurements.

TV series are one of the elements capturing the highest ratings in broadcasting, which provide key economic inputs. It may not be admittedly very realistic in terms of both ratings and attention that the female characters in the series are supposed to jibe with the women's image in reality.

Notwithstanding all this, this study aims to recognize how a female character portrayed in TV series is viewed from the women's perspective in the real life and try to see what the perception of women is and should be in these series which are moulding and caring for the society in female's eyes.

"We should take into consideration that media not only shapes the views and attitudes of men and boys towards women and girls to some extent but also consolidates the women's negative thoughts about themselves." (Özerkan, 2004; 21)

In Turkey, women's social contributions were considered when the role of their determinant and moulding elements was recognized, and some media roles were attributed in this way. The women's role have been re-established, which was seen as bringing up kids to be good family members and being an effective instiller of moral and humanistic values with abstract social rules. In social understanding, woman's figure very often takes place as guiding the family unity, catalyzing intrafamily mechanism, and acting as a natural unifier. Female in TV series is a visual icon of the society and however rather associated with the virtue-oriented behaviors moulding the family and being out of the basic needs of the public such as moral and humanistic values and abstract social rules. The media reflection and the public acceptance of such perception also could possibly be come across in these days (e.g. Ekmek Teknesi (*Bread and Butter*), Perihan Abila (*Sister Perihan*), Bizim Mahalle (*Our Neighbourhood*)).

"In Turkey, the programs for women was first originated with "Ev Saati" (Home Time) on radio in 1939, which would continue under the name of "Ev İçi" (Intra-House) on the matters including child care, health, and family, in general. In broadcasting objectives for such programmes, women are described as one of the basic elements to realize the happy aspects of society. Although women are specified as good partners and mothers in family as well as humanbeing in the world and citizen in the society, they cannot get out of the identity of housewives restricted within the walls of home (Akbulut, 2004:159).

Society is like a living organism which is living, transforming, developing, and improving itself. The behavioral ways of individuals in the community and their responses to phenomena and statuses can be regarded as the mechanism that is keeping the society alive and developing and changing it. The role of media has a very substantial role in shaping the public opinion. TV channels, radio broadcasts, newspapers, magazines, periodicals, and all publications are the most important part of this formation and perception, as well as digital media and social networks that are increasingly getting more important.

In this sense, TV broadcasts, the principal actor of media, have undertaken a serious role in the perception of women since they were launched in public. It can be acclaimed that TV's impact might have continued almost unabated from then on. Shaping and shifting the society, TV programmes gave a role to women especially in the earliest years. This consists of a whole of references characterizing women and crystallizing how the community should read the perception of women. The perception of women who are fond, lenient, altruistic, devoted, value family unity above all, bring up good boys and at the very core of their characteristics, include the notions of chastity and selflessness, was manifesting itself in almost all programmes (e.g. Kaynanalar (Mothers in law), Bizimkiler (Our Family), Yedi Numara (Number Seven)).

"Once TV broadcasting commenced following radio, many programs have been made for women. In these, traditional roles of women, such as a self-sacrificing mother, a good wife, and a housewife, were highlighted. Most effective and common instrument of culturization in modern societies, television is major one of the mass media putting their stamp on our age. Women represented in series, films, ads, music clips, magazine programmes are mostly portrayed with their sexuality and become exploited by media. Females in TV shows have to be well-groomed and good-looking, that's the most important one of the required qualifications is that they have beautiful physical appearance. It would not be exaggerated to say that females are currently transformed to visual objects on TV." (Büyükbaykal, 2011)

The perception of women portrayed in domestic series from mid 1990's till the earliest 2000's gave way to a modern, ambitious and aggressive model of women with a substantial change experienced in the early 2000's. Female characters in the series of 1990 had the stories in which she was just stuck in the middle of a large family and sometimes the oppression of tribal culture and also had went through the trials and tribulations while she had difficulty in adaptation phase to those traditions and seldomly made uprising (e.g. Asmalı Konak (Vine Villa), Zerde (a female name), Beyaz Gelincik (White Weasel), Sila (a female name)).

Many stereotyped codes used for male and female characters in Yeşilçam (Turkish) melodramas now reappear in disguise with the modified screens of our domestic series (sometimes undisguised, exactly the same). The traditional patriarchal discourse is getting more powerful in time." (Özsoy, 2018)

Of the female image in these series, passivity as a common approach almost never changed. Women was not rulers but obedient, or not playmakers but always defenders or guards against intrigues. The study of TÜSIAD (*an NGO in Turkey*) on the perception of women over 12 series noted the standardized female model.

In a relevant news, Özlem Gürses from Sözcü Newspaper reported: “TÜSIAD releases the study findings of ‘Perception of Women in TV series’. This suggests that ‘women are portrayed in 12 series most popular in Turkey much apart from reality and unfortunately in one single stereotype: like the creatures which are never businesslike, always whinny, flabby, and mopy.’ In this study conducted by TÜSIAD in partnership with a university, 12 out of the most popular series in Turkey was sampled and each one of them was analyzed frame by frame during the month of May. That news is going on like: *“The results are sobering! We often use a language to feed these stereotypes and prejudices even regardlessly. Whereas the intelligents engaged particularly in the ad and series sectors are highly creative and exceptional, and even they have freshly recognized by means of our these studies. The same problem is also valid for males; as much as one man is persistently portrayed in series as aggressive, red-hot, violent, this bad image sticks on men. Above all, females are jammed with physical shapes, and while males are represented at every point of the spectrum, they are all imaged as under 39, skinny or fleshy and matronly. Here is the thing that is “rendering the diversity” in every respect. Women are romantic, it’s alright, but how about men? Or vice versa...”*

The image of women who are always suffering, aggrieved and underdog due to her devotion to ethnic group or tribal order and sometimes obliged to be quiet, got changed across several series with female image, a “headstrong woman” who sets up the rules on her own and modifies traditions as a clan leader or under the matriarchal structure, or a powerful, cunning and intriguer woman in historical series (e.g. Hanımın Çiftliği (Lady’s Ranch), Kara Melek (Black Angel), Hürrem Sultan (*a figure from Ottoman Dynasty*)).

One model of the female characters in domestic series that TV broadcasters used includes the figures who are always oppressed, suffering, downtrodden and having few friends around (e.g. Fatmagül’ün Suçu Ne? (What fault could Fatmagül have?), Acı Hayat (Living Death), O Hayat Benim (This is My Life), Aliye (*a female name*)). From the early 2000’s, a new woman’s image reappeared that she was financially more independent, social, prestigious, having more active status and sometimes under the pressure of matriarchal structure.

“Females are used as sexual object particularly in magazine programmes or foreign series, and domestic TV series have more conservative image of women. Represented in accordance with Turkish traditions and customs, they are featured by their role of good mother and wife. In domestic series which portray the conventional roles of women, their real statuses are reflected in some respect.” (Büyükbaykal, 2011)

All these series have common point of non-concordant characters with normal course of real life, implausible, exceptional coincidences, non-fictionalizable unusual incidents, and unrealistic female characters. From the early 2010’s, gorgeous, attractive women with beautiful physical features are seen on the screen in the series. Female models who are care and make-up even when she has just got up, have luxurious autos, work for holdings and in plazas, and have no financial problems are embodied in series over the theme of love and affairs, and intrigue. These non-productive women who are not featured by their professional qualifications take place with the image intrepid, unabstainer from telling lies and obsessive to reach their goals.

“The characters (starred couples) in domestic TV series that permeate into our lives in the adventure of domestic series from past to present and deeply affect many parts of the society gain popularity with their lives of violence, loves and conflicts. Male characters of domestic series have got their women and envy them to die while female characters are always ready to sacrifice anything that they own any time. It means that they can immediately throw away their facilities and equipment that they have earned in life for the sake of their love. Self-sacrificing for their purity, family and children and fidelity are less than nothing for them.” (Özsoy, 2018).

The images included in communication codes of media apparently serve the conventional ideology consolidating women’s dependency and secondary status. A number of TV series broadcasted on prime-time lay emphasis upon the priority of the women’s roles relating to their home and family (Kalan, 2010:81).

In their most of life the individuals must have had at least one woman. People’s physical and psychological developments are characterized by the presence of women. Female in the figure of mother, sister and wife is the moulder of the set of behaviors which specify the social dynamics, are often learnt unwittingly and transform into characteristic structures.

There are sexual identities accepted by every culture, and their social norms determine how either one man or one woman should appear, act and relate to each other (Yılmaz, 2007:144).

Story line and distributed characteristic structures can be regarded as usual when considering the overwhelming portion of men in the group of senarists of serial films. However, the scenarios typed from men’s perspective sometimes may not represent as true the roles in life, the viewpoints to happenings, the situational assessments, and then character formation. This can also be one of the reasons why female image portrayed in the series is questioned.

The narrations that made by male story-tellers are the stories of man and mannishness that provides men with symbolic power. Modern communication instruments have an explicit role and been employed in functioning the gender-based process of representation and interpretation (Kotaman et al., 2011:78).

Findings And Conclusion

At between the years of 20 and 50, 10 females attended this study on “portrayal of the perception of women in domestic series and its comparison with the real-life women’s figure from women’s perspective”. The participants who are professionals and regularly watching TV (at least one hour a day) were demanded to answer the questions asked related to the perception of women in TV series. A proper environment was provided so that they can explicitly express their feelings and thoughts under no influence in response to the general, understandable and clear questions directed. The respondents’ answers were coded in the way of S:1 (for Speaker 1), S:2 (for Speaker 2), etc., and the given responses were examined with the method of content analysis and released below.

First a question was asked to the attendants such as: **“How is do you think the women’s model in domestic series represented?”** The respondents’ answers are such below:

(S:1) *“In TV series, there are female characters who are passive, directed and easily guided, and naive or lead any of their surroundings, try to figure all humans and events towards their request, desire to get their way and are quite malicious. That’s, a portrayal of character was made by power distribution; powerless women are portrayed as naive and directed, and powerful ones as ruling and villainous.*

(S:2) *“They are intrigue-oriented or meek/weak-oriented. The message in the intrigue-oriented group is the motto of “everything in love is fair” while those in the meek/weak-oriented need a man shakening and awakening her for meaningful life, actual renaissance, and controlled life. Apart from this main tendency, other side characters have its various levels in general. Triumphant women to gain a footing have traumas with accompanying and degrading somebodies and need a man safeguarding her to leave her troubles behind and become happy.”*

(S:3) *“The impression that I have got is that the theme in the series is usually, you know, that women who are downtrodden and uninfluent characters if it is Anatolian/chieftain/clan thematic one. In urban series, the profile of city women is such that seducers and coquette addicted to men or much intriguing and cunning females.*

(K:10) *“There are women’s models who we do not come across in real life. Too intriguer or too altruistic women”*

The respondents who assess the way of representation of female characters in domestic series made notable observations. Women are portrayed in series as passive, underdog, weak, battered, and tormented or intriguer, gossipier, and lustful for power over others. Or they can be perceived as meek, weak with a character whose course of life suddenly shifts when she falls in love with a well-off and powerful man and who must require a masculine body to safeguard themselves so as to make achievements in life and recover from her troubles. Out of current series with high ratings, the one named “Ufak Tefek Cinayetler” (Little Murders) has four starred female characters. The series narrates the life story full of intrigues and lies belonging to these women living a prosperous and luxurious life, and the character with the name of Oya the doctor, whose college and personal life is turned into a living hell after she is slandered by her friends, despite being an idealist doctor, is portrayed as meek, weak, and non-self-advocate. Expected to have a key status in social life as a doctor, the character of Oya is taken under his wigs and looks to him as a safe harbor not until she is in love with a married man, which is the result of the mentality to portray women as passive.

It is also not different for the series of “Sen Anlat Karadeniz” with high ratings. This is about the incidents happened to the character of Nefes who is sold for money to a man by his own father and tormented, and then took shelter in Karadeniz (Black Sea) and had much trouble. This series which is attention-grabbing with too many scenes of violence has been criticized by audiences for the reason of “normalization of violence against women”. The starred female character, Nefes, is portrayed as battled, weeping, tormented and exposed to many other misdoings.

The respondents have negative thoughts about **“the consistency of the model represented in TV series with the real life”**. One stated that extreme troubles and emotions are normalized and economic class is highlighted that the reality concept in the public have been changed and reshaped by senarists: *“I think many cases in TV series are excessive in quantity and exaggerated. Again they, I think, are trying to create sense of familiarity and normalize such extreme negativities as they make the public view all these hyperbolic violence and excessive negative emotions, thoughts and actions persistently. The stories always make arguments on the subject of social class that the problems and conditions of humanbeings are differentiated according to socio-economic classes as much as I see, that’s the emphasis is too much on the class issue. By keeping similar stories told, people’s sense of reality in the society is rebuilt or reengineered by senarists and producers every day ...as well as male and female character models.”* (S:1)

Another respondent pronounced that the life represented in the series has no association with the real life: *“These series lead to adopt the reality in different and nonconstructive way. It is seen as though the achievements are subject to that sort of actions. And also, they emphasize the discrimination in social gender roles and created an effect like single woman is somehow defect. On the side of men, a new identity of classical men that has appeared within the modern version of traditional masculine model help people internalize the role of dominance and determination.”* (S:2)

One of the respondents pointed out the gap between the female model portrayed in the series and the real-life women’s model: *“In my opinion, it’s irrelevant. We can even see this when we look at houses and settings that these serial films are shot. The culture of extravagant consumption is overwhelming in the series. All environments*

are luxurious places. The houses are not normal, they are like the residents of palaces or residences. Hidden ads are embedded into the series cause a bad impression.” (S:8) and another replied “Although the characters in the scenarios can be sometimes simulated to the women in the lives of ours or our friends’, the series include exaggerations: the characters may live on the edge.” (S:4)

The respondents replied to the question of “**How would you describe the characteristics of the females that you have watched in series?**”

(S:1) “They are characterized by a social class and power-focused structure. Exceptionally, there are some characters including the women wealthy but more naive as well as the others deprived but highly passionate and thus desperately struggling to attain money and power.”

(S:2) “Having to pay off being powerful, weak, dependent on a man to deal with drawbacks in her life, usually downtrodden if not an intriguing character, oriented towards being like extension to a man rather than being individualistic.”

(S:5) “The women sex-oriented, male-dominant, oppressed, male-dependent, femme fatale, secret plots in closer kinship, yenta, and low brow. In short, the females who got there using their intelligence are unlikeable and in supporting roles. Yet, it depends on the series. For example, I mostly like two series... I am watching them because they are preponderantly psychological: *Tehlikeli Karım* (My Dangerous Wife) and *Fİ*. The female characters in those series draw my attention.”

(K:10) *Beautiful, well-groomed, intriguer, self-sacrificing, lover, sneaky, brave, smart, gossip, hypocritical, two-faced*

The respondents make physical and behavioral assessment for the female roles in domestic series and highlight that women are intriguing, eagerly attached to a man, sneaky, self-sacrificing, highly courageous, downtrodden, dependent on husband, class- and power-focused, non-individualistic, weak, slim, beautiful, made-up, well-kept and manivured even if tormented. The warm-hearted characters are also represented as the secondary characters who are shy, diffident, and taking a backseat.

The responses to the question of “**What is the authenticity of the economic conditions of the women portrayed in the series?**” are such below:

(S:1) “The female characters’ economic attributes are characterized by the patterns of social and economic class. They are portrayed as being in the economic status, very high or very low. Apart from its trueness, persons in middle, middle-low and middle-high income groups have far less chances to be viewed on the screen, I think.”

(S:2) “By the fashion of poor girl to rich guy, which is considerably going on, a female character is featured, who sets for life by means of mad love of a wealthy man or makes a marriage of convenience with a rich person and gets out of her financial troubles. When she is possibly a woman who can stand on her own feet, she is in the position of paying a heavy price for it, being downtrodden, oppressed or isolated. Namely, there is like an inclination as if the woman had to receive a nasty blow from her safeguarding attached man in order to realize that goal.”

(S:3) *It doesn’t mean that plaza women all are making good money. We may sometimes see them in high managerial positions in plazas but this won’t shift the real thing. Dreams and Realities. With the theme of sub-culture, some series may be a bit closer to reality.*

(S:7) “Some are too rich or too poor.. There is no normal as family figure. Except for the series of *Çocuklar Duymasın* (Don’t Let the Kids Hear)”

(S:4) “The characters who generally mentioned in the series are financially easy and even sometimes got attention with their too much luxurious lives. They can be the exaggerated lives that do not correspond to the common social understanding.

To such question as “**What would you like the female character in series to be when considering their social contributions?**”, one replied “The female characters that I would like to view in the series are who come from any socio-ekonomik sub-structures in the society, are well-educated, coherent of their feelings, thoughts and actions, able to go through and cope up with their problems, suffering from their troubles without much dramatization, having positive personal characteristics, doing good things not only for themselves and their families but also for the community and the globe, working and earning their financial independence, self-aware and self-conscious as women, conscious of equal and democratic citizenship, and good role model to other girls and women in the society.” (S:1) and another respondent stated “*There are such studies on as human relations, mate selections, individuality, self-identity formation, sexual roles, etc., but they are informed exclusively to a certain part. These can unfortunately not be addressed to general public and reached out low socio-economic levels through transformation into real life form. The series need to be designed with experts’ views from psychology, psychiatry and sociology, and the findings are embodied with the serial characters. The message made by the series can be that in order to stand on one’s own feet and be an individual, there is no need to pay a heavy price for it, for plots or submission to realize it, and provide insight with how is making choice, awareness of gaining from freedom, and how one can be able to differentiate the useful alternative from the useless one.*” (S:2) Other respondents’ answers are such below:

(S:7) *“Firstly I would like the series to be genderles; that’s, without any discrimination of men or women, just a humanbeing. Women should have to stand on their own feet alone, intelligent, smart, and simultaneously funny. In other words, the female intelligence should be featured by the series.”*

(S:10) *“I would like to view females in the series who are workers, developers, good lovers, producers, readers and achievers while their sons and daughters must be happy mostly by such a women’s model. These perceptions should be focused in TV series.. affection and performance inside women won’t be oppressed but on the contrary will be uncovered.”*

(S:5) *“There should be female characters to be exemplar, away from twisting men around their fingers and exalted but not disparaged from men’s perspective.”*

Starting from all these observations, the perception of women in TV series have unequivocally great importance with its critical role in shaping the society. When considering the role of women in the development of individuals in the society, the responsibility that should be undertaken by TV serial broadcasters is overtly substantial. As a result of the present study, it has been observed that there are not significantly any similarities between the serial female characters and the real-life women’s figures. The female characters are portrayed as powerless, weak, whinny, under male dominance, or class- and power-focused, wealthy, ambitious, dominant, intriguing and with beautiful physicalities.

The respondents indicated that the female model portrayed in TV series are rarely consistent with the real-life women’s figure. It is observed that the incidents characterized by female characters contain exaggerated, extreme and negative emotions and these thoughts and actions have been gradually normalized. In the series, the reality is made to be adopted in a different and unconstructive way, and the presence of single woman is explicitly portrayed as defect in minds by emphasis of the discrimination on social sexual roles. Regardless their jobs, the females are represented as the characters who are safeguarded by men and finally, fall in love with him and so have a meaningful life. In the scenarios overwhelmed by consumption culture, female characters live in waterfront residences, villas in much luxury, or in shantytowns in destituteness rather than modest real-life models.

Those attending the study pronounced that the female image represented in the series is not authentic and re-engineered by producers. The female characteristics that they would like to view can be listed as: originated from any socio-economic sub-structures in the society, well educated, coherent in her actions, keeping in touch with reality, not dramatizing her troubles, having positive personality, working and financially independent, able to be a good role model for other girls and women in the society, not require paying a heavy price for being an individual, aware of not having to resort to any intrigue to deal with issues, producer, reader, intelligent.

Reference

- Akbulut, TN. (2004) Türk Televizyonunda Kadın Söylemi. Kadın Çalışmalarında Disiplinlerarası Buluşma, Cilt:2,79-86
- Büyükbaykal, C. (2011) Medyada Kadın Olgusu. İletişim Fakültesi Dergisi
- Güngör, N., (2011). İletişim Kuramlar Yaklaşımlar. Ankara: Siyasal Kitabevi.
- Kalan, Ö. G. (2010). Reklamda Çocuğun Toplumsal Cinsiyet Teorisi Bağlamında Konumlandırılışı: ‘Kinder’ Reklam Filmleri Üzerine Bir İnceleme. İstanbul Üniversitesi İletişim Fakültesi Dergisi, 38, 75-90
- Kotaman, A., Samav Uğursoy, A., Artun, A. (2011). Televizyonda Hikâye Anlatıcılığı. İstanbul: H2O Kitap.
- Özerkan, Ş. A(2004) Bir Toplumsallaşma Aracı Olarak, Medyanın Kadın İmajına Yaklaşımı. Kadın Çalışmalarında Disiplinlerarası Buluşma, Cilt:2,21-29
- Stewart, C. J. & Cash, W. B. (1985). Interviewing: Principles and Practices (4. Baskı) Dubuque, IO:Wm. C. Brown Pub.
- Yıldırım, A. ve Şimşek, H (2006). Sosyal Bilimlerde Nitel Araştırma Yöntemleri. Ankara: Seçkin Yayıncılık, s:152
- Yılmaz, R.A. (2007). Reklamlarda Toplumsal Cinsiyet Kavramı: 1960-1990 Yılları Arası Milliyet Gazetesi Reklamlarına Yönelik Bir İçerik Analizi. Selçuk İletişim, 4(4), 143-156
- <http://www.aljazeera.com.tr/gorus/yerli-dizilerin-urettigi-siddet-cinsiyetcilik-ve-kadin-cinayetleri>
- <https://www.sozcu.com.tr/2018/gundem/dizilerdeki-kadin-algisi-degismeli-2309881/>

Post Occupancy Evaluation In Architecture Education

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Abstract

Interest of design professionals in Post Occupancy Evaluation (POE) is growing. Insights received from the POE can help informing the architectural design briefs. Therefore, POE has an important place in architectural education. Accordingly, Post Occupancy Evaluation (POE) is carried out with students within the scope of the elective Physical Environment Control course, which is taken in the 3rd year (5th semester) in Uludağ University Architecture Department since 2012. During the course, the concept of Post Occupancy Evaluation is given to students and then a questionnaire is prepared by the students regarding the key themes in order to evaluate user satisfaction. In this context, surveys were carried out with the users of various types of buildings such as education buildings, medical buildings, university campus buildings, public buildings, shopping centers, mosques, and light rail stations in Bursa. The results obtained from these questionnaires are evaluated statistically with percentiles and are then discussed and evaluated with students. In addition to the climatic, acoustic and visual comfort conditions of the buildings, positive or negative factors related to the design are being considered and it is aimed that these results will guide the students in future designs. Ultimately, it is considered that architecture students' opportunity to experience POE during their training will contribute to their professional lives by giving them the skills to create better quality physical spaces with optimum comfort conditions.

Keywords: *Architecture Education, Post Occupancy Evaluation, Building Design*

1. Introduction

Human needs are all the environmental and social conditions that enable users to maintain their lives in various ways (physiological, social, social, psychological, etc.) without discomfort and with the ability to be productive in their work (İnceoğlu, 1982). Because people spend a large part of their lives inside buildings, the quality of life provided to users is an important factor in meeting the human needs. After the initial usage of a building, where people live, work and carry out recreational activities, users understand if the building is able to fulfill their expectations in various fields such as space organization, functionality, technique and aesthetics, and this directly affects user satisfaction.

Architects have an important responsibility in designing a good quality of life for users and ensuring user satisfaction. Being able to respond to the needs of users is very important in designing and constructing successful buildings. Architects should design buildings with high user satisfaction based on the feedback they receive from users and should minimize mistakes in future designs. POEs are important for building performance evaluation, which helps to identify user expectations and existing problems in buildings. In architectural education as well as in professional architectural environment, providing students with POE experience will contribute to their professional lives by giving the skills to create better physical space quality. POE is handled differently in architecture education. For example, buildings' post-occupancy evaluation (POE) is carried out at Oxford Brookes University for more than 10 years. In general, the POE module runs in semester 1 over 12 weeks (and more recently 8 weeks) and is delivered through 12 sessions of 3 hours (36 hours contact time and 20 credits), combining lectures and seminars with the real case study building (domestic or non-domestic) to understand the cause and effect of both hard and soft issues on building performance. Students in groups of three or four conduct the POE of a building, thereby developing skills in teamwork and collaboration (Gupta, 2014). This paper describes importance of 'post-occupancy evaluation (POE) of buildings' into undergraduate teaching in Uludağ University, Bursa/Turkey.

2. Post Occupancy Evaluation

Post Occupancy Evaluation (POE) is an evaluation method used in many disciplines including academic literature, industry press and professional institutes. The first important work on post-occupational evaluation was conducted in 1960s in buildings such as in mental hospitals and prisons to observe some serious problems that seemed to be caused

by the structured environment. The evaluation of health, safety, security and psychological effects in relation to the usage of the environment were striking in these studies. In the 1960s, there have been an increasing number of studies on the relationship between human behavior and building design that led to the establishment of interdisciplinary professional associations such as the Environmental Design Research Association (EDRA) and the creation of a new field of environmental design research. Today, design professionals' interest in POE is growing.

POE offers an opportunity for assessing if architects in construction and architecture sectors are able to meet the requirements of buildings. According to Watson (2003), POE is an approach that can be conducted any time in the life course of buildings. Since 1960s, POE assessments were made for different building types (Preiser, 2002). Hospitals (DHFP, 1990; QHRS, 2001; Carthey, 2006; Ornstein et al., 2007), education environments (Evrin, 2010; Manahasa, 2017; SEE, 2005; Watson and Thomson, 2005; Mumovic et al., 2009; Tookaloo and Smith, 2015), convention and exhibition centers (Tanyer and Pembegül, 2010), offices (Voordt and Klooster, 2008), playgrounds (Moore, 1983), government and public buildings (Nawawi and Khalil, 2008).

Post Occupancy Evaluation is a building evaluation process where a building is evaluated systematically and regularly after being built and used. POE focuses on users and their needs, so that design decisions that have an impact on the design and construction of the building can be tested. As a result of evaluating the design decision in planning and comparing it with the end product, the strengths and weaknesses of the design can be determined. This information is transferred to new designs, while it is also used as feedback for the solution of problems in the existing environment. The knowledge gained becomes a basis for the designers for building better buildings in the future (Presier et al., 1988, Karagenç Onur, 2002). The knowledge gained in this process also creates a basis for designers for building better environments in the future. According to Preiser et al. (1988), POE's purposes are: (Preiser et al., 1988)

- To collect information on solutions to urgent problems in buildings,
- Helping to solve problems that are encountered by building users, which were not understood during construction,
- Providing useful information that will help establish the balance between the user and the environment during the use of the building,
- Accepting building-related situations as data and using such to resolve issues in similar types of buildings,
- To generalize POE related information for updating existing design criteria, compiling them in order to prepare guidelines for the architecture profession.

According to Kirk and Spreckelmeyer (1988: 162), post-usage evaluation activities are a set of techniques used by architects and environmental designers to determine how the environment is used by users, and also to determine the level of satisfaction provided by specific design goals. This technique has recently been used to establish criteria for planning new designs based on the performance of the environments in use. Accordingly, the purposes of the Post Occupancy Evaluation studies can be listed as follows (Kirk and Spreckelmeyer, 1988: 162)

- Use existing environments to shape future environmental needs and requirements,
- Testing program and design goals,
- With the knowledge on how existing environments are used by users, updating and adapting them to meet the needs.

Despite great efforts of architects and other specialists, and despite the large number of constructions, it is often believed that such environments are unable to achieve satisfactory results in terms of performance. This may be due to the fact that the usage of the environment is not monitored sufficiently and similar mistakes may be repeated numerously. During the usage of built environments, productivity may decrease, health and safety problems may arise, users' comfort and satisfaction levels could be reduced. These results have proven the benefits of Post Occupational Evaluation (POE) studies, have grown POEs' field, and led to the development of activities (Karagenç, 2002). Preiser (1997) has attempted to identify the fundamental problems of environmental performance using Post Occupancy Evaluation studies. Identified problems that are related to performance are listed below (Preiser, 1997: 179).

- Health, safety and security issues,
- Comfort problems (poor thermal control and air circulation)
- Aesthetic problems

- Surface maintenance problems
- Waste of energy
- Poor image and direction finding problems
- Leakage problems

Whether it is related to technical, usage or behavioral criteria within the environment, understanding these problems are a step towards the solution of problems. This underlines the importance and utility of the use of Post Occupancy Evaluation studies. The utilization process and the size of the impact of the benefits arising from Post Occupancy Evaluation studies can be considered in three terms (Preiser et al., 1988)

Short-Term Benefits: Short-term benefits emerge as a result of the use of POE findings. In the short term, achievements and failures regarding environmental performance are identified and recommendations are made for problems to be solved. Additionally, Post Occupancy Evaluations' another short term benefit is related to dealing with problems arising out of budget cuts for reducing costs. Trying to keep project costs low usually lowers environmental quality. Post Occupancy Evaluation allows for higher quality and performance building production with lower costs. The short-term benefits can be summarized as follows: (Zimmerman and Martin, 2001).

- Identifying and solving space usage problems,
- Considering the issues that will increase the efficiency of the employees working in the area,
- Evaluating user opinions, who actively participated in the evaluation process,
- To make informed decisions and to better understand the results of the design,
- Establishing a relationship between budgetary constraints and performance.

Mid-Term Benefits: POE can provide solutions of identified problems in the building such as rearrangements, remodeling, and adaptation or can provide databases for larger constructions. Accordingly, mid-term POE benefits are related to the main decisions regarding building construction. Mid-term benefits are; (Preiser, 2002).

- Reducing costs in the process of construction, use and repairs,
- Providing opportunity to the designer to take part in the evaluation of space performance,
- Adaptation of functions to suit the new space usage for the changes to be carried out in time.

Long-Term Benefits: Long-lasting benefits are those that surface in 3-10 years after information on success and failures regarding the performance of the built environment are learned and applied to design of buildings to be built in the future; this POE benefit is related to architectural environments, such as hotels, office buildings, schools, and residences. Long-term benefits are; (Preiser, 2002).

- To produce measures to improve space design and construction quality,
- Making long-term cost plans,
- Establishing databases, standards, criteria and guidelines, and developing existing ones.

Reviewing users' satisfaction level from buildings is a common approach that aims to increase the efficiency of existing buildings and to guide future designs. In this regard, the Post Occupancy Evaluation - POE system has the following benefits as explained in "Post-Occupancy Indoor Environmental Quality Evaluation of Student Housing Facilities";

- Determining building problems and solutions in a short period of time,
- Enhancing building performance and feedback related to usage,
- Creating important costs savings during construction and the building lifecycle
- Creating long term improvements in building performance
- Creating a knowledge base for improving databases, standards, and criteria (Hassanain, M. A. 2007).

Although designers and customers benefit to a great extent from POE activities, the POE approach is not routine in design-project stage because of the following,

- POE costs are high,
- POE research is time-consuming,
- The designer or project owner does not want the mistakes to come to light (Evrin, 2010).

3. Method

The data collected with POE is believed to assist designing new buildings and will also assist implementation of new arrangements for existing buildings. For this purpose, Post Occupancy Evaluation (POE) is carried out with students within the scope of an elective course, which is taken in the 3rd year (5th semester) in Uludağ University Architecture Department since 2012. During the course, the concept of Post Occupancy Evaluation is given to the students and then a questionnaire is prepared by the students regarding the key themes for evaluating user satisfaction. Every 3rd year (5th semester) architecture students conduct surveys with the users of various types of buildings such as, education buildings, medical buildings, cinemas, university campus buildings, public buildings, shopping centers, mosques, and light rail stations in Bursa.

Surveys are one of the most effective methods to obtain a wide range of information (Zimring, 1987). Since the purpose of a survey is to measure how people interacting with a particular environment react to it; it is important to reach the largest group that interacts with the environment and learn their ideas. The results obtained from these questionnaires are evaluated statistically with percentiles and are then discussed and evaluated with students. In addition to the climatic, acoustic and visual comfort conditions of the buildings, positive or negative factors related to the design are being considered and it is aimed that these results will guide the students in the future designs. Figure 1 shows the workflow of carried out with students for post-use evaluation.

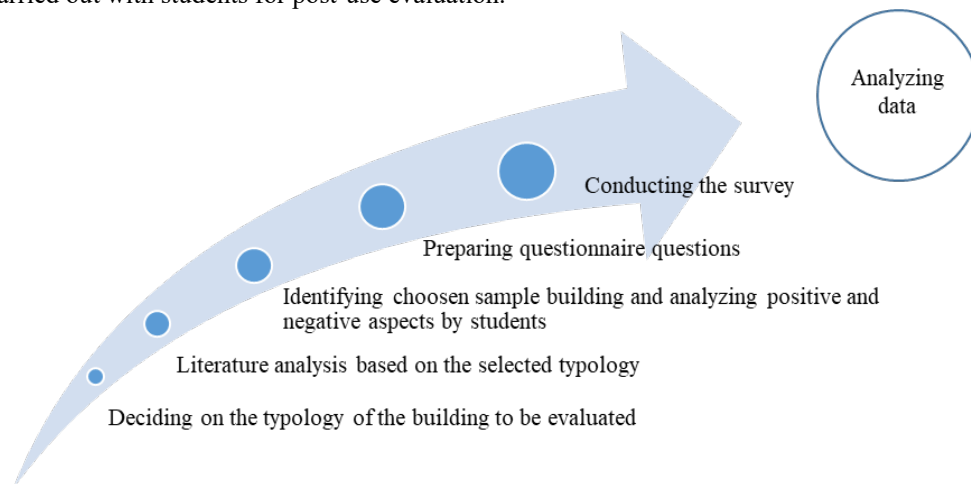


Figure 1. Workflow Chart

When the workflow diagram is examined it can be seen that the first decision is about the typology of the building to be evaluated. Students focus on buildings that they use, and that they will be able to experience the positive or negative aspects. In the second stage, a literature analysis is made on the selected typology and national and international studies to date about these buildings are examined. In the third stage, students are asked to do a study to identify the sample building they choose. It is expected from the students to observe and identify the problems or positive aspects about space setup, interior design, transportability, accessibility, ergonomics, thermal comfort, acoustic comfort, visual comfort, indoor air quality, service areas etc. After conducting preliminary studies and researching existing questionnaires related to the subject, work starts on the preparation of questionnaires for the subject. Although the prepared questions differ according to the type of building, the topics in Table 1 are questioned in general.

Table 1. Evaluation Criteria

Transportability	Pedestrian access to the building
	Perception of building entrance
	Position of building areas
Accessibility	Accessibility between storeys' circulation areas
	Ease of access to units
Ergonomics	Indoor storey height
	Size of windows
	Width of stairs and height of risers
Thermal comfort	Indoor temperature in summers
	Indoor temperature in winters
	Usage of artificial air conditioners
Audial comfort	Audial comfort
	Noise from installations
	Outdoor noise problem
Visual comfort	Natural lighting
	Artificial lighting
	Color preference
Indoor air quality	Natural ventilation
	Indoor air quality
	Odor problems in wet areas
Service areas	Catering and resting areas
	Wet areas
	Car parks
Socializing	Areas that enable social communication
	Open areas, courtyards
	Green areas that enable socializing

After survey questions are prepared, students are asked to conduct the questionnaires in groups of 2-3 people. Users evaluate satisfaction conditions, importance and performance of buildings using scores under between 1-5. 1 indicates “lower importance” and “poor performance”, and 5 indicates “higher importance” and “better performance”.

After the questionnaires are conducted, they are evaluated in the Excel program and the results of the questionnaires are revealed. The evaluation process of the questionnaires is transferred to the students in a simple way and the results can be easily transferred into percentages and graphs.

After the results are revealed, user satisfaction questions are reanalyzed and scored again on a 5-point Likert scale, which indicates the satisfaction or the importance level (very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, dissatisfied and can't choose).

In accordance with the survey data, the level of comfort score was voted within -2 and +2. Negative scores indicate user's dissatisfaction (negative points) and marked with bold characters, while positive scores indicate user satisfaction (positive points). The overall evaluations of case studies are summarized below in the Table (Figure 2).

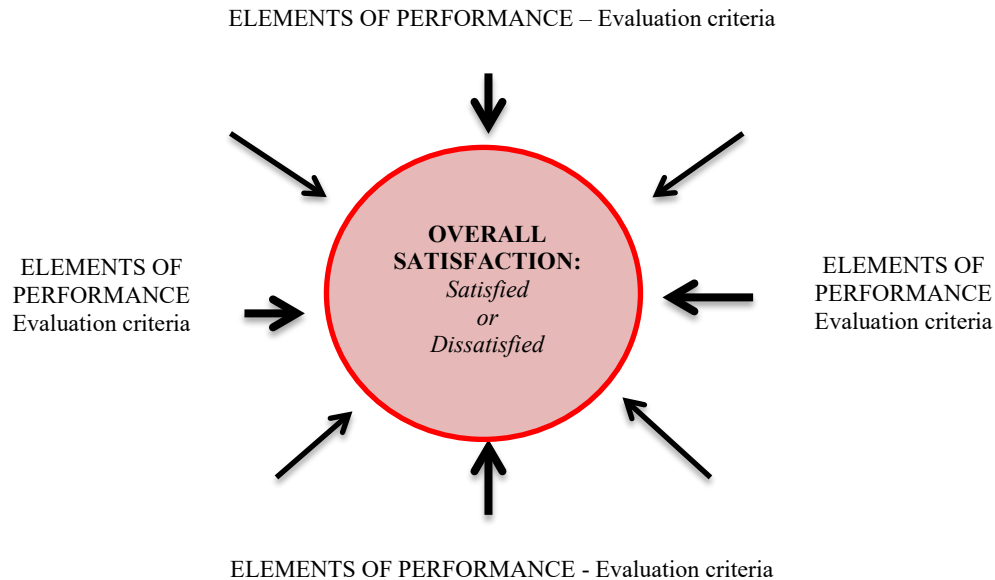


Figure 2. POE Evaluation Chart

As a result, satisfaction levels of users are determined under each of the performance criteria. Additionally, the respondents are asked open ended questions to evaluate the optimum comfort conditions of the buildings that they use to determine positive and negative performance characteristics of buildings. At the end of the study, students discuss what they can do in the design phase regarding the performance values that the users feel dissatisfied.

4. Conclusion

POE allows students to undertake thorough real-world research. POE studies are useful tools for generating evidence and feedback that are required for learning lessons from buildings. POEs also provide a valuable specialist skill in understanding and evaluating building performance, in relation to their own design and that of others, particularly for students that will be architects of the future. By strategically aligning POE and design studio, the gap between design intent and actual reality can be addressed.

In addition, students will be able to see and analyze different types of structures in place and examine problems faced by users, and consider the problems they encounter to support solutions. Also, students are encouraged to do research and gain experience in group work. More advanced levels of POE are supported in order to achieve more scientific and precise results by introducing the SPSS in the graduate programs.

According to the feedback received at the end of the course from students about their work, it was seen that using POE systems prior to the design phase was considered by the students to contribute greatly to the prevention of mistakes in design. It is apparent that because of all its positive contributions, introducing the POE system to the students in the architectural undergraduate programme and conveying it to students with examples will contribute positively to the architectural education process.

References

- Carthey, J. (2006) Post Occupancy Evaluation: Development of a Standardized Methodology for Australian Health Projects, the International Journal of Construction Management. July; 57-74.
- DHFP (1990) Indian health service hospital browning Montana facility post occupancy evaluation, Division of Health Facilities Planning, Office of Management, Office of Management.
- Evrin, T. (2010) Examination of post-occupancy evaluation method in Yildiz Technical University, Faculty of Chemistry and Metallurgy. YTU Master Thesis, Istanbul.

- Gupra, R. (2014) Embedding post-occupancy evaluation into architectural education. Association of Architectural Educators Conference (AAE). Low Carbon Building Group, Oxford Institute for Sustainable Development, School of Architecture, Oxford Brookes University.
- Hassanain, M.A. (2007) Post-occupancy indoor environmental quality evaluation of student housing facilities. *Architectural Engineering and Design Management*. 3(4), 249-256.
- İnceoğlu, N. (1982) Building Programming in Architecture Architecture, ITU, Istanbul.
- Karagenc O. (2002) Post Evaluation Model for Symbolic Performance in Mass Housing Areas, İstanbul.
- Kirk S.J., Spreckelmeyer K.F. (1988) Creative Design Decisions, A Systematic Approach to Problem Solving in Architecture, Van Nostrand Reinhold Co., NY.
- Manahasa, O. (2017) Children's and post occupancy evaluation in developing a communicative language to (re) design educational environments. ITU, Master Thesis, Istanbul
- Moore, G. T. (1983). Teaching design evaluation, with results from case studies of schools, schools, and housing for the elderly *Design Studies*, 4 (2), 100-114.
- Mumovic, D., Davies, M., Ridley, I., Altamirano-Medina, H., Oreszczyn T. (2009) A Methodology for Post-Occupancy Evaluation of Ventilation Rates in Schools, *Building Services Engineering Research and Technology*, v: 30, n: 2; 143-52.
- Nawawi, A., Khalil, N. (2008) Post-occupancy evaluation correlated with building occupants' satisfaction: An approach to performance evaluation of government and public buildings. *Journal of Building Appraisal*, 4 (2): 59-69. <https://doi.org/10.1057/jba.2008.22>
- Ornstein, SW, Ono, R., Lopes, ME, Monteiro, RZ, Gill, AA, Machry, HS (2007) Health Care Architecture in São Paulo, Brazil, Evaluating Accessibility and Fire Safety in Large Hospitals, *International Journal of Architectural Research*, 1(1), 13-25.
- Preiser W.F.E., Rabinowitz IL Z., White E. T. (1988) Post Occupancy Evaluation, Van Nostrand Reinhold, NY.
- Preiser W. F. (1997) Applying the Performance Concept to POE, *International Journal of Facilities Management*, 1 (4): 179-184.
- Preiser, W. (2002) The evolution of post-occupancy evaluation: toward building performance and universal design evaluation. Learning from our buildings: a state-of-the-practice summary of post-occupancy evaluation, Federal Facilities Council Technical Report No: 145, National Academy Press, Washington, DC; 9-22.
- SEE (2005) Post Occupancy Evaluation - Braes High School, Falkirk, Scottish Executive, Edinburgh.
- Tanyer A.M., Pembegul, T. (2010) Post occupancy evaluation of the architecture: a case study of Lütfi Kırdar Convention and Exhibition Center. *METU JFA*, 27: 1: 241-265.
- QHRS (2001) Royal Children's Hospital Post Occupancy Evaluation, Queensland Health and Royal Children's Hospital Health Service District.
- Tookaloo, A., Smith, R. (2015) Post Occupancy Evaluation in Higher Education. *Procedia Engineering*, 118: 515-521.
- Voordt, T, Klooster, W. (2008) Post-Occupancy evaluation of a new office concept in an educational setting. CIB W70 International Conference in Facilities Management, Heriot Watt University, Edinburgh, June 16-18th 2008.
- Watson, C. (2003) Review of building quality using post occupancy evaluation. *Journal of Program Education Building*, 35, 1-5.
- Watson, C., Thomson, K. (2005) Bringing Post-Occupancy Evaluation to Schools in Scotland, OECD / PEB Evaluating Quality in Educational Facilities. OECD Publishing; 129-34.
- Zimmerman, A., Martin, M. (2001) Post Occupancy Evaluation: Benefits and Barriers, *Building Research & Information*, 29 (1), 168-174.
- Zimring, C. (1987) Evaluation of Designed Environments: Methods for Post Occupancy Evaluation, *Methods in Environmental and Behavioral Research*, New York: Van Nostrand, 270-300.

Potentialities Of The Augmented Reality In The School Manuals Of Primary Education

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Abstract

Today's technologies show unique potentialities in education. How can virtual / physical interweave add value in education? In an attempt to find an answer to this question, we carried out an analytical study that predicts to investigate hypothesis previously elaborated in order to find elements that allow us to verify if the augmented reality can be an added value for the school manual. A focus manual on the study of Portuguese and the environment was taken as a focus. We start from the following hypothesis: application of augmented reality adds value to the textbooks. The study is being prepared to be applied to primary students by trainee students in the context of initial teacher training. In this context, we intend to look at school textbooks, articulating them with the curricular goals and the student profile for the 21st century in order to understand the potentialities of augmented reality. Examples of use are presented. The results confirm our hypothesis and reinforce that the inclusion of augmented reality adds educational value: it promotes methodological renewal by changing the profile of student and teacher in the sense of promoting a connective and circular education with a focus on the student who produces his own knowledge.

Key words: *Augmented reality, Methodological renewal, Initial teacher training.*

Introduction

We grew up with the idea that in the year 2000 the world would end. In reality, the Normal Science that Kuhn (2009) called the phase accepted by the scientific community was broken by the appearance of enigmas that the traditional paradigm could no longer solve. This anomaly of persistent puzzles is giving birth to a new era with projection in the digital world, so we live an era of transition to a new world. In this age, we have not yet been able to detach ourselves from physical elements that were as important in our lives as the physical textbook, but we began to rethink how to transform them. The new generation of children entering or going to school are actually different in their cognitive and emotional characteristics, in the way they live life, in their interests and motivations. Citing several authors, Roberts (2010) defines this generation that has grown up exposed to ICTs and, therefore, experiences skills that make it suitable for the simultaneous use of multimodal digital resources that connects it with the world, as a generation that values the process collaborative learning, often networked, struggling to learn from traditional methods and with a limited one-size-fits-all program.

Effectively, current technology can favor the leap into the new era, for its potentialities and opportunities to develop skills base for current citizenship. But technology is not enough, education professionals are needed with a vision of the future of children's lives, change-conscious professionals and social and economic trends, aware of today's child psychology and innovative experiences in education that have already took place in pilot schools or small niches. It also needs reflective, innovative, creative, enterprising and constructive professionals who reflect on the new methodologies, taking from them ideas to experiment, deduce and recreate, that move towards the mission of contemporary education in line with real life, inclusion of current technologies should provide meaningful learning for the school and for life, in addition to being able to read, write and count. This articulation with life imposes a knowing and being cognitive, emotional, relational and organizational, so there are important skills in this new century as they define the profile of the student (Oliveira-Matins, 2017, OECD, 2005).

In addition, it is in the real relationships between people and facts that learning becomes more meaningful, so that the school should not be limited to its walls but overflow to the world by immersing in it, its problems, anxieties, conflicts, desires and dreams, and emerging with solutions and preventions, knowledge and skills of adaptability, recognition, flexibility, creativity, intellectual and moral autonomy for proactivity in personal, academic and social life. In the latter context, Pascoal (1999), based on several studies by Piaget, reinforces that in the interaction of assimilation with accommodation guided by self-regulation, intellectual autonomy is emphasized, and the child is

not satisfied with a methodology based on memory passive because he feels intellectual curiosity and wants new ways of solving everyday problems, thinks about propositions and not only about the experience provided by concrete objects, raises hypotheses, privileging the formal aspect of thought. Moral autonomy, however, refers to their critical capacity vis-a-vis situations, becoming aware of decisions, of respect for the other.

In this scenario, the textbook can be a limiting element of education if the teacher does not release his / her potentialities through active methodologies and resources that enhance value creation in education to train citizens capable of producing creative ideas, not just repeat what is written by other generations, in other contexts. There is, therefore, a need to open spaces for the student to affirm his / her change of interaction with the environment, developing problem solving skills to produce knowledge, that is, to move from the concrete intelligence that interacts in the real to a formal structure, the content, knowledge (idem).

When looking at the primary school textbook, there is a physical and digital model. Both models respond to the logic of the press culture characterized by packaging information, ideas and organized knowledge and assume a standardized curriculum development model and in mass, that is, reveal six characteristic challenges of the twentieth century: model of expository and receptive teaching, material structured and self-sufficient for curriculum development, cultural industry product packaging, cultural object of press technology, encyclopaedist organization of knowledge, resources mediator between official curriculum and educational practices (Area, 2017). However, in Portugal the model in digital format, despite being a replica of the previous one, already begins to give the first signs of change: it allows access to an avatar with information, in the case of the Portuguese area, for example, grammatical, text structure, with access to PowerPoint and interactive fiches that can be stored in the platform or in the student's own folder; in the case of the Mathematics manual there is the possibility of performing interactive exercises with possibility of correction and conclusive information; Media Study allows you to access interactive content exploration and explanatory PowerPoint images. This fact, compared to the framework of a few years ago (Quadros-Flores, Ramos & Escola, 2015), shows a positive evolution, but still does not allow the student's collaboration in the manual itself which remains closed in its contents and possibilities, despite of interactivity with a view to consolidating knowledge. Some authors point out the importance of interactivity as a determining factor in learning Matas (2011) the need for the living book, which facilitates the updating, that includes tools that allow the student to collaborate, be multimedia and interactive and foster a free navigation through hypermedia Adell (2007), which has social life, which is dynamic Vershbow (2006). This view of the book can be associated with the school handbook by showing more the process of construction in time, open and flexible, adaptable to the group of students and the educational network that becomes active, than the finished, static, closed and limited product.

In Portugal there are platforms that complement the primary school textbook, namely the Virtual School (Porto Editora group) and 20th Digital Classrooms (e-LeYa group) and, according to Quadros-Flores, Ramos and Escola (2015), they rely on pillars in which they aim to improve the results of the children: the organization of the work of the teacher in the level of the planning of classes, of the group and of the work accomplished and evaluation tests; support to the teacher and student through multimedia resources that stimulate vision, hearing and interaction, such as animations, playful and interactive activities, videos, games and concept maps; communication between peers and teachers, chat, forum and sending documents / classes built; other features outside the platform. They amplify the potentialities of the textbook, so the authors (idem) show that they represent the first phase of change in the textbook. For Area (2017) the change lies in the crossing of different areas: in the artifactual or technological dimension, teaching and student functionality, in the processes (pedagogical object) of production, distribution and consumption.

In this evolutionary process, we arrive at Augmented Reality (AR) as a didactic resource that encourages more radical changes in the school manual and, consequently, a change in the child's attitude towards the learning process, a change in the teacher's attitude towards the opportunities of development of skills in the child, more pronounced methodological change, change in the opening of the school to the world and the world to school. It is emphasized that augmented reality can be a driver of the shift from the traditional model to the creation of a dynamic, open, personalized, daring learning model in creation and production, collaboration and network learning, focusing the learning process on the child. According to Matthioudaki and Ioannidou (2018), augmented reality is very promising in improving the teaching and learning process, since it allows learning beyond the curricular boundaries, redefining space, time and resources and that benefits the learning environment as it increases flexibility and interaction in learning activities by ensuring continuous learning. It also promotes immediate access to a range of relevant, collected and shared information from different applications (Yang & Yuen, 2012). In fact, the AR, by allowing the interactive interface of elements of the world with virtual environments (Cobo & Moravec, 2011) and simultaneous exercises in real time, captures the child's full attention in the learning process, facilitates the understanding of the world and things, promotes ubiquitous learning with

stimuli of immediate interaction and moments of decision. Downey (2016) proposes a multiplicity of possibilities for the use of AR in art, architecture, safety, sports, education, medicine, advertising, transportation, and other domains, showing that AR has potential not only in the learning, but also in the daily life of individuals.

This article presents a critical and reflexive thought about the potentialities of augmented reality in education, namely in the school manual. It aims to present augmented reality tools that can be an asset in the use of the school manual, reflect on its potential, and exemplify how the virtual / physical interweave adds value in education.

Methodology

An analytical study was designed to investigate hypotheses previously elaborated in order to find examples of augmented reality that could be an added value in education. The textbook of different curricular areas was taken as the focus of the exposition. We start from the following hypothesis: application of augmented reality adds value to school textbooks by allowing (1) child participation, (2) integration of other resources by teacher and by the student (3) involvement of other education actors the real and contextual world, (5) the development of skills other than curricular (6) curricular articulation (7) methodological change. We reinforce that the study is being prepared to be applied to primary students by trainee students in the context of initial teacher education

Thus, in this article we suggest some AR tools and possibilities of articulation with different curricular areas in the primary education (a). We also present some practical examples of use in the school manual, as well as experiences already used in real context (b) by trainee students in the context of initial teacher training, Supervised Pedagogical Practice.

Findings

(a) Augmented reality as a regenerative potential of curricular and contextual integration

The Order of the Ministry of Education 5908/2017 reinforces curricular flexibility as a means of promoting quality education, that is, it encourages effective and meaningful learning, which stimulates the consolidation of knowledge and its mobilization in concrete situations in order to foster a successful citizenship in the context of the challenges of contemporary society. It is also in this context that the need to develop competences designed in the student profile (Oliveira Martins, 2017) is framed in a transdisciplinary educational environment that involves not only curricular knowledge, but also abilities, attitudes and values. Thus, it is expected that the student who develops scientific knowledge in the curricular areas, acquire cultural and artistic training, possessing empathic capacity, critical thinking, communication, creativity, autonomy and intellectual, moral maturity, intervention and digital literacy, that is capable of integrating knowledge, solving problems, mastering different scientific and technical languages, cooperating and collaborating and having aesthetic sensibility. In this context, AR assumes a relevant potential for the development and implementation of innovative teaching approaches, namely the ability to research, analyze, understand, select, integrate, argue, produce and share. Surfing on the Internet we can get free applications that require only a *Smartphone* or *Tablet* with *Wi-Fi* connection and that reveal potential for change in education. Taking into account the curricular contents of the primary education, table 1 presents some examples of potential use of augmented reality in educational context.

Table 1: AR as a regenerative potential of curricular and contextual integration

Pokémon Go	The search for little monsters through the streets of the city, the neighborhood or in the school space, can provide a visit to the city: its monuments, gastronomy, culture..., while at the same time highlighting dangers, safety signs, community intervention projects, multiple public and private institutions, urban media, community spaces, commerce and institutions, comparisons with twinned cities... that could be the input of debates, the realization of intervention projects for the encounter of local solutions, study of geography and history, use of maps and their recreation, of posters and infographics, being able to stimulate the reading of texts, of works, news and the recreation of these in books online. In addition, it can awaken the study of distances, the design of angles, geometric figures, estimates and costs. Looking to the nearest space, the neighborhood and the school, triggers the deeper knowledge of the place stimulating positive interrelations with the school community that the game itself promotes in articulation with the areas of physical and motor expression, dramatization, plastic arts and music. In addition, in the interaction game there is space for developing the foreign language.
AR Dragon	The possibility of feeding your pet can provide a reflection on the food: what foods, how to cook, hygiene care, food validity, table presentation, meals, causes and effects of healthy / unhealthy eating, estimates, article reads and post-sharing text writing. It also allows the

	knowledge of self and others to draw up graphs and to carry out objective, coherent and communicable analyzes that promote the development of the capacity for reflexive and critical reasoning that can give rise to intervention projects with immediate effect on children .
Google translator	The possibility of pointing a smartphone camera to signs, pamphlets, publicity, papers, restaurant menus and immediately accessing the translation can promote the learning of foreign languages.
Quiver	The possibility of digitalizing children's works in printed cards that are acquired on the Internet and of magically giving them life in 3D digital environment, integrating image, movement, audio and interaction, allows the creation of emotions in children and can be articulated with different areas: plastic expression, study of the environment, including history and geography, Portuguese, mathematics and foreign language. The possibility of photographing, or filming the experience of reply to an interactive questionnaire, interacting and playing with the characters, stimulates methodological and playful renewal in learning. It is unfortunate not to allow the user to create the questionnaire. Also, the possibility of deciding, given the choice of the place of visit, allows developing leadership, decision-making, argumentative and critical thinking skills and cooperative work, as well as stimulating project creation and curricular flexibility.
WallaMe and AR Geocaching Game	The possibility of leaving hidden messages anywhere in the world allows contact with the world and its knowledge, its history, geography, culture, nature and society, by which it stimulates contact with the world, thus the development of language and communication, consequently promotes reading and writing, the ability to question, digital literacy, mathematics (measures of greatness, money, and other essential mathematical instruments in the study of phenomena) the development of culture, communication, geography, creativity .
Qlone	The possibility of scanning an object and inserting it in 3D form opens the child to complete their manual with real-life things with materials they have built in the area of plastic expression, musical, mathematical, and science.
Aurasma Reveal	- Viewing videos and images overlapping the physical element allows you to pinpoint objects and respond to gestures interacting with virtual objects. In this way, it stimulates the creativity of the child and the teacher in order to demonstrate how they understand the world, or the content to be dealt with in the school manual, promoting the articulation and curricular flexibility, the development of collaborative projects.
QRCode	The ability to create two-dimensional barcodes, easily digitized and transformed, alters the way the child interacts with the world and broadens the possibilities for dialogue of contents and curricular areas, materials, interlocutors in education, customization and methodologies.

This table with AR tools shows the possibility of a new era of the school manual in a new educational scenario where learning has meaning and can provoke emotions. By deflating the traditional orientation from the simple to the complex, in a line of clear continuity from successive stages to an end, new openings are possible that, according to the pertinence of the content, mix the capacity to understand and to realize it, of the interest and comprehensiveness of the curiosity, creative and entrepreneurial capacity and organization of educational practices in the sense of promoting opportunities for student growth, always bearing in mind the expected objectives / competences in the respective year of schooling. In a transdisciplinary environment it is possible to associate active methodologies focused on the student and the learning process stimulating their involvement and commitment, the motivation and the desire to improve, therefore the satisfaction. Examples of active methodologies are *Gamification, the Flipped Classroom, project-based and problem-based learning, and peer-to-peer learning*.

(b) The augmented reality experienced in real schools in a context of internship in the initial formation of teachers: experiences and results

In the context of initial teacher training, in an internship situation, future teachers applied AR tools in their

educational practices. It was verified the enthusiasm of some in the organization of the lesson plan, but also the technical difficulty of others in the use of the tool. By stimulating the institutional supervisor of the student trainee creativity, some fantastic successful experiments were possible not only because they promoted enthusiasm and emotion in the trainee student, cooperating teacher and children, but also because it surpassed the imagination of the various educational actors, having immediate effects on satisfaction of children and learning outcomes. Here are some concrete examples with evidence:

- (1) The child had access to the printed sheet of Quiver and colored the images and interacted through the program (Figure 1). Listening to the sound of the plane and watching it fly in space you can select cities to visit. The course is recorded and inserted in the school manual through the *Aurasma*. It motivates the development of the theme "media" in the study of the environment in articulation with the development of skills of the student profile. Wanting to extend the approach, for a matter of time, was not possible, a project was then developed on cities and their cultures, tourism and globalization. Depending on the level of education and guided in a *WebQuest* articulated with Google Drive (as a collective repository of the class), children can access brochures from a travel agency, for example *eDreams* learning to book trips and being aware of their values, *Google Earth*, to *Youtube* by selecting videos that help you understand the topic you are studying. They can access texts, books, news, music, relevant document sources and integrate all the information collected in *QR Codes* that will be attached to the school manual. They can also take artistic forms, in appropriate applications, compile the information into keywords, or into a concept map. Working collaboratively, an online book with the tasks performed by the various groups is attached to the school handbook using *QR Code* or *Aurasma*. These tasks should be performed by children.



Figure 1 Activity with Quiver

- (2) The child selects a video on *YouTube* and integrates it into their manual using *QR Code*, but can share it with their colleagues. Provides a *QR Code* to your colleagues to voluntarily decide whether or not to attach to your manual (Figure 2). The trainee student integrated questions to stimulate understanding of the text and a knowledge verification / consolidation quiz. Also these features can easily be shared with the pairs (Figure 3). Eventually the tendency of the publishers will be to assume this hybrid possibility of school textbooks by providing resources through AR. If this happens, it will be a good help to the teacher by freeing him or her for other tasks. However, the teacher should also add resources and guidelines made by him / herself and appropriate to the class and, above all, open spaces for children's collaboration in school textbooks, giving them the opportunity to customize them for the children and other actors they select. They are the children who must research, select, add, connect, produce and, if possible, share.



Figure 2 Integration of QrCode by the student



Figure 3 Integration of QrCode by the student

- (3) During the experimental science class, where the child used different soil samples to verify their permeability, each had the opportunity to access information and challenges through AR (Figure 4). This information and the activities they have performed in response to the challenges can be attached to the middle school textbook. After the children learn how to use the technology (*Aurasma / Reveal*) they can search, according to their interest, need and rhythm, can create text or book online, include in their school manual using AR by customizing it.



Figure 4 Access to information during class

- (4) The school manual itself served as the basis for this activity through the tongue-and-groove "The sink and the kite" (Figure 5). In this specific case it was the trainee student who, for a better understanding of the text, integrated movement (drip fell from the sink to the chick's beak), and video (the birth of the chick). There are two essential points in the process of learning, meaning and emotion that have been experienced in this experience. The children and the cooperating teacher were fascinated. The children were able to develop creativity in the field of orality, imagining the sink and water drip, what the chick felt, what the function of the sink, why it drips in the sink and what happens to the water drip when it enters the chick's beak. They were able to write a registration form by completing the character's balloons and a tongue-and-groove that was played through *incredibox.com*. All this can be attached to the manual through AR. By observing the birth of the chick, they can articulate the knowledge of the Study of the Middle by creating a research project: how birds are born, incubation of eggs in the hen (time / duration), growth of the chick until it is rooster, physical characteristics, mobility, reproduction; of mathematics: estimates, measures of length and time, masses, money, representations of sets and data. Children should learn to use AR resources to freely use at school or at home. The collection of information on the subject studied may be free or oriented, but it is important that they select the best resources, arguing the decision,

to be attached to the school handbook. Example of this suggestion is to access the AR through her selecting and interacting with character, in this case an animal (Figure 6)



Figure 5 Access to a video and water drip movement from the sink. Figure 6 Access to animals through AR

- (5) In this activity, in an environment of discovery and collaborative way, the children observed and felt, touching the rocks and registered their characteristics. Each group showed to the others, what they learned by stimulating dialogue and scientific foundation, and the presentations were recorded. The children learned to use the AR application, integrated the videos in the school manual, or registration forms, and held a final debate on the topic of critical and argumentative thinking (Figure 7). It is important to leave open possibilities for children to recreate!

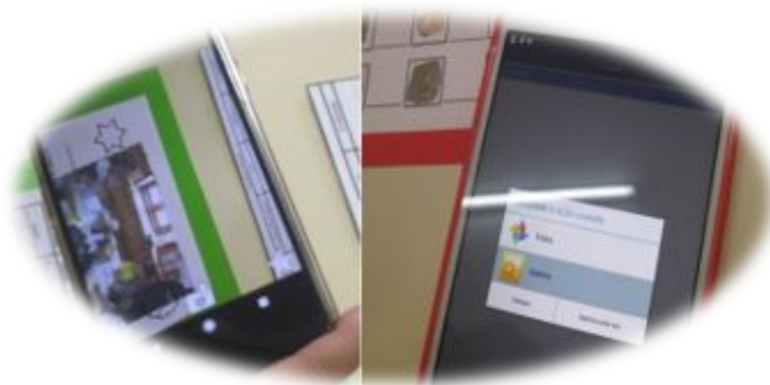


Figure 7 Integration of a video, made by the children, related to the work developed

Conclusions

In an "augmented" world, reality merges with digital objects immediately, interactively, and in three dimensions. This overlapping of virtual information to the physical elements of the world, such as the case of the school manual, when and where we want, changes the way we learn, what we learn, when and where we learn, articulates the formal and the informal, the playful as a didactic tool and develops digital literacy skills among other transversal and fundamental competences in the contemporary world. In addition, it changes the attitude and connections with the world, by which it alters the student profile: collaborator in the construction of didactic resources, in an individual and collaborative way, critical and creative entrepreneur, self-regulator of learning, responsible. In this environment, learning becomes increasingly social and organic, seen as transformative.

Learning to learn in a more open social model, where challenges open paths to groups and individuals, and these travels driven by common and individual interests and objectives, in the most varied directions, presupposes growing up in an environment of connections where children reveal the interpretation which have on the curricular content studied through selection of added resources, this selection being the mirror of the construction of their world, reflecting their emotions and sensitivities. Knowledge is thus a process built in an environment where the child moves with dynamism and interaction, mobilizing theory in practice accompanied by reflexive processes.

If one day the AR is able to integrate a multiplicity of technological equipment, we can talk about sustainable circular education. Given that we are in a transition period, it seems to us, however, that this connectivist tendency (George Siemens, 2005) must be accompanied by the teacher's attention to converge with the objectives for the year of schooling, since the chance encounter of selections pedagogy for children can lead to the dispersion and difficulty of understanding and building meaningful learning. Thus, the teacher assumes a fundamental role in the selection of technologies and methodologies that promote the development of thought and interaction, guiding the child in his / her growth process and understanding of the world, of himself and others, helping to think critically, produce and share knowledge and resources in the sense of connectivity, creativity and circularity.

This study confirms that AR encourages the participation of the child, teacher and other actors in textbooks and interaction with the real and contextual world, which promotes curricular flexibility. In fact, AR has the potential to change the pedagogical action of the school manual to the level of transmission, the organization of units and sequences of learning, transforming the physical school manual, as we now conceive it, as it overlaps the digital, adding value to the process of construction and recognition of knowledge patterns, the possibility of developing skills and evaluation parameters, revealing that it is a process to be developed rather than a tool to be applied in relation to digital technologies, as Castells (2000) states. Thus, it requires the teacher creativity to find diversified strategies and opportunities that respond to the needs and interests of the students and that expand spaces and moments of learning of the children for the children.

This scenario differs from the image of education 1.0, very artisanal, of 2.0 already more collaborative, approaching 3.0 where the recognition of change is a reality that imposes proactivity of the educational agents to a circular education focusing on the child who produces the information it needs. This educational sustainability favors the adaptability to the student's environment and autonomy. As a conclusion, augmented reality promises profound changes that make the manual innovative: it changes the possibility of the learning structure according to the child and the context, so the static, limited, transmissive school manual becomes more open, comprehensive, questioning, interactive and shared; it changes the possibility of more distributed and connective and less organized articulation; changes the opening of the book and the ways of teaching to learn to learn, more constructivist and collaborator, by which changes the profile of the student, teacher and learning methodologies and adds the possibility of developing skills and emotions in the learning process.

References

- Adell, J. 2007. O livro de texto do futuro. *Revista Galega de Educación*, 38, 9-15.
- Castells, M. (2000). *A Sociedade em Rede*. S. Paulo: Edições Paz e Terra.
- Cobo, C. & Moravec, J.W. (2011). *Aprendizaje invisible. Hacia una nueva ecología de la educación*. Barcelona: Universitat de Barcelona. Available: <https://www2.educationfutures.com/books/aprendizajeinvisible/en/>
- Downey, S. (2016). *The Gigantic List of Augmented Reality Use Cases*. Available: <https://uploadvr.com/augmented-reality-use-cases-list/>
- Kuhn, T. (2009). *A Estrutura das Revoluções Científicas*. Lisboa: Editora Guerra & Paz.
- Matas, M. (2011). *A next-generation digital book*. Available: http://www.ted.com/talks/lang/en/mike_matas.html.
- Matthioudaki, O. & Ioannidou, K. (2018). Augmented reality in education: introducing the tool Aurasma in a hybrid learning context to increase Learner autonomy and motivation. In *Proceedings of INTED2018Conference* (pp. 1364-1373). Valencia: INTED.
- Pascual, J. (1999). Autonomia intelectual e moral como finalidade da educação contemporânea. *Psicologia, Ciência e Profissão* 19 (3), 2-11.
- Roberts, R. (2010). The Digital Generation and Web 2.0: E-Learning Concern or Media Myth? In Yang, H., & Yuen, S. (Eds.). *Handbook of Research on Practices and Outcomes in E-Learning: Issues and Trends* (pp. 93-115). Hershey, PA: IGI Global. DOI: 10.4018/978-1-60566-788-1.ch006.
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3-10.
- Szymczyk T., Skulimowski S., The use of virtual and augmented reality in the teaching process. In *Proceedings of INTED 2017, 11th International Technology, Education and Development Conference* (pp. 6570-6577). Valencia: IATEDAcademy.
- VERSHBOW, B. (2006). *Defining the networked book: a few thoughts and a list. If: book -A project of The Institute of the future of de Book*. Available: http://www.futureofthebook.org/blog/archives/2006/05/defining_the_networked_book_a.html
- Yang, H.H., & Yuen, S. C-Y (Eds.) (2012). *Handbook of Research on Practices and Outcomes in Virtual Worlds and Environments*. Hershey, PA, USA: IGI Global. doi:10.4018/978-1-60960-762-3.

Practical Examples From Economics And Security For Motivation Purposes In The Tuition Of Single Variable Calculus At The Start Of Studies At University

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Abstract

In this paper, the authors try to find answers to questions relating to the selection of solved examples from the Single Variable Calculus field that could evoke positive motivation in students of economic and security disciplines at universities in their studies of Mathematical subjects. They concern the dependency of the selection of examples with respect to the timing of their presentation in the tuition process; at the same time, as the question of the adequacy of these examples with respect to the students' level of knowledge in their first year of studies. At the end of the article, some demonstration examples are mentioned, which contain Single Variable Calculus applications that require a knowledge of only the most basic parts of the given subject matter. Therefore, these not-too-difficult examples can be used - as the authors hope, for the eventual interest of other users at other universities with Engineering disciplines.

Keywords: *Mathematics tuition, motivation to study, Single Variable Calculus, examples, universities with Engineering disciplines*

Introduction

When selecting a sample of solved examples for this contribution, we were aware that each selection of such examples is a subjective matter. Nevertheless, we shall present some experiences that could - despite the subjectivity of the selecting examples, contribute both to the quality of the afore-mentioned examples as well as to the well-timed motivation of students to study mathematics.

The greatest advantage of the selected sample examples, where complex mathematical tools are not used, and which - at the same time, are a bridge between mathematics and the specialist subject matter is that these examples can be used in the early stage of mathematics lessons, or at the beginning of a certain mathematical topic. When motivation does not take place in time, it will lose much of its effect. The proper and immediate understanding of mathematical application examples will also make a significant contribution to increasing the self-esteem of some less gifted students.

It is also important to have the widest variety of samples which motivate an understanding of the solved examples - both in terms of the content of specialized topics, and the range of mathematical or geometric skills used.

Feedback can certainly help to reduce the subjectivity of the selected examples chosen by the teacher. In order to acquire these skills, it is necessary to do several research surveys in the tuition process whereby students will evaluate individual examples.

Now, let's mention a few experiences that can contribute to the quality of the form of the text. The mathematicians concerned should consistently use a valid international standard (International Standard ISO 80000-2: 2009); which defines the writing of mathematical symbols in the examples and all the lessons, and which is always implemented in individual national standards. Experience to-date, has shown that many mathematicians do not use these standards consistently when writing mathematical teaching texts. The excuse for this fact can certainly not be that every editorial office of mathematical or other journals has its own requirements for writing texts with mathematical symbols - which are often determined by tradition.

Each figure should have its own concise description of the situation which it displays. Coordinate axes - and in particular, coordinate axes in three-dimensional space, should be oriented such that they should be ended with arrows. This should also - where possible, be if it is a graphical output from a computer algebraic system (e.g. Maple, Matlab, Mathematica, etc.), and the figure needs to be completed by using other software.

In this sample of presented and solved examples, each example has its concise name with the use of keywords, which are clearly highlighted in *Italics*. The example name contains and highlights those key mathematical terms that are applied, as well as those highlighted technical terms that must be used in the particular example. Thus, the example name represents a certain abstract of the whole example and is valuable both for the better orientation of the teacher and that of the student.

If it is necessary to explain some of the technical terms, then it is advisable to do so immediately after setting out the example, and to place these explanations in the marked remarks. It is sometimes useful to summarize the result obtained in the example.

Although some examples can be very closely related to each other, it is prudent to try to formulate them from the start - in a relatively independent way. For future changes to the sample examples, it may be helpful not to use references to other examples in the text.

Experienced educators, including the authors of this contribution, do not consider the presented sample of solved examples as being definitive. The authors are convinced that attractively formulated solved examples – with the right timing, will always “spice-up” the tuition process.

The Study

Nowadays, Single Variable Calculus is a classic mathematics teaching topic in most of the final years of secondary schools. In this teaching text, the central concept is the limit of function. Euclides of Alexandria, ($\pm 365 - \pm 300$ BC); and in particular, Archimedes of Syracuse, (287-212 BC), used the limit of function in a simple form. The limit of function - as the most basic concept of mathematical analysis, was defined in the 17th Century by the Englishman, John Wallis, (1616-1703); but it was not until the Czech mathematician and persecuted philosopher and priest - Bernard Bolzano, (1781-1848), the Frenchman, Augustin Luis Cauchy (1789-1857), and the German, Karl Weierstrass, - 1897), who introduced the concept of Limit consistently into mathematics. Without limits, is hard to imagine teaching mathematics today. But, understanding the concept of the limit is a rather difficult issue.

The first example in this paper is also devoted to applying limit processes to derive a formula for continuous interest rates, which is to say, the limit of the Compound Interest Rate. The term “Derivative” can be very naturally explained by the limits of functions. The first - and higher derivative of function allow one to solve problems with searches for the maximum or minimum of a function; the so-called Extremal Problems. The solution of these problems makes it possible to optimize many processes from the engineering practice field.

The second example deals with the application of the derivation of a certain function to solve the extremal problem of the maximum profit calculation.

In the third example, the necessary condition of the local extreme of a certain function is applied to minimize the cost of building a road connection to a railway line so that the connection is directed under the optimum angle. In the fourth example, a Cosine Theorem - known from secondary school geometry lessons is applied, and the necessary condition of the local extreme of the function of one variable is used to calculate the optimal distance such that the observer is able to register/see the vertical image at the maximum angle. This is a situation that can be solved in security situations - where the observer is an explorer. The example is also interesting in that it also demonstrates in the figure showing a graph of certain functions, the relationship of the Arithmetic and Geometric Means of two values.

The fifth - and final example, is the application of the “Per Partes” method in an Indefinite Integral to derive the function of the total income, and hence - to determine the Demand Function; which, when applied to the limit at the plus infinity (improper) point $+\infty$, thus easily enables one to confirm the fact that the demand rapidly decreases with the quantity of products sold. This example is useful for teaching for many reasons. Especially because the “Per Partes” method is uncomplicated and is often discussed in the last years of secondary schools. Mathematicians know that this method very often also solves very complicated problems; for example from applications where mathematical physics equations are present - for which, advanced functional analysis procedures are needed.

In this example, there are functions that also contain Exponential Function. And it is up to the student’s ability to control the derivation and integration operations of such functions at universities where great emphasis on such matters. The reason is that the exponential course, or a course that is very close to it, has a large number of natural and social laws. At the end of the example, the notion of limits is used to demonstrate that - as noted above, demand decreases in dependence with respect to the growing quantity of the products sold. This conclusion of the example is a nice interconnection of Integral Calculus with the Limit, as the basic concept of the differential calculus of functions of one variable.

Note that in this article - as well as in the teaching process, we consistently use a valid international standard for writing mathematical symbols - (International Standard ISO 80000-2: 2009). In the Czech Republic, this is the national standard - (Czech Standard ISO 80000-2: 2012).

Findings–Main Results–Sample Solved Motivational Single Variable Calculus Examples

Example

The *Limit Process* application, and the use of the well-known definition of the *Euler Number* as the limit for the derivation of *Continuous Interest* - as the limit of the *Compound Interest Rate*

Derive the formula for *Compound Interest rates*, which are mainly used in theoretical financial models; you know that the extreme case (limit) of the Compound Interest rate described - including its formula in another case, where the *interest rate frequency* indicates how many times the interest is credited to a year, grows unboundedly; in other words, an unlimited short *interest rate period* also corresponds to the unlimitedly low *interest rate*. Abstract this from the *Withheld Interest Tax*.

Solution

Compound interests, when ignoring the withholding interest tax, is described by the formula

$$K_n = K_0 \cdot \left(1 + \frac{i}{m}\right)^n,$$

in which K_n is the amount payable, K_0 is the principal, i is the rate p. a., and n is the capital deposit period in years.

Now let us move on to the compound interest rate limit for $m \rightarrow +\infty$. For a period of n years, the interest is credited a number of times $m \cdot n$, in other words - the number of *interest periods* is now $m \cdot n$, since - in each of the n periods, there is another m period; i.e. the *limit process* leads to a formula describing *continuous interest*

$$K_n = \lim_{m \rightarrow +\infty} K_0 \cdot \left(1 + \frac{i}{m}\right)^{m \cdot n} = K_0 \cdot \lim_{m \rightarrow +\infty} \left[\left(1 + \frac{1}{\frac{m}{i}}\right)^{\frac{m}{i}} \right]^{i \cdot n} = K_0 \cdot \left[\lim_{\frac{m}{i} \rightarrow +\infty} \left(1 + \frac{1}{\frac{m}{i}}\right)^{\frac{m}{i}} \right]^{i \cdot n},$$

$$K_n = K_0 \cdot e^{i \cdot n},$$

where we use the defining equality for e

$$e := \lim_{x \rightarrow +\infty} \left(1 + \frac{1}{x}\right)^x.$$

In conclusion, let us note that the continuous interest rate is even more advantageous for depositors than compound interest is; whose special case is - that even though the strength of continuous interest is only manifested by interest rates of several tens of percent per year.

Example 2

The application of the *Derivative of Function Concept* to the solution of *Extremal Problems* relating to the *Maximum Profit Calculation*

A car rental centre has 50 passenger cars. Long-term observation has discovered that, in the course of the daily rental of one car for 30 €, it achieves full daily rental and every increase of rent of 1.5 € causes a decrement of interest in one car. Evaluate the car hire price, such that the firm's profit is maximised, if the new calculated price of car hire service is 3.- € per car on the daily overhead costs.

Solution

When x indicates the number of rented cars, then $50 - x$ cars remain untapped daily, as a result of increased rent by $1.5 \cdot (50 - x)$. Then, the daily rental income is equal to

$$P(x) = (30 + 1.5 \cdot (50 - x)) \cdot x - 3x = 102x - 1.5x^2. \quad (1)$$

The quadratic function $P(x)$, represented here by the parabola open against the (positive) direction of the axis Oy , has only one local, (and global), maximum at the critical point x_0 ; for which it is valid:

$$P'(x_0) = 102 - 3x_0 = 0 \Rightarrow x_0 = 34.$$

The increased rent of $1.5 \cdot (50 - 34) = 24.-$ €; that is, 54.- € per car; which gives a maximum daily profit of $P(34) = 1\,734.-$ €. from the daily rental of 34 cars.

In conclusion, let us note that the calculated value of 1 734 can also be obtained from (1), after modifying the quadratic expression to its "square" - (second power), known from secondary school mathematics. Then, it is valid that:

$$P(x) = -\frac{3}{2} \cdot x^2 + 102 \cdot x =$$

$$\begin{aligned}
 &= -\frac{3}{2} \left[x^2 - 2 \cdot \left(\frac{102}{3} \right) \cdot x + \left(\frac{102}{3} \right)^2 - \left(\frac{102}{3} \right)^2 \right] = \\
 &= -\frac{3}{2} \left(x - \frac{102}{3} \right)^2 - \frac{3}{2} \left(\frac{102}{3} \right)^2 \\
 P(x) &= -\frac{3}{2} \cdot (x - 34)^2 + 1734,
 \end{aligned}$$

so the parabola has its peak at the point $V = (34, 1734)$.

Example 3

The application of angular properties in adjacent triangles, expressed by goniometric functions and cyclometric functions, including the application of the *Local Minimum Necessary Condition* of the function of one variable to calculate the mathematical condition that guarantees the *Minimum economic Costs* necessary to make a direct road-connection to the railway line that runs from the city - which rail does not pass through, at an *Optimum Angle*; if the ratio of road transport costs to the cost of rail is known.

Not far from Company A, the railway should run along a straight line to B. At what angle α to the railway line is it necessary to design a straight road from A, to make transport from A to B as low as possible, if the long-term rate for road transport is 1t/km, as compared to rail m more times expensive?

Solution

The situation is described by the following figure

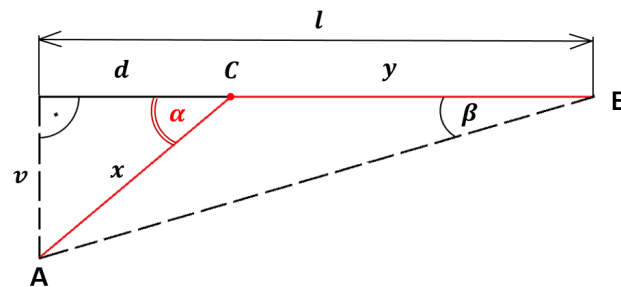


Figure 1 Finding the optimal angle of the road link to the railway line

Let n be the cost of transport by rail, p total cost, while v, l are constants. Then, it is valid that

$$\frac{v}{x} = \sin \alpha \Rightarrow x = \frac{v}{\sin \alpha}, y = l - d = l - v \cot \alpha,$$

so

$$p = m n x + n \cdot (l - d) = m n v \cdot \frac{1}{\sin \alpha} + n \cdot (l - v \cot \alpha).$$

The *Necessary* condition for the local *Extremum* of function $p(\alpha)$ gives

$$p'(\alpha) = -m n v \cdot \frac{\cos \alpha}{\sin^2 \alpha} + n \cdot (-v) \cdot \left(-\frac{1}{\sin^2 \alpha} \right) = 0 \Rightarrow -m n v \cdot \cos \alpha + n v = 0 \Rightarrow$$

where

$$\cos \alpha = \frac{1}{m}, \text{ kde } 1 < m. \quad (1)$$

From this, we obtain the *Stationary Point* of the function $p(\alpha)$, which is the sought angle

$$\alpha = \arccos \frac{1}{m}, \quad (2)$$

and that, under the following conditions

$$\cos \alpha = \frac{1}{m} < \cos \beta = \frac{l}{AB}$$

that is to say, under these conditions

$$\frac{l}{AB} < \frac{1}{m}, \quad (3)$$

Where l is the size of the perpendicular projection of the connecting road AB between Cities A and B in the direction of the railway line passing through City B.

It can be shown that $p''(\alpha) > 0$, i.e. the **total cost** $p(\alpha)$ is a function everywhere where $(0 < \alpha < \frac{\pi}{2})$ is **convex** and **minimal** for $\cos \alpha = \frac{1}{m}$..

Namely

$$p''(\alpha) = -mnv \cdot \frac{-\sin^3 \alpha - 2 \cos^2 \alpha \cdot \sin \alpha}{\sin^4 \alpha} - 2nv \cdot \sin^{-3} \alpha.$$

If we insert input from relation (1) here, we get - after a simple modification, the following relations

$$p''(\alpha(m)) = nv \cdot \frac{m^3}{\sqrt{m^2 - 1}} > 0.$$

Example 4

The application of the *Cosine Theorem* and the *Necessary* conditions for the existence of the *Local Extreme* function of one variable on the calculation of the *Optimal Distance* in which the robot is to be stopped in order to scan the height of the image of the vertical wall, under the greatest angle.

Determine the distance that the robot has to stop in order to scan the height of the image on the vertical wall at a maximum angle; if the upper, respectively, the lower edge of the image is by the value of a – or respectively, the value of b is higher than the robot's optical sensor.

Solution

The situation is illustrated in the following figure

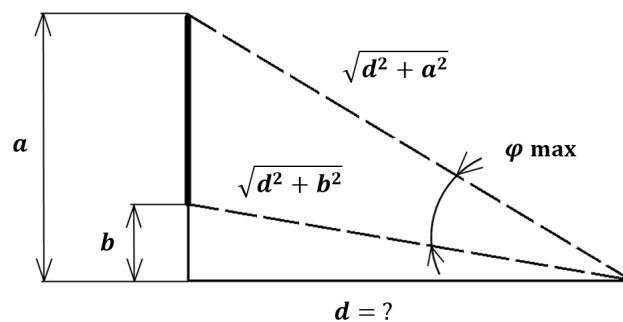


Figure 2 Investigation of the maximum scanning angle of a vertical figure, depending on the distance of the figure

From the Cosine Theorem for a triangle with sides a, b, c - known from secondary school mathematics,

$$c^2 = a^2 + b^2 - 2ab \cdot \cos \gamma$$

we get

$$(a - b)^2 = (d^2 + a^2) + (d^2 + b^2) - 2\sqrt{(d^2 + a^2) \cdot (d^2 + b^2)} \cdot \cos \varphi.$$

Let us denote

$$y(d) = \cos \varphi = \frac{d^2 + ab}{\sqrt{(d^2 + a^2) \cdot (d^2 + b^2)}},$$

where this dependence is expressed in the following figure (obtained from the Matlab computer algebra system).

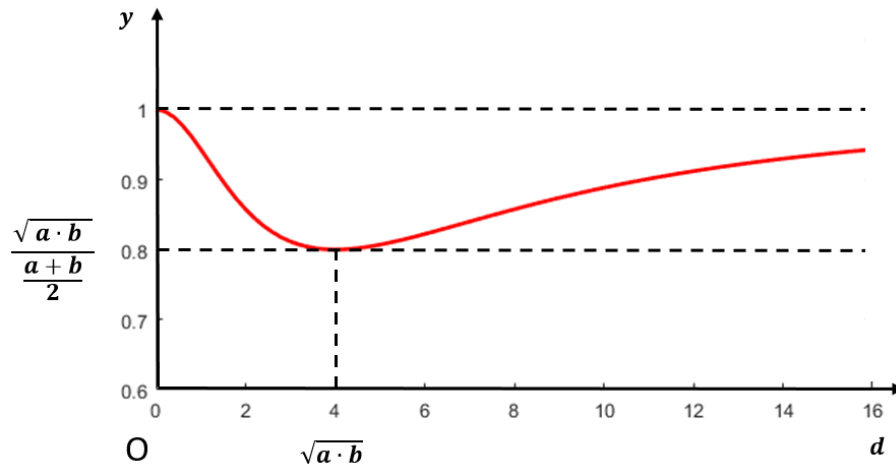


Figure 3 The graph of the dependence of scanned angle size, (given by the cosine function), with respect to the scan distance at $a = 8$, $b = 2$

From the geometrical essence of the task, it is obvious that the angle attains its maximum - and this is only once. Therefore, it is sufficient to use the necessary condition for its existence; which is the zero value of the derivative of the following function:

$$y'(d) = \frac{2d\sqrt{(d^2 + a^2) \cdot (d^2 + b^2)} - (d^2 + ab) \cdot \frac{d(2d^2 + a^2 + b^2)}{\sqrt{(d^2 + a^2) \cdot (d^2 + b^2)}}}{(d^2 + a^2) \cdot (d^2 + b^2)} =$$

$$= \frac{2d(d^2 + a^2) \cdot (d^2 + b^2) - (d^2 + ab) \cdot d(2d^2 + a^2 + b^2)}{[(d^2 + a^2) \cdot (d^2 + b^2)]^{\frac{3}{2}}} = 0.$$

Therefore, after the rearrangement of the last fraction numerator, the following equalities must hold for the nullity of that numerator.

$$\underbrace{(a - b)^2}_{> 0} \cdot (d^2 - ab) = 0 \Rightarrow d = \sqrt{a \cdot b}.$$

Conclusion

The robot must stop at a distance that is equal to the geometric mean (centre) of the two values a and b ; and it can be deduced that the corresponding value in this distance $y = \cos \varphi$, is given by the ratio of the geometric mean $\sqrt{a \cdot b}$ to the arithmetic mean $(a + b)/2$.

Example 5

The application of the “Per Partes” method in an Indefinite integral in order to derive the function of the Total Income - and from it, to then deduce the Demand function, from which it can be confirmed by the application of the Limit at the plus infinity (improper) point, that demand rapidly decreases with the quantity of products sold.

Find the function of Total Revenue $T_R(x)$ and Demand Function $d(x)$, if the Marginal Income function is $M_R(x)$; where x is the number of products, is given by the relation:

$$M_R(x) = \left(2 - \frac{x}{50}\right) e^{-\frac{x}{4}}.$$

Solution

The Total Revenue function holds

$$T_R(x) = \int M_R(x) dx.$$

After insertion, we will get

$$T_R(x) = \int \left(2 - \frac{x}{50}\right) e^{-\frac{x}{4}} dx = \left(2 - \frac{x}{50}\right) \cdot (-4) \cdot e^{-\frac{x}{4}} - \int \left(-\frac{1}{50}\right) \cdot (-4) \cdot e^{-\frac{x}{4}} dx =$$

$$= -8 \cdot e^{-\frac{x}{4}} + \frac{4x}{50} \cdot e^{-\frac{x}{4}} - \left(-\frac{16}{50} \cdot e^{-\frac{x}{4}} + C\right) =$$

$$= \frac{2}{25} \cdot (x - 96) \cdot e^{-\frac{x}{4}} + C.$$

Thus, the Total Income function is

$$T_R(x) = \frac{2}{25} \cdot (x - 96) \cdot e^{-\frac{x}{4}} + C \quad (1)$$

In the calculation, we used the “Per Parties” method that we had chosen

$$\begin{aligned} u &= 2 - \frac{x}{50} & v' &= e^{-\frac{x}{4}} \\ u' &= \left(0 - \frac{1}{50}\right) & v &= (-4) \cdot e^{-\frac{x}{4}} \end{aligned}$$

We calculate the Integration Constant from Equation (1), in which we replace x by zero - (the zero quantity of products for which we received zero income). The so-called **Initial Condition** for a unique solution then gives:

$$T_R(0) = -\frac{192}{25} + C = 0 \Rightarrow C = \frac{192}{25}$$

The Total Revenue function is

$$T_R(x) = \frac{2}{25} \cdot (x - 96) \cdot e^{-\frac{x}{4}} + \frac{192}{25} \quad (2)$$

We determine the Demand Function $d(x)$ from the relation

$$T_R(x) = x p = x d(x), \quad p - \text{price of product.}$$

From here, we have - for the Demand Function $d(x)$

$$d(x) = \frac{T_R(x)}{x} \quad (3)$$

After substitution of (2) into (3), we derive the demand function $d(x)$ relation

$$d(x) = \frac{1}{x} \cdot \left[\frac{2}{25} \cdot (x - 96) \cdot e^{-\frac{x}{4}} + \frac{192}{25} \right],$$

so

$$d(x) = \frac{2}{25} \cdot \left(1 - \frac{96}{x}\right) \cdot \frac{1}{e^{\frac{x}{4}}} + \frac{192}{25x}.$$

From this, it is obvious here that Demand $d(x)$ decreases rapidly with the number of (sold) products; since

$$\lim_{x \rightarrow +\infty} d(x) = 0.$$

Conclusions

The aim of the article was, apart from the attempt to find answers to some more general questions relating to motivating students to study Mathematics; to show –at the same time, a sample of appropriate uncomplicated examples from the Single Variable Calculus field. The sample of five examples presented herein is primarily intended for students of the first year of the Security and Economics disciplines. Both of these disciplines are studied at Tomas Bata University in Zlín, but the authors believe that these examples can also be used at other universities where Single Variable Calculus is taught; whether in the full-time or combined/distance forms of studies. Of course, these examples can also be used in the appropriate parts of the secondary schools as well. Interest in the study of mathematics can be significantly buttressed the use of effective motivational strategies - these strategies are studied in detail by Posamentier and Krulik, (2011).

The results presented in this paper link to the duly defended Research Project No. 504 of the Ministry of Education, Youth and Sports of the Czech Republic, and the experience gained in writing textbooks, like – for instance - (Fialka, 2008a; Fialka 2008b; Fialka 2008c).

In conclusion, let's recall the well-known pedagogical principle that says that, “better is an example, than mere words”, as follows:

“Verba movent, exempla trahunt”... “Words encourage, examples compel.”

References

- Czech Standard ISO 80000-2: 2012. *Quantities and units – Part 2: Mathematical signs and symbols to be used in the natural sciences and technology*. (in Czech) (64 p.). Prague: The Czech Office for Standards, Metrology and Testing.
- Fialka, M. (2008a). *Differential calculus of several variables with applications*. (in Czech) 3rd ed. (145 p.). Zlín: Tomas Bata University in Zlín.
- Fialka, M. (2008b). *Integral calculus of several variables with applications*. (in Czech) 3rd ed. (103 p.). Zlín: Tomas Bata University in Zlín.
- Fialka, M. (2009). *Mathematics I*. (in Czech) 2nd ed. (107 p.). Zlín: Tomas Bata University in Zlín.
- International Standard ISO 80000-2:2009. *Quantities and units – Part 2: Mathematical signs and symbols to be used in the natural sciences and technology*. (40 p.). Geneva: International Organization for Standardization.
- Posamentier, A.S. & Krulik, S. (2011). *The Art of Motivating Students for Mathematics Instruction*. 1st ed. (128 p.). Practical Guides. London, United States: McGraw-Hill.

Pre-Service Preschool Teachers' Opinions About The Formative Assessment

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Abstract

Formative assessment is based on the principle of determining students' learning needs and teaching them with their needs in mind. The main goal of formative feedback is to strengthen students' knowledge, specific skills, understanding in certain contents, and general skills such as problem solving. The aim of this study is to determine pre-service preschool teachers' opinions about the use of formative assessment. This is a case study, a qualitative research method. This study was conducted with 63 pre-service teachers who were juniors in the education faculty of a public university in the west of Turkey's Black Sea Region in the 2016-2017 academic year. The study data were collected using an opinion form which included open-ended questions as well as interview questions. Pre-service teachers' written explanations to the open-ended questions were analyzed using content analysis, a qualitative analysis method. In addition, the study used descriptive analysis to assess the data that were collected during interviews with the purpose of obtaining further information. The research results show that a majority of pre service teachers' had positive opinions about formative assessment. They stated that formative assessment has many advantages such as enhancing efficiency, providing experience and self-evaluation.

Keywords: *Formative assessment, teacher training, preservice teachers.*

Introduction

Education aims to train individuals in a form ideally suited to meet the needs of the time. All of the works corresponding to this aim serve to constitute a qualified education. One of the most important elements governing the capacity to improve the quality of education is the "evaluation" stage, which acts as a control mechanism (Taras, 2002, 2003), as it serves to identify the extent to which the aims are achieved and the success of the elements (student, teacher, teaching method, teaching materials etc.) constituting the learning process. There are two types of assessment, product assessment, which is an assessment conducted at the end of units to determine what the students have learned, and formative assessment, which is an assessment conducted to determine the learning needs of the students (OECD, 2005; Liu & Carless, 2006). Recent results have shown that the product assessment methods, which are commonly used in schools and require the students to achieve predetermined standards in order to earn a diploma, are insufficient (OECD/CERI, 2008). Formative assessment methods, whose function is focused on preventing students from failing to continue their education in the future, serve as an alternative to the product assessment methods. Formative assessment is based on the principle that the needs of the students are determined in the process and that teaching is modified according to those needs. According to Shute (2007), the main objective of formative assessment is to increase the students' knowledge and skills, like drawing inferences or problem-solving in certain content areas. In this sense, the quality of learning can be increased through formative assessment (Higgins, Hartley, & Skelton, 2002). Gagne (cited in: Gibbs & Simpson, 2004) lists the effects of formative assessment in a learning environment as follows: activating and reinforcing background information and learning, ensuring that mainly active learning strategies are used, and enabling opportunities for the students to reinforce and implement their skills before introducing new information and materials to them. In addition to these, the following could be included: providing students with information and corrective feedback on the learning outcome, ensuring that the students are aware of their learning, and helping them develop self-evaluation skills, all of which will serve to give students the opportunity to experience the feeling of success.

Rubrics are one of the most important tools used in formative assessment. They are applied in the assessment process to identify the learners' knowledge and skills, study habits, efforts, and values according to predetermined criteria (Kan, 2007). In many studies conducted on the use of rubrics in the learning environments, it has been stated that the use of rubrics improves the quality of learning (Andrade, 2005; Andrade & Du, 2005; Panadero, Alonso-Tapia, & Huertas, 2012; Panadero, Alonso-Tapia & Reche, 2013; Reddy & Andrade, 2010). In a study by Panadero and Jonsson (2013), rubrics were found to be capable of positively affecting the learning of the learners. Additionally, Wollenschlager, Hattie, Machts, Moller and Harms (2016) found in their study that rubrics had a positive effect on performance. Teachers too have found rubrics to be quite useful (Kutlu, Bilican, & Yıldırım 2010).

A high-quality, up-to-date education requires practices that improve both skills and knowledge. Studies that seek

to understand how individuals internalize and use information in line with their aims and how they provide effective solutions to problems have therefore gained importance in the respective literature. Moreover, as it relates to pedagogy, taking applied classes during undergraduate education is of major importance. The acquisition of knowledge and skills that pre-service teachers can achieve by taking responsibility for their learning and doing self-evaluations plays a key role in improving their future teaching abilities. In the applied classes taken during undergraduate education, the quality and accuracy of the application are particularly important. In applications involving formative assessment, theory and practice are able to be bridged and self-evaluations are made possible through accurate performances. By offering applied classes during undergraduate education, there would be an improvement in the quality of the practices applied by pre-service teachers and they would be able to accurately employ the formative assessments, as they will have gained experience in how it is used and been given the opportunity to test its effectiveness. It is believed that the results of this study shall contribute to improving the quality standards in teacher training.

Purpose Of The Study

The purpose of this study is to investigate the views held by pre-service preschool teachers on the formative assessment process. This study was performed within the "Creativity and Its Improvement" class offered to second-year students under the Preschool Teacher Education Department. The participants' opinions on the use of formative assessment (rubrics, and verbal-written feedbacks), which they had learned about during the process of applying creative thinking techniques in actual classroom environments, were canvassed.

The following research questions were developed for the study:

1. What are the views of pre-service teachers regarding the advantages of formative assessment?
2. What are the views of pre-service teachers regarding the disadvantages of formative assessment?
3. What are the views of pre-service teachers regarding the use of rubrics in formative assessment?
 - a) What are the views of pre-service teachers regarding planning rubric?
 - b) What are the views of pre-service teachers regarding application rubric?
 - c) What are the views of pre-service teachers regarding finalization rubric?
4. What are the views of pre-service teachers regarding whether formative assessment contributes to professional development or not?

What are the views of pre-service teachers regarding the use of formative assessment in other courses?

Methodology

Study Design

This study adopted a qualitative case study design. The most important characteristic of a qualitative case study is its ability to perform an in-depth investigation of one or several cases (Yıldırım & Şimşek, 2008). Additionally, according to Büyüköztürk, Çakmak, Akgün, Karadeniz, and Demirel (2012), case studies are a type of study in which a phenomenon is described in a single space and time. In case studies, the researcher(s) is/are responsible for qualifying the case to be examined, and the cases are not restricted to only certain persons and objects that have a specific identity (such as a group, a person, a class, or an institution) but can also be an incident, an activity, or a process (Johnson & Christensen, 2014). The case investigated in this study is the evaluation process of pre-service teachers' practices in actual classroom environments using formative assessment.

Participants

A total of 63 second-year pre-service preschool teachers, who were studying at the Ereğli Faculty of Education of Zonguldak Bülent Ecevit University in the 2016-2017 academic year, participated in the study. The participants were between the ages of 19 and 21, and 60 were female and 3 were male. All of the participants were taking the "Creativity and Its Improvement" class for the first time.

Procedure

Within the scope of the "Creativity and Its Improvement" class, the participants were presented the general concepts of brainstorming, creative drama, analogy, and case study techniques, and model practices were demonstrated. After being provided the theoretical knowledge on these concepts, the participants were asked to conduct group work on one of these techniques and to plan an "application". Next, three rubrics (planning, application, and finalization rubrics) were given. The rubrics and the criterion governing them were explained, and it was made clear that the evaluation of the works would be conducted according to these rubrics. The pre-service teachers performed the implementation in the following three stages:

1st Stage: In the planning of the application process, the pre-service teachers plotted the procedure by considering the criterion in the "planning rubric". Each of the pre-service teachers presented their planned applications during their practice and in their classes (at the university). After the presentations, they were given verbal feedback by the instructor regarding the application plan of the techniques and the suitability of the techniques in terms of grade

level and creativity. A sample criterion for the planning rubric used by the pre-service teachers is given in Table 1.

Table 1: Sample Criterion for Planning Rubric

CRITERION	ACHIEVEMENT LEVELS		
	<u>5 points</u>	<u>10 points</u>	<u>20 points</u>
The nature of the technique	The technique is not planned properly	The technique planned partially conforms to the rules	The technique is planned properly

2nd Stage: The pre-service teachers started the implementation phase of their works which had been planned after receiving feedback. At this stage, the participants used an “application rubric”, and they implemented the subjects that they had selected by considering the criterion of the rubric in the classroom environment. The criterion in the application rubric covers the points that need to be paid attention to and taken into consideration during the implementation of the creative thinking techniques in the classroom environment. The techniques that the pre-service teachers were provided training on and given feedback for were implemented in 2-hour sessions in a preschool classroom (authentic classroom environment) with 5-6-year-old children. Each technique was implemented in a different school with different contents. A sample criterion for the application rubric is given in Table 2.

Table 2: Sample Criterion for Application Rubric

CRITERION	ACHIEVEMENT LEVELS		
	<u>2 points</u>	<u>5 points</u>	<u>10 points</u>
Imagination	None of the students used their imagination during the application.	Only a few students used their imagination during the implementation.	Many students used their imagination during the implementation.

3rd Stage: At this stage, the groups finished their application, prepared a PowerPoint presentation, which they presented to their instructors and classmates in the classroom environment (at the university), and prepared a report for their study. At this stage, the pre-service teachers used the finalization rubric. A sample criterion for the finalization rubric is given in Table 3.

Table 3: Sample Criterion for Finalization Rubric

CRITERION	ACHIEVEMENT LEVELS		
	<u>5 points</u>	<u>10 points</u>	<u>20 points</u>
Relating the collected data	The relations between the collected data are not shown and only seldom are inferences drawn from the application.	The collected data are only related to the rubric, making the inferences only partly sufficient.	Since the collected data are related based on the data received from multiple sources, the inferences drawn are quite sufficient.

Data Collection Tools

In this study, the data were collected from pre-service teachers through an open-ended questionnaire. This open-ended questionnaire was prepared in line with the research questions by the researcher. To confirm the content validity of the form and the interview questions, they were reviewed by two field experts and one assessment expert. When the actual classroom applications were completed, the form was administered to all of the participants, who filled it out individually. It took approximately 35 minutes for the participants to complete the form.

A sample question from the open-ended questionnaire:

What do you think are the advantages of formative assessment?

Interviews were used as another data collection tool for this study. The interview questions were prepared in line with the research questions. The interviews were conducted face-to-face with eight of the pre-service teachers from among the participants in order to investigate the research questions in-depth.

A sample question from the interviews:

Would you prefer the use of formative assessment in your other classes as well? Please explain your answer with reasons.

Data Analysis

The participants' answers to the open-ended questionnaire were analyzed using qualitative analysis techniques. The data obtained from the interviews were analyzed through descriptive analysis and investigated in line with the categories of the study, which were as follows: the advantages of formative assessment, the disadvantages of formative assessment, the use of rubric in formative assessment and the views on rubrics (planning rubric, application rubric, finalization rubric), contributions of formative assessment to professional development, and the use of formative assessment in other classes. The data were analyzed through content analysis, with two different raters analyzing the data, whose Miles-Huberman (Miles and Huberman, 1994) reliability value was found to be 93.67.

Findings

In this section, the findings from the study are presented in categories arranged in tables. Direct quotations from the views of the pre-service teachers were included as well.

The codes related to the "Advantages of Formative Assessment" category are given in Table 4.

Table 4: The Codes and Frequencies of the Advantages of Formative Assessment

Code	Frequency	Code	Frequency
Experience	35	Effective learning	5
Opportunity to perform application in the classroom environment	21	Motivation	5
Permanent learning	14	Guiding	4
Transferring theoretical knowledge into practice	12	Effective communication	3
Learning by doing	12	Awareness of the deficiencies of the class	3
Communication with students	9	Gaining experience by observation	3
Receiving feedback	7	Originality	3
Improving creativity	7	Knowing students	3
Mastery learning	7	An important activity	2
Individual evaluation	7	Critical thinking skill	2
First experience opportunity	6	Process evaluation	2
Awareness of different assessment techniques	6	Cooperation	2
Self-evaluation	6	Enjoyable	2
Gaining a different perspective	6	Socialization	1
Exchange of ideas	5		

According to Table 4, the pre-service teachers stated that among the advantages of formative assessment were that it provided experience and facilitated permanent learning by giving them the opportunity to practice in the classroom environment. Additionally, the participants thought that the application allowed them to transform theoretical knowledge into practical knowledge, contributed to learning by doing, and provided them the opportunity to communicate with the students. Pre-service teacher (PT -1) offered the following views on the advantages of formative assessment: *Formative assessment gives the pre-service teachers experience. It enables us to form our own ideas about our profession. Most importantly, it enables the person who thinks and feels that he/she should work as a teacher to definitively make that decision before the process is over.* Pre-service teacher (PT-6) added the following: *It enables active participation. Since each student has a role, the aim of the class is understood better. Any deficiencies in the studies are able to be identified during the presentation, and the views of other pre-service teachers are listened to and discussed. Group participation enables learning to take place together.* PT-2 offered the following views on communicating with students: *This is the first time that I have ever been to a kindergarten. I have practiced and spent time with children. This was a valuable opportunity for me to understand whether this profession is appropriate for me or not. I am quite happy; it was very important for me to participate in practicum and see the actual classroom environment.* It can be stated that the pre-service teachers gained professional development and experience in the use of assessment instruments.

The codes related to the “Disadvantages of Formative Assessment” category are given in Table 5.

Table 5: The Codes and Frequencies of the Disadvantages of Formative Assessment

Code	Frequency
No disadvantage	27
First-time application	7
Time-consuming	6
A difficult process	6
A stressful process	3
Unequal distribution of the responsibilities	3
Group work	3
Evaluation of the process	2
Insufficient experience regarding practice	2
Difficulty in controlling the process	2
Classroom management	1
The high number of evaluation criteria	1
Group evaluation during the process	1
Communication with students	1
The feeling of inadequacy in the process	1

According to Table 5, the majority of the pre-service teachers stated that formative assessment did not have any disadvantages. Some of the pre-service teachers cited their first time experience with the practice and the time-consuming and difficult nature of the process as disadvantages. Regarding this latter view, PT-5 stated the following: *This was my first practice and I hadn't worked at a preschool institution before, and I did not have any experience, therefore, I may not be able to demonstrate my full performance.* Similarly, PT-7 stated: *The application process was sometimes long and time-consuming.* During the process, group work was mentioned as a disadvantage, as expressed by PT-4, who stated: *Group work was definitely challenging. I could not fully implement what I thought because of the differences in opinions. There was no other disadvantage.* Although the formative assessment process is a time-consuming application, the majority of the pre-service teachers did not perceive this as a disadvantage.

The codes related to the “Use of Rubric in Formative Assessment” category are given in Table 6.

Table 6: The Codes and Frequencies of the Rubric Use in Formative Assessment

Code	Frequency
Guiding	26
Planning and organizing the process	13
Facilitates application and planning	6
Limits the process	5
Evaluates the process	5
Enables identification of the details	4
Enables identification of the deficiencies	4
Effective in the details of the process	3
Too detailed	3
Guide	3
Self-evaluation	3
Facilitating	2
Multidimensional thinking	2
Gaining points	2
Instruction	1
Making the process efficient	1
Guide	1
Objectivity	1

According to Table 6, the pre-service teachers thought that the rubrics used in formative assessment were guiding, that they helped in planning and organizing the process, and that they were necessary for limiting and evaluating the process. PT-1 had the following thoughts on the use of rubrics: *Rubrics made the process easier. We evaluated both ourselves and our process, so we became conscious and could think more critically.* Regarding the guiding feature of rubrics, PT-3 stated: *Having a rubric guided us in implementing the technique. Although we had learned the assessment in the class, the rubric helped us to understand why we did the assessment.* PT-5 added: *The use of the rubric is very important because it directs and enables awareness on the deficiencies. Additionally, we become aware of the points that we need to be careful about.* The positive views that the pre-service teachers had about rubrics and their characterization of them as guiding can be considered as the main reasons they adopted the formative assessment instrument and were willing to use it.

The codes related to the “Planning Rubric” category are given in Table 7.

Table 7: The Codes and Frequencies Regarding the Planning Rubric

Code	Frequency
Designing the process	14
Guiding	13
Organizing the process	11
Helps application	9
Showing the parts that need attention	9
Appropriate	6
Sufficient	5
Successful	4
Directive	3
Noticing the asking questions category	3
Beneficial	3
Necessary	3
Demonstrating the process step-by-step	3
Educational	3
Preparation for the application	2
Facilitating	2
Improving creativity	2
Detailed information	2
Self-confidence	1
A written framework of the process	1
Effective	1

According to Table 7, the pre-service teachers felt that since the planning rubric showed the points that needed attention, it helped them to perform the application and organize the process. Moreover, the pre-service teachers consider the rubric to be appropriate for the application, sufficient, and successful. PT-8 had the following thoughts on the planning rubric: *It acted as a blueprint to the questions of "How should I act?", "What should my application be like?", "What are my objectives?", and "How should I express them?", and it guided well.* PT-2 added: *It was important for us regarding the order of the plan and the points that need attention during the plan.* Finally, PT-3 stated: *When all was said and done, we had organization. In the absence of organization, discipline cannot be mentioned, and in the absence of discipline, success cannot be mentioned. We thought about what to do and what the questions should be.* From these opinions, it is clear that the planning rubric used in the formative assessment was guiding.

The codes related to the “Application Rubric” category are given in Table 8.

Table 8: The Codes and Frequencies Regarding Application Rubric

Code	Frequency
The inclusion of the practical aspect of the profession	13
Helpful in the classroom environment	12
The inclusion of the implementation stages	9
Planning the implementation process	8
Guides the application	7
Observing the students	7
Communication with students	7
Including the points that need attention in application	5
Changing according to the process	5
Successful	5
Fully sufficient	5
The most important part of the process	3
Appropriate	3
Note taking	2
The inclusion of the evaluation type	2
Beneficial	2
Has application aim	2
Effective	2
Improves creativity	2
School experience	2
Facilitating	1
Self-confidence	1
Internship	1

According to Table 8, the pre-service teachers stated that since the application rubric used in the formative assessment process includes application stages, it acted as a guide in the planning of the application process, and it provided an opportunity to observe and communicate with the students in the classroom environment. PT-5 expressed the following views regarding the application rubric: *It provided answers to my questions about how to do the application so that it enables use of the creative thinking technique. It helped us to make the right plan and act in the right way.* PT-6 added: *The application rubric provided an advantage by enabling the use of creative thinking skills and included the possible problems that may be faced during the application.* Finally, PT-1 stated: *Providing an application rubric is good; it provided information about how to do the application, which was nice, considering that I did not have previous experience.* The application rubric can be seen as a supplementary resource in the classroom environment, since it includes practical information on teaching.

The codes related to the “Finalization Rubric” category are given in Table 9.

Table 9: The Codes and Frequencies Regarding Finalization Rubric

Code	Frequency
Self-evaluation	10
Evaluation of the application process	10
Interpreting the results	7
Evaluating the activity	6
Appropriate	5
Seeing the objectives	5
Sharing the results	5
Evaluating the group	4
Awareness of the errors and deficiencies	4
Map of the products	3
Guide of the results	2
Effective reporting of the results	2
Raising awareness on the possible problems	2
Planning the evaluation	2

Beneficial	2
Planning the presentation	2
Sufficient	2
Revision	2
Critical thinking	2
Creativity	1
Successful	1

According to Table 9, the participants felt that the finalization rubric was effective in the evaluation of the application process and interpretation of the results. Additionally, they thought that the rubric was appropriate for the process and effective since it included the objectives. PT-2 offered the following views on the finalization rubric: *At the end of the application part, everything was finalized. As a result, the better I do this part, the better I can reflect my homework.* Regarding self-evaluation, PT-4 stated: *It is quite an important step in terms of evaluating the activity. It helped us by enabling us to ask the following questions to ourselves: "What did we do?", "What did we expect?", and "How did it happen?".* Additionally, PT-7 stated: *The finalization rubric enabled me to see what I have done in the application and the objectives.* From these statements, it is clear that the finalization rubric used in the formative assessment process provided an opportunity for self-evaluation. The codes related to the "Contribution of the Formative Assessment to Professional Development" category are given in Table 10.

Table 10: The Codes and Frequencies Regarding Whether Formative Assessment Contributes to Professional Development

Code	Frequency	Code	Frequency
It contributed to professional development	23	Motivation	3
School experience	14	Developing original ideas	3
Preparation for the profession	13	Effective learning	3
Learning by doing	9	Enables permanence	2
Practicing in a real classroom environment	9	Seeing the results of methods and techniques	2
Transferring theoretical knowledge into practice	8	Making observation	2
Self-evaluation	8	Evaluation in the classroom environment	2
Evaluation	6	Beneficial	2
Communication with students	6	Classroom management	2
Awareness	6	Considering individual differences	1
First experience	5	Self-efficacy	1
First time communication with students	5	Reaching the objectives	1
Learning how to design a lesson procedure	5	Encouraging	1
Critical thinking	5		

According to Table 10, the participants felt that formative assessment contributed to professional development in terms of providing school experience, enabling the opportunity for practice in an actual classroom environment, transferring theoretical knowledge into practice, and enabling the opportunity of self-evaluation. On this issue, PT-8 stated: *It would be very pleasing to move from simple memorization to this system.* PT-3 added: *It certainly contributed to my professional development. Practicing with children in the real classroom environment moved the techniques outside the limits of formal information; it will enable us to conceptualize and conduct similar activities in the future.* Finally, PT-1 had the following to say on the subject: *This is the first time I have ever come across this type of assessment. I wish we had this assessment for each course. I wish that we could apply everything we learned so that the information would be more permanent.*

The codes related to the "Use of Formative Assessment in Other Course" category are given in Table 11.

Table 11: The Codes and Frequencies Regarding the Use of Formative Assessment in Other Courses

Category	Code	Frequency
Yes (41)	Turning theoretical knowledge into application	9
	Increasing permanence	8
	A beneficial application	7
	Learning by doing	6
	Applied system instead of memorization	5
	In applied classes	5
	In pedagogy classes	3
	Professional development	3
	Learning the subject comprehensively	3
	Communication with students	2
	Self-evaluation	2
	Cooperation	2
	Performance-based learning	2
	A different evaluation	2
	Facilitates learning	2
	Practice in the actual classroom environment	2
	Training experienced teachers	2
	Improving creativity	2
	Responsibility	1
	Developing ideas	1
	Embodying	1
	Practical courses	1
	Experience	1
No (4)	Not appropriate for each course	2
	Stressful process	1
	Time-consuming	1
In certain courses (13)	Permanence	3
	In field courses	2
	In applied classes	2
	Experience	1
	Educative	1
	Preparation for the profession	1
	Depends on the content of the course	1

According to Table 11, the majority of the participants felt that formative assessment should be used in other courses as well, particularly because it transforms theoretical knowledge into practice, increases permanence, is an educative application, and provides an opportunity to learn by doing rather than memorizing. Regarding its use in other courses, PT-2 said: *'Yes, I would definitely want it because it is an extraordinary evaluation method.* PT-6 stated: *'Yes, I would. I think its use, especially in the applied classes, will be beneficial for us.* Additionally, regarding its use in other written courses, PT-4 stated: *'Yes, I would want it. We won't teach by memorization, we will teach by doing. So, I think we need to learn by doing.'*

Conclusions, Discussion, And Implications

This study revealed that the views of the majority of the pre-service teachers regarding formative assessment were positive. Among these views, gaining experience, enabling permanence learning, and turning theoretical knowledge into practice stood out. Additionally, they felt that this application facilitated their professional development and provided them with a chance to communicate with the students in the classroom environment. The findings of other studies in the literature support the results of this study. Formative assessment is an application that includes various approaches capable of being used to support a student's learning (Van der Kleij, Vermeulen, Schildkamp, & Eggen, 2015; Briggs, Ruiz-Primo, Furtak, Shepard, & Yin, 2012). Decristan et al. (2015) conducted an experimental study on curriculum-embedded formative assessment and its effect on classroom quality and found that the curriculum-embedded formative assessment's impact on class quality for a science course taught on floating and sinking helped to facilitate the students learning. Bulunuz and Bulunuz (2013) noted in their study that the use of the formative assessment approach in science courses has high potential in terms of supporting conceptual learning. In a report by Jones (2005), it was stated that in order to progress in a specific activity it is necessary to provide feedback, which is an element of formative assessments, to the students. When the students are provided with feedback to improve the task that they are working on, the value they derive

from it is perceived as a motivator. Studies conducted in various fields of education have revealed that the formative assessment process needs to be actively employed in education.

Rubrics, which function as an element of formative assessment, was also addressed in this study. The pre-service teachers viewed the rubrics that they used in the process of formative assessment as guiding and directive. Additionally, they felt that the rubrics were beneficial and important insofar as they helped in planning and organizing the process. In terms of each specific rubric, the participants expressed that the planning rubric they used guided them by helping them to design and organize the process, that the application rubric helped to improve the practical aspect of the teaching profession and included the application steps for the classroom environment, and that the planning rubric facilitated their self-evaluation by interpreting the results and evaluating the process. Other studies in the literature that were conducted on the effectiveness of rubrics in the learning environments support the findings of this study. In education, rubrics are an effective tool for teacher training, scientific contents, and assessment processes (Alsina, Ayllón, Colomer, Fernández-Peña, Fullana, Pallisera, Perez-Burriel, & Serra, 2017; Harrison & Lee, 2011; Timmermann, Strickland, Johnson, & Payne, 2011; Ward & McCotter, 2004; Panadero & Jonsson, 2013).

The following implications were drawn from the findings of this study:

1. In faculties of education, formative assessment should be included as part of applied undergraduate courses. Additionally, even in theoretical courses, formative assessment can be used by including application as part of the course.
2. In-service teachers can be trained on formative assessment by means of in-service training.
3. Rubrics, which are one of the elements of formative assessment tools, can be implemented at every level of learning, from primary school to higher education. In this respect, different application types may be used for many courses.
4. In teacher training, formative assessment types can be tested on different sample groups with different applications and instruments.

Similar studies may be conducted in different teaching branches and with a higher number of participants.

References

- Alsina, Á., Ayllón, S., Colomer, J., Fernández-Peña, R., Fullana, J., Pallisera, M., Perez-Burriel, M., & Serra, L. (2017). Improving and evaluating reflective narratives: A rubric for higher education students. *Teaching and Teacher Education*, 63, 148-158.
- Andrade, H. G. (2005). Teaching with rubrics: The good, the bad, and the ugly. *College Teaching*, 53(1), 27-30.
- Andrade, H., & Du, Y. (2005). Student perspectives on rubric-referenced assessment. *Practical Assessment, Research & Evaluation*, 10(5), 1-11.
- Briggs, D. C., Ruiz-Primo, M. A., Furtak, E., Shepard, L., & Yin, Y. (2012). Meta-analytic methodology and inferences about the efficacy of formative assessment. *Educational Measurement: Issues and Practice*, 31(4), 13-17.
- Bulunuz, M., & Bulunuz, N. (2013). Fen öğretiminde biçimlendirici değerlendirme ve etkili uygulama örneklerinin tanıtılması. *Türk Fen Eğitimi Dergisi*, 10(4), 119-135.
- Büyüköztürk, Ş., Çakmak, E. K., Akgün, Ö. E., Karadeniz, Ş. & Demirel, F. (2012). *Bilimsel araştırma yöntemleri*. Ankara: Pegem Akademi.
- Decristan, J., Klieme, E., Kunter, M., Hochweber, J., Büttner, G., Fauth, B., Hondrich, A.L., Rieser, S., Hertel, S., & Hardy, I. (2015). Embedded formative assessment and classroom process quality: how do they interact in promoting science understanding? *American Educational Research Journal*, 52(6), 1133-1159.
- Gibbs, G., & Simpson, C. (2004). Conditions under which assessment supports students' learning. *Learning and Teaching in Higher Education*, 1, 3-31.
- Harrison, J. K., & Lee, R. (2011). Exploring the use of critical incident analysis and the professional learning conversation in an initial teacher education programme. *Journal of Education for Teaching: International Research and Pedagogy*, 37(2), 199-217.
- Higgins, R., Hartley, P., & Skelton, A. (2002). The conscientious consumer: reconsidering the role of assessment feedback in student learning. *Studies in Higher Education*, 27(1), 53-64.
- Johnson, B., & Christensen, L. (2014). *Eğitim araştırmaları: nicel, nitel ve karma yaklaşımlar*. (S. Demir, Trans.). Ankara: Eğitimci Kitap.
- Jones, C. A. (2005). Assessment for learning (Vocational learning support programme:16-19). London, UK: Learning and Skills Development Agency, Retrieved February 20, 2018, from <http://dera.ioe.ac.uk/7800/1/AssessmentforLearning.pdf>.
- Kan, A. (2007). Performans değerlendirme sürecine katkıları açısından yeni program anlayışı içerisinde kullanılabilecek bir değerlendirme yaklaşımı: Rubrik puanlama yöntemleri. *Kuram ve Uygulamada Eğitim Bilimleri / Educational Sciences: Theory & Practice*, 7(1), 129-152.

- Kutlu, Ö., Bilican, S., & Yıldırım, Ö. (2010). A study on the primary school teachers' attitudes towards rubrics with reference to different variables. *Procedia Social and Behavioral Sciences*, 2(2), 5398–5402.
- Liu N. F., & Carless, D. (2006). Peer feedback: the learning element of peer assessment. *Teaching in Higher Education*, 11(3), 279-290.
- Miles, M. B., Huberman, A. M., Huberman, M. A., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook*. sage.
- OECD, (2005). Formative assessment: Improving learning in secondary classrooms. *Policy Brief*, Retrieved February 28, 2018, from <http://www.oecd.org/publications/Policybriefs/>.
- OECD/CERI, (2008). *Assessment for learning: Formative assessment. International Conference, Learning in the 21st Century: Research, Innovation and Policy*. Paris: CERI/OECD, Retrieved March 20, 2018, from <http://www.oecd.org/dataoecd/19/31/40600533.pdf>.
- Panadero, E., Alonso-Tapia, J., & Huertas, J. A. (2012). Rubrics and self-assessment scripts effects on self-regulation, learning and self-efficacy in secondary education. *Learning and Individual Differences*, 22(6), 806–813.
- Panadero, E., Alonso-Tapia, J., & Reche, E. (2013). Rubrics vs. self-assessment scripts effect on self-regulation, performance and self-efficacy in pre-service teachers. *Studies in Educational Evaluation*, 39, 125–132.
- Panadero, E., & Jonsson, A. (2013). The use of scoring rubrics for formative assessment purposes revisited: a review. *Educational Research Review*, 9, 129–144.
- Reddy, Y. M., & Andrade, H. (2010). A review of rubric use in higher education. *Assessment & Evaluation in Higher Education*, 35(4), 435–448.
- Shute, V. J. (2007). *Focus on formative feedback*. Research Report. Princeton, NJ: Educational Testing Service, Retrieved April 2, 2018, from <https://onlinelibrary.wiley.com/doi/pdf/10.1002/j.2333-8504.2007.tb02053.x>.
- Taras, M. (2002). Using assessment for learning and learning from assessment, *Assessment & Evaluation in Higher Education*, 27(6), 501–510.
- Taras, M. (2003). To feedback or not to feedback in student self-assessment. *Assessment & Evaluation in Higher Education*, 28(5), 549-565.
- Timmermann, B., Strickland, D. C., Johnson, R. L., & Payne, J. R. (2011). Development of a “universal” rubric for assessing undergraduates' scientific reasoning skills using scientific writing. *Assessment & Evaluation in Higher Education*, 36(5), 509-547
- Van der Kleij, F. M., Vermeulen, J. A., Schildkamp, K., & Eggen, T. J. H. M. (2015). Integrating data-based decision making, Assessment for Learning, and diagnostic testing in formative assessment. *Assessment in Education: Principles, Policy & Practice*, 22(3), 324-343.
- Ward, J. R., & McCotter, S. S. (2004). Reflection as a visible outcome for preservice teachers. *Teaching and Teacher Education*, 20(3), 243-257.
- Wollenschlager, M., Hattie, J., Machts, N., Moller, J., & Harms, U. (2016). What makes rubrics effective in teacher-feedback? Transparency of learning goals is not enough. *Contemporary Educational Psychology*. 44, 1–11.
- Yıldırım, A., & Şimşek, H. (2008). *Nitel araştırma yöntemleri*. (7. Baskı). Ankara: Seçkin Yayıncılık.

Preservice Teachers' Awareness About Stem*

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Abstract

This quantitative study examines educational faculty preservice teachers' awareness about STEM in terms of different variables. Students from the departments of mathematics education, science education and computer and instructional technology at Afyon Kocatepe University were the participants. This is a survey study, which used the STEM Awareness Scale (SAS) developed by Buyruk and Korkmaz (2016) to collect the data. Some quantitative data analysis tests were applied on the data obtained. The results show that the preservice teachers had positive perspectives on STEM education.

Key words: *STEM, preservice teachers, awareness*

Introduction

STEM stands for science, technology, engineering and mathematics. The term was first used in 2001 by Dr. Judith Ramaley, the Education and Human Resources Director of the National Science Foundation (NSF) (Chute, 2009), making the NSF the first institution to use the term (NAE & NRC, 2009; Sanders, 2009). According to Morrison (2006), STEM is a new discipline based on the integration of science, technology, engineering and mathematics. Advancements in science and technology make it essential for individuals to acquire the skills to overcome real life problems, use their new knowledge in real life settings, think creatively, and use their knowledge at the appropriate time and place. For these reasons, STEM education is important today (Akgündüz, Ertepinar, Ger, Kaplan Sayı & Türk, 2015; Bybee, 2010).

STEM increases the quality of learning environments in education, makes teaching processes more effective, and gives students opportunities to integrate the disciplines of science, technology, engineering and mathematics. Science is the effort to understand the natural world (NRC, 1996). It examines the natural world and uses inquiry, invention, discovery and scientific methods in courses such as physics, biology, astronomy and geology from primary school to the university level (Dugger, 2010). Technology also uses discovery and scientific methods (Dugger, 2010). Technology changes the natural world based on the desires and needs of humankind (ITEA, 2000). It can be defined as the design, development and production of new materials using natural resources. Processes such as invention, innovation, practical problem solving and design are included in technology (Dugger, 2010). Engineering concerns finding solutions to the needs of humankind using mathematical and scientific knowledge obtained through practice and experience (ABET, 2007). Engineering involves problems that must be solved, understanding problems, asking relevant questions, setting up benchmarks for successful solutions and identifying limitations (Bybee, 2011). Mathematics is defined as the relationships among models, figures and numbers (AAAS, 1993). Mathematics serves as a real language for science, technology and engineering (Dugger, 2010).

STEM education involves activities that can foster students' interests and tendencies in science, technology, engineering and mathematics using the skills they should possess today (Baran, Canbazoglu Bilici & Mesutoğlu, 2015). STEM education is intended to transform theoretical knowledge into implementation, production and innovative discoveries. It enables students to consider their learning in science, technology, engineering and mathematics as parts of a whole. Many countries have incorporated STEM into their curricula. STEM education enables students to enlarge their physical, intellectual and cultural worlds and fosters their competence in critical thinking and problem solving (Çorlu & Aydın, 2016).

STEM education is an interdisciplinary approach to learning from primary school to graduate school. It offers students an interdisciplinary perspective on problems and some skills and knowledge using a holistic understanding of education (Şahin, Ayar & Adıgüzel, 2014). NSF launched activities to attract attention to the content of STEM education in the 1990s and many international studies have been conducted in this regard (Bracey & Brooks, 2013; Buxton, 2001; Cleaves, 2005; Nadelson, Seifert, Moll & Coat, 2012; Pinnell et al., 2013). However, the Turkish literature has focused on this issue only in the last few years (Baran, Bilici & Mesutoğlu, 2015; Çevik, 2015; Gencer, 2015; Şahin, Ayar & Adıgüzel, 2014; Yamak, Bulut & Dündar, 2014; Yıldırım &

* This study study was supported by Afyon Kocatepe University BAP, Project number: 18.Kariyer.73.

Altun, 2015). These studies have mostly investigated teachers' or preservice teachers' awareness about STEM, developed scales or adapted international scales into Turkish. For example, Karakaya, Ünal, Çimen, and Yılmaz (2018) investigated science teachers' awareness about the STEM approach in terms of some variables. They found significant differences by gender, professional experience, in-service training and educational level, but no significant difference by classroom size or type. Another study of teachers' perspectives on and awareness about STEM education found that science teachers know the STEM model better than teachers from other disciplines and use it more, that science and mathematics teachers consider their disciplines as an indispensable to the STEM model, but that they restrain themselves from applying the model (Özbilen, 2018). Rather than determining the general situation, studies of preservice teachers have mostly taken the form of scale adaptation.

There is a limited number of studies in the literature that examine preservice teachers' awareness about STEM in terms of various variables. Therefore, this study can contribute to the literature because it examines educational faculty preservice teachers' awareness about STEM in terms of different variables. It sought answers to these research questions:

1. What is the level of preservice teachers' awareness about STEM?
2. Is there a significant difference between the levels of preservice teachers' awareness about STEM by department?
3. Is there a significant difference between the levels of preservice teachers' awareness about STEM by gender?
4. Is there a significant difference between the levels of preservice teachers' awareness about STEM by grade level?

Method

The participants in this study were students in the departments of mathematics education, science education and computer and instructional technologies at the educational faculty of Afyon Kocatepe University. This quantitative study was designed as a survey. According to Karasar (2014), researchers should use survey study design if they intend to describe a case as it exists, whether it is an event, individual or object. The STEM Awareness Scale (SAS) developed by Buyruk and Korkmaz (2016) was used to collect data. The data were analyzed using IBM SPSS 18 software. The Kolmogorov-Smirnov test was done to analyze the normality of the data distribution and showed ($p < 0.05$) that the data did not have a normal distribution. Therefore, non-parametric tests were used. The Mann-Whitney U test was used to make a pairwise comparison, and the Kruskal-Wallis test was used to make multiple comparisons.

Findings

Table 1 shows the descriptive analysis of the preservice teachers' scores on the STEM Awareness Scale.

Table 1. Descriptive analysis of the STEM Awareness Scale scores

Department	Positive perspective			Negative perspective			Overall Scale		
	N	Mean	sd	N	Mean	sd	N	Mean	sd
Mathematics Education	115	3.99	.875	115	4.03	.683	115	4.01	.736
Science Education	113	3.78	1.07	113	3.53	1.21	113	3.70	.947
Computer and Instructional Technologies Education	87	3.81	.778	87	3.41	1.14	87	3.69	.707
TOTAL	315	3.87	.930	315	3.68	1.06	315	3.81	.821

Table 1 shows that the mean scores on the positive perspective sub-dimension ($\bar{X} = 3.87$), on the negative perspective sub-dimension ($\bar{X} = 3.68$) and on the overall scale indicated that all of the preservice teachers had positive perceptions about STEM education ($\bar{X} = 3.81$).

Table 2 shows the mean scores on the scale by department.

Table 2. Kruskal-Wallis test results for the comparison of the mean scores on the STEM Awareness Scale

Scale	Group	N	Mean Rank	sd	Chi-Square	p	Significant Difference
Positive	Math Edu.	115	163.96	2	2.013	.366	-
	Science Edu.	113	160.85				
	Comp. Edu.	87	146.43				
Negative	Math Edu.	115	182.96	2	14.964	.001	1-2 1-3
	Science Edu.	113	149.99				
	Comp. Edu.	87	135.41				
Total	Math Edu.	115	178.70	2	10.734	.005	1-2 1-3
	Science Edu.	113	152.72				
	Comp. Edu.	87	137.51				

Table 2 shows that, even though no significant was found in the positive perspective sub-dimension, the mathematics education preservice teachers had a higher mean score (163.96) than the science education and computer education and instructional technologies preservice teachers.

The variance of the preservice primary mathematics teachers' mean scores by gender is shown in Table 3.

Table 3. Mann-Whitney U test results for the comparison of the preservice primary mathematics teachers' mean scores by gender

Scale	Group	N	Mean Score	Rank Total	U	p
Positive	Female	78	64.26	5012.00	955.000	.003*
	Male	37	44.81	1658.00		
Negative	Female	78	62.06	4841.00	1126.000	.056
	Male	37	49.43	1829.00		
Total	Female	78	64.06	4996.50	970.500	.005*
	Male	37	45.23	1673.50		

Table 3 shows that the female preservice teachers had significantly more positive perceptions of STEM in the positive perspective sub-dimension and the overall scale. However, no significant difference was found by gender in the negative perspectives sub-dimension.

Table 4 shows the mean scores of the primary mathematics education preservice teachers by grade level.

Table 4. Kruskal-Wallis test results for the comparison of the preservice primary mathematics teachers' mean scores by grade level

Scale	Groups	N	Mean Score	sd	χ^2	p	Significant Difference
Positive perspective	1 st year	30	43.13	3	8.33	.040	1-2
	2 nd year	30	62.48				1-3
	3 rd year	30	65.50				1-4
	4 th year	25	61.46				
Negative perspective	1 st year	30	51.37	3	2.46	.483	-
	2 nd year	30	62.98				
	3 rd year	30	61.88				
	4 th year	25	55.32				
Total	1 st year	30	43.92	3	8.04	.045	1-2
	2 nd year	30	64.20				1-3
	3 rd year	30	65.75				
	4 th year	25	58.16				

Table 4 shows that the sophomore, junior and senior preservice teachers in the primary mathematics education department had significantly more positive perspectives on STEM in the positive perspective sub-dimension than the freshmen. Although no significant difference was observed in the negative perspective sub-dimension, the sophomore, junior and senior preservice teachers had more positive perspectives in the negative perspectives sub-dimension than the freshmen.

Table 5 shows the preservice science teachers' mean scores by gender.

Table 5. Mann-Whitney U test results for the comparison of the preservice science teachers' mean scores by gender

Scale	Group	N	Mean Score	Rank Total	U	p
Positive	Female	93	59.97	5577.00	654.00	.037*
	Male	20	43.20	864.00		
Negative	Female	93	59.85	5566.00	665.00	.045*
	Male	20	43.75	875.00		
Total	Female	93	60.45	5622.00	609.00	.016*
	Male	20	40.95	819.00		

Table 5 shows that the female preservice teachers had significantly more positive perceptions of STEM in the sub-dimensions and the overall scale.

Table 6 shows the mean scores of science education preservice teachers by grade level.

Table 6: Kruskal Wallis test results for the comparison of the preservice science teachers' mean scores by grade level

Scale	Groups	N	Mean Score	sd	χ^2	p	Significant Difference
Positive	1 st year	27	39.65	3	11.543	.009*	1-2
	2 nd year	32	68.13				1-3
	3 rd year	26	59.69				1-4
	4 th year	28	58.52				
Negative	1 st year	27	46.07	3	14.276	.003*	1-2
	2 nd year	32	73.19				2-4
	3 rd year	26	60.19				
	4 th year	28	46.07				
Total	1 st year	27	39.67	3	15.994	.001*	1-2
	2 nd year	32	73.19				1-3
	3 rd year	26	59.56				2-4
	4 th year	28	52.84				

Table 6 shows that compared to the freshmen, the sophomore, junior and senior preservice teachers in the science education department had significantly more positive perspectives on STEM in the positive perspective sub-dimension. On the negative perspective sub-dimension of the scale, the sophomore preservice teachers had less negative perspectives on STEM than the freshmen and seniors. On the overall scale, the sophomore and junior preservice teachers had more positive perspectives on STEM than the freshmen, and the senior preservice teachers had more negative perspectives on STEM than the sophomores.

Table 7 shows the preservice computer and instructional technologies teachers' mean scores by gender.

Table 7: Mann-Whitney U test results for the comparison of the preservice computer and instructional technologies teachers' mean scores by gender

Scale	Group	N	Mean score	Rank total	U	p
Positive	Female	48	49.98	2399.00	649.000	.014*
	Male	39	36.64	1429.00		
Negative	Female	48	50.98	2447.00	601.000	.004*
	Male	39	35.41	1381.00		
Total	Female	48	51.47	2470.50	577.500	.002*
	Male	39	34.81	1357.50		

Table 7 shows that the female computer and instructional technologies preservice teachers had significantly more positive perspectives on STEM in the sub-dimensions of the scale and the overall scale.

Table 8 shows the mean scores of the computer and instructional technologies preservice teachers by grade level.

Table 8. Kruskal Wallis test results for the comparison of the preservice computer and instructional technologies teachers' mean scores by grade level

Scale	Groups	N	Mean Score	Sd	Chi-square	P	Significant Difference
positive perspective	2 nd year	30	37.10	2	9.893	.007	2-4
	3 rd year	30	39.57				
	4 th year	27	56.59				
Negative perspective	2 nd year	30	42.73	2	0.119	.942	3-4
	3 rd year	30	44.50				
	4 th year	27	44.85				
Total	2 nd year	30	38.78	2	4.868	.088	2-4
	3 rd year	30	41.33				
	4 th year	27	52.76				

Table 8 shows that, compared to the sophomores, the senior preservice teachers had significantly more positive perspectives on STEM education in the positive perspective sub-dimension of the scale and the overall scale. In the negative perspectives sub-dimension, the senior preservice teachers had less negative perspectives than the juniors.

Conclusions

The results indicate that the preservice teachers from the departments of mathematics, science, and computer and instructional technologies have positive perspectives towards STEM, which is corroborated by many studies of preservice teachers and STEM education (Akaygun & Aslan-Tutak, 2016; Yenilmez & Balbağ, 2016; Yıldırım & Selvi, 2015). This also underlines that preservice teachers had positive awareness about STEM. Studies have shown that individuals with high awareness about STEM also have more positive perceptions of and perspectives on it (Guzey, Harwell & Moore, 2014; Schmidt & Kelter, 2017).

The preservice teachers in the department of mathematics education had more positive perceptions of STEM. Yenilmez and Balbağ (2016) reported that preservice science teachers have more positive attitudes. This may stem from preservice teachers' learning backgrounds or the difference between their undergraduate courses.

The females' mean scores on the STEM Awareness Scale were higher than the males in all departments. This result is corroborated by those of Yenilmez and Balbağ (2016). Çevik, Danıştay and Yağcı (2017) investigated teachers' awareness about STEM by gender and found no significant difference by gender. Therefore, the effect of the gender variable on the awareness about STEM may differ in preservice or in-service training courses.

By grade level, the sophomore, junior and senior preservice teachers from the department of mathematics education had more positive perspectives on STEM than the freshmen. This may imply that courses in mathematics education positively influence their perceptions of STEM. The sophomore, junior and senior preservice science teachers had significantly higher mean scores on the positive perspective sub-dimension of the scale than the freshman. However, the senior preservice science teachers had less negative perceptions of STEM in the other sub-dimensions of the scale and the overall scale than the sophomores. The reasons for this can be investigated in further qualitative research. On the other hand, the senior preservice computer and instructional technologies education preservice teachers had more positive perceptions of STEM than the sophomores and juniors.

References

- AAAS. (1993). Benchmarks for science literacy. New York, NY: Oxford University Press.
- ABET (2007). The Engineering Accreditation Commission of the Accreditation Board of Engineering and Technology. Accreditation handbook online. Available at: <http://www.abet.org>.
- Akaygun, S., & Aslan-Tutak, F. (2016). STEM images revealing stem conceptions of pre-service chemistry and mathematics teachers. *International Journal of Education in Mathematics, Science and Technology*, 4(1), 56-71. DOI:10.18404/ijemst.44833

- Akgunduz, D., Ertepinar, H., Ger, A. M., Kaplan Sayi, A., & Turk, Z. (2015). The report of STEM education workshop: An assessment on STEM education in Turkey. *Istanbul Aydın University: STEM Centre and Faculty of Education*.
- Baran, E., Canbazoglu-Bilici, S., & Mesutoğlu, C. (2015). Fen, Teknoloji, Mühendislik ve Matematik (FeTeMM) spotu geliştirme etkinliği. *Araştırma Temelli Etkinlik Dergisi*, 5(2), 60-69
- Bracey, G., Brooks, M., Marlette, S., & Locke, S. (2013). Teachers' training: Building formal STEM teaching efficacy through informal science teaching experience. In *ASQ Advancing the STEM Agenda Conference, Grand Valley State University, Michigan*.
- Buxton, C. (2001). Exploring science-literacy-in-practice: Implications for scientific literacy from an anthropological perspective. *Electronic Journal in Science and Literacy Education*, 1(1). Retrieved from <http://sweeneyhall.sjsu.edu/ejls/>
- Buyruk, B., & Korkmaz, Ö. (2014). FeTeMM farkındalık ölçeği (FFÖ): geçerlik ve güvenirlik çalışması. *Journal of Turkish Science Education*, 11(1), 3-23.
- Bybee, R. W. (2010). Advancing STEM education: A 2020 vision. *Technology and Engineering Teacher*, 70(1), 30.
- Bybee, R. W. (2011). Scientific and engineering practices in K-12 classrooms. *Science Teacher*, 78(9), 34-40.
- Çevik, M. (2017). Content analysis of stem-focused education research in Turkey. *Journal of Turkish Science Education (TUSED)*, 14(2).
- Çevik, M., Daniştay, A., & Yağcı, A. (2017). Ortaokul öğretmenlerinin Fetemm (fen-teknoloji-mühendislik-matematik) farkındalıklarının farklı değişkenlere göre değerlendirilmesi. *Sakarya University Journal of Education*, 7(3), 584-599.
- Chute, E. (2009). Lack of diversity part of equation in STEM fields. Colleges try to increase numbers of women, minorities in science and engineering. *Pittsburgh Post-Gazette*. Retrieved 2/21/10 from <http://www.post-gazette.com/pg/09041/947952-298.stm#ixzz0glceZiGK>
- Cleaves, A. (2005). The formation of science choices in secondary school. *International Journal of Science Education*, 27(4), 471-486.
- Corlu, M. A., & Aydin, E. (2016). Evaluation of learning gains through integrated STEM projects. *International Journal of Education in Mathematics, Science and Technology*, 4(1), 20-29.
- Dugger, W. E. (2010, December). Evolution of STEM in the United States. In *6th Biennial International Conference on Technology Education Research in Australia* retrieved from <http://www.iteea.org/Resources/PressRoom/AustraliaPaper.pdf>.
- Gencer, A. S. (2015). Fen eğitiminde bilim ve mühendislik uygulaması: fırıldak etkinliği. *Araştırma Temelli Etkinlik Dergisi*, 5(1), 1-19.
- Guzey, S. S., Harwell, M. ve Moore, T. (2014). Development of an Instrument to assess attitudes toward Science, Technology, Engineering, and Mathematics (STEM). *School Science and Mathematics*, 114 (6), 271-279.
- ITEA. (2000). Standards for technological literacy: Content for the study of technology. Reston, VA: Author.
- Karakaya, F., Ünal, A., Çimen, O., & Yılmaz, M. (2018) Fen bilimleri öğretmenlerinin stem yaklaşımına yönelik farkındalıkları. *Eğitim ve Toplum Araştırmaları Dergisi/JRES*, 5(1), 124-138.
- Karasar, N. (2014). *Bilimsel Araştırma Yöntemi*, Ankara: Nobel Yayın, 26.
- Morrison, J. (2006). TIES STEM education monograph series, attributes of STEM education. *Baltimore, MD: TIES*, 3.
- Nadelson, L. D., Seifert A., Moll, A. J. & Coat, B. (2012). I-STEM Summer Institute: An integrated approach to teacher professional development in STEM. *Journal of STEM Education*, 13(2), 69-83.
- National Academy of Engineering and National Research Council [NAE & NRC]. (2009). *Engineering in K-12 education: Understanding the status and improving the prospects*. Washington: National Academies Press.
- National Research Council (NRC). (1996). National science education standards. Washington, DC: National Academy Press.
- ÖZBİLEN, A. G. (2018). Stem eğitimine yönelik öğretmen görüşleri ve farkındalıkları. *Scientific Educational Studies*, 2(1), 1-21.
- Pinnell, M., Rowley, J., Preiss, S., Franco, S., Blust, R. ve Beach, R. (2013). Bridging the gap between engineering design and PK-12 curriculum development through the use of the STEM education quality framework. *Journal of STEM Education*, 14(4), 28-35.
- Şahin, A., Ayar, M. C., & Adıgüzel, T. (2014). Fen, teknoloji, mühendislik ve matematik içerikli okul sonrası etkinlikler ve öğrenciler üzerindeki etkileri. *Kuram ve Uygulamada Eğitim Bilimleri*, 14(1), 1-26.
- Sahin, A., Ayar, M. C., & Adiguzel, T. (2014). STEM related after-school program activities and associated outcomes on student learning. *Educational Sciences: Theory and Practice*, 14(1), 309-322.
- Sanders, M. (2009). STEM, STEM education, STEM mania. *Technology Teacher*, 68(4), 20-26.
- Schmidt, K. M.ve Kelter, P. (2017). Science Fairs: A Qualitative Study of Their Impact on Student Science Inquiry Learning and Attitudes toward STEM. *Science Educator*, 25(2), 126-132.

- Yamak, H., Bulut, N., & Dündar, S. (2014). 5. Sınıf öğrencilerinin bilimsel süreç becerileri ile fene karşı tutumlarına FeTeMM etkinliklerinin etkisi. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi*, 34(2).
- Yenilmez, K ve Balbağ, M. Z. (2016). Fen bilgisi ve ilköğretim matematik öğretmen adaylarının STEM'e yönelik tutumları. *Journal of Research in Education and Teaching*, 5(4), 301-307.
- Yıldırım, B. ve Selvi, M. (2015). Adaptation of STEM attitude scale to Turkish. *Turkish Studies*, 10(3), 1107-1120.
- Yıldırım, B., & Altun, Y. (2015). Investigating the effect of STEM education and engineering applications on science laboratory lectures. *El-Cezeri Journal of Science and Engineering*, 2(2), 28-40.

Pre-Service Teachers' Stem Teaching Intention And Views About Stem

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Abstract

The aim of the current research is to determine the STEM teaching intention of pre-service teachers and learn their views towards STEM and STEM implementations. Mixed method research was used in this study. For the quantitative part of the research, the data were collected through "Integrative STEM Teaching Intention Questionnaire" developed by Lin and Williams (2015) and the Turkish version of the questionnaire adapted by Hacıömeroğlu and Bulut (2016). The scale consist of 31 items, 7 likert type and five dimensions. In the qualitative part of the research semi-structured interview technique was used. One of the purposeful sampling methods', criterion sampling was used for the selection of the participants. The students of primary school teacher training program were chosen as the participants of the current research. After analyzing process, the results showed that pre-service teachers' STEM teaching intentions were high. The results of the qualitative part of the study were tally with the results of the quantitative part. According to the result of the qualitative of the current research, it was shown that the teacher candidates believed themselves using STEM in their classes and if they had problems they believed to solve them while implementation of STEM.

Keywords: *Pre-service teachers, STEM, STEM education, STEM teaching intentions,*

Introduction

The need for qualified people has caused the countries to go for a change in their education policies. "In the 21st century, developments in science, technology, engineering, and mathematics, in particular, have accelerated in all areas, but have almost influenced every aspect of modern life and play a key role in solving the most immediate and future problems of humanity" (National Research Council-NRC, 2012). For this reason, the present education systems aim efficient learning and teaching approaches in order to cope with economic races, ever-growing technologies, vast amounts of information and other concerns of the 21st century (Wells, 2008). STEM (Science, Technology, Engineering, and Mathematics) education which drew attention to this point during the last years is an approach that unifies science, technology, engineering and mathematics content, and skills during the teaching-learning process. The STEM is an integrated approach and aims the students to look at the problems with an inter-discipline point of view and to acquire knowledge and skill.

When we consider the fast advancement of science and technology, it is accepted by the majority that the students need to deal with real problems through a multi-discipline education program that merges theory and practice and to increase their creative skills in problem-solving. This situation brings forth the STEM education (Chang et. al, 2015). Since STEM has the potential in developing the capacity of innovation and competition power of nations originating from labor and industry branches, these disciplines are important. The request for STEM has increased in speed for the last ten years for sustainable economic growth and a brighter future (Langdon, Mckittrick, Beede, Han and Doms, 2011).

When the needs of the age we live in are considered, there is a need for individuals who can solve real-world problems in areas such as science, technology, mathematics, and engineering, not just with understanding the relationship between science and technology, but with interdisciplinary relations. The STEM is preferred as the strongest model to be used in this context. This is because STEM contributes to society in terms of leadership in technology and economy, success in science and mathematics, raising qualified individuals, developing sustainable economics, developing skills (scientific process, investigation, critical thinking, etc.), solving real-world problems and being productive, and increasing the number of individuals needed in the twenty-first century working environment (Toulmin and Groome, 2007).

An integrative viewpoint in STEM education can be thought of as the adaptation of the four fields as content, or as a context in which one is taken into focus and others are taught the content of this discipline. It can also be done in the form of combining at least two of these four areas, if not all of them. For example, to provide integration of mathematics, engineering, and technology in the context of science lessons (Dugger, 2010). However, the interpretation of STEM as science or mathematics and the lack of recollection of technology or engineering is a subject that needs to be solved (Bybee, 2010).

STEM education is an educational approach distinguished by interdisciplinary nature from pre-school education to university education (Gonzalez and Kuenzi, 2012). There are sufficient research results that show STEM

education has positive effects on students' achievement, interests, and motivations. This leads to the increased practice of the STEM approach and to be worked on more (Sanders, 2009).

The fact that countries that implement the STEM as an education system on an international platform have seen significant increases in the results of the global assessment examinations such as PISA and TIMSS have led other countries to focus their attention on the STEM and have focused their training reforms on an additional interest in STEM education. The PISA 2015 results showed that the performance of Turkish students was below the average of scientific literacy, mathematics literacy and reading skills (MEB, 2016a). The findings of TIMSS 2015 revealed that Turkish students did not have an excellent success in terms of science and mathematics performance (MEB, 2016b). OECD Education at a Glance when seen which countries will take the lead professions in the future STEM area according to the 2017 report, Turkey appears to be the last among 34 countries (OECD Education at a Glance, 2017). These results suggest that Turkey also needs to be done in a systematic education reform across the country and revealed the necessity of the increase in the STEM applications.

Because of these developments emerging in the field of education in Turkey, arrangements were made in 2017 for all curricula from elementary school to high school to be renewed. Primary school, mathematics, science, and technology-design teachers need to cooperatively develop investigation-based STEM teaching plans that support students' critical and creative thinking skills. So, the teachers and also the pre-service teachers have to learn STEM and how to implement STEM in their classes.

Teachers have a key role in implementing and spreading STEM education throughout the country. This is because the increase in employment of the countries in the areas of STEM depends on the quality of teachers who can give STEM education to the students at an early age (Wang, 2012). Teachers who will give STEM training should be educated in this field both as interservice and in before service (Çorlu, Capraro and Capraro, 2014). However, when compared with the developments in the world, it is not at the desired and expected level and it is pointed out that the universities should take measures in this regard urgently (Çolakoğlu and Gökben, 2017). The aim of the current research is to determine the STEM teaching intention of pre-service teachers and learn their views towards STEM and STEM implementations.

The Methodology Of The Study

Mixed method was used for current research. Different patterns can be used in mixed method researches. One of these patterns is convergent parallel design. Qualitative and quantitative stages occur simultaneously in the same phase of the research process. This pattern gives equal priority to the methods, separates the phases from each other during analysis, and then combines the results when doing general interpretation (Creswell and Plano Clark, 2015). While quantitative data are collected during the screening type surveys, data obtained through questionnaires or interviews are described by statistically analyzed analysis of the questions or hypotheses that are raised at the beginning of the study. The results of the statistical analysis are interpreted in relation to previous research findings (Creswell, 2012). In this context, STEM teaching intentions of participants were determined using the "Integrative STEM Teaching Intention Questionnaire" in the quantitative survey of this research. In the qualitative dimension of the study, the interview technique was used. Interviewing is a useful technique that is used when participants want to understand their point of view or to learn how participants understand the facts and events. It is possible to classify the interview technique as structured, semi-structured and unstructured interviews. When determining the type of interview to be used, the types of questions to be asked and the types of responses desired should be taken into consideration (Yıldırım and Şimşek, 2013, Berg and Lune, 2015). Qualitative aspects of this study were based on a semi-structured interview technique for taking the participants' views about STEM and STEM implementations.

One of the purposeful sampling methods', criterion sampling was used for the selection of the participants. The main criterion was to taken "Science teaching method course I" and "Mathematics teaching method course I" by pre-service teachers. According to this criterion, the students of primary school teacher training program of the education faculty of a state university were chosen as the participants of the current research.

For the quantitative part of the research, the data were collected through "Integrative STEM Teaching Intention Questionnaire" developed by Lin and Williams (2015) and the Turkish version of the questionnaire adapted by Hacıömeroğlu and Bulut (2016). The adapted questionnaire includes 31 items placed on a 7-point likert type scale. The questionnaire includes five sub-scales: knowledge ($\alpha=.93$), value ($\alpha=.86$), attitude ($\alpha=.87$), subjective norm ($\alpha=.69$), perceived behavioral control and behavioral intention ($\alpha=.86$). Cronbach's alpha coefficient for the overall instrument was calculated as .94.

In the qualitative part of the research, the data were collected through semi-structured interview form. The interview form was developed by researcher then given to two experts to provide internal validity of the interview form, and the form took its final shape by being reviewed. After a student engaged in the pilot interview the sound recording was transcribed. The interview printout form was computerised in order to determine whether or not the questions were clear and comprehensible and the answers of the student reflected the answers of the questions. At the end of this study, the validity of the questions was determined. The data were analyzed using descriptive statistics for quantitative part. The content analysis technique was used to analyze the qualitative data.

Findings

The quantitative part of the study examined pre-service teachers' STEM teaching intentions with descriptive analysis.

Table 1 shows the results of the descriptive analysis scores obtained from "Integrative STEM Teaching Intention Questionnaire".

Table 1. Descriptive analysis results of the "Integrative STEM Teaching Intention Questionnaire"

Name of the scale	Sub-factors	N	X	s
Integrative STEM Teaching Intention Questionnaire	Knowledge	104	5,48	1,04
	Value	104	6,30	,69
	Attitude	104	6,00	,85
	Subjective norm	104	5,09	1,13
	Behavioral control and behavioral intention	104	6,15	,65
	Total	104	5,89	,64

Findings of the quantitative part of the current research revealed that intentions of the pre-service teachers about knowledge, value, attitude, subjective norm, perceived behavioral control and behavioral intention were generally positive. According to the sub-factors of the scale, one of the sub-factors (value) level were "I agree exactly", three of the sub-factors (knowledge, attitude, perceived behavioral control and behavioral intention) level was "I agree" and one sub-factor's (subjective norm) level was "I rather agree". The findings showed that pre-service teachers' STEM teaching intentions were high.

Findings of the qualitative part of the current research, various sub-themes and categories obtained from the interviews are shown in the following tables, the findings were presented comparatively, the examples were given by direct citations, and some deductions were made about the differences obtained from the findings. The first theme, its' sub-themes and categories obtained from the data analysis of semi-structured interviews presented in Table 2.

Table 2. Sub-themes and categories under the main theme of STEM and STEAM

Theme	Sub-themes	Categories
STEM and STEAM	Definition of STEM	Interdisciplinary connection
	Reason for STEM	Adaptation to requirements of age
		Relation of science fields
		To develop the community
	Reason for STEAM (STEM + Art)	Social requirement for art culture
		Need for aesthetics
		Contribution to human psychology (relaxation, fun)
	Connection to everyday life	Contribution to the solution of the problems of life
		Support for creative practices
		Understanding the connection between life and science

The participants expressed their thoughts about "STEM and STEAM". Ahmet said "It is the combination of science, math and technology courses that create a interdisciplinary connection and teaching the students about different branches in a joint way and making them practice likewise".

In the sub-theme “*Reason for STEM*”, Hanife also said “*Interdisciplinary dialogs have become more integrated over the last century. The more the modern technology advances the more it is needed. If you do some work on physics, mathematics gets involved. These were gathered under a roof and given a name. I think this was made with the purpose of educating students in line with the requirements of the modern time*”.

Erkan said, on the other hand, about “*Reason for STEAM*” sub-theme, “*People are always more comfortable with art, it is easier to practice. So, although engineering or math is quite terminological, including theatre, drama, painting, poetry, music, visual arts, etc. into them would make student more comfortable. Studying them would become more enjoyable*”. In the sub-theme “*Connection to everyday life*”,

In the theme “*STEM and STEAM*” about the sub-theme “*Connection to everyday life*”, Mahmut said, “*Designing a project in STEM is a perfect practice for finding a solution for an everyday problem and it is very creative. Students can also use what they learn in courses in their daily life*”.

The second theme and its’ sub-themes and categories obtained from the data analysis of semi-structured interviews presented in Table 3.

Table 3. Sub-themes and categories under the main theme of STEM practices and education

Theme	Sub-themes	Categories
STEM practices and education	Advantages of STEM practices	Development of the sense of curiosity and research
		Permanent learning
	Disadvantages of STEM practices	Ability to work collaboratively
		Contribution to the choice of profession
		Takes a long time
STEM practices and education	Personal beliefs in STEM education	Teacher's lack of knowledge about STEM
		Economic problems
		Incompatibility with the exam system
	Suggestions for STEM education	Believe in ease of practice
		Believe in that success of practices will increase with experience
STEM practices and education	Suggestions for STEM education	STEM practices contribute to teachers and teacher candidates in school experience courses
		Teacher candidates can do project works in faculties for education methods (science education, mathematics education, etc.) courses
		Seminars and practical courses can be organized for teachers
		School principals should be informed about STEM so that they can guide the teachers in the school

In the theme “*STEM practices and education*” about the sub-theme “*Advantages of STEM practices*”, Remziye said “*First of all, I think STEM practices are fun for the child. It enhances the sense of wonder. They learn to research. They gain a lot at the same time. They learn that they are all integrated*”, and Nilay said “*It contributes to the children in that they learn what the teamwork is, respect for other ideas and they learn to think more creatively. From my point of view, while my students learn more effectively they also play a more active role in the classes. Learning becomes permanent for students*”.

In the sub-theme “*Disadvantages of STEM practices*”, Mahmut said “*It definitely has a disadvantage. After all, it takes a lot of time. Also you can't teach everything in detail. For instance, the exams were TEOG or something like that. There are really ridiculous questions in that exam. I don't think we can cover everything of the subject through this STEM method. Students may not solve the current question types in the exam*”, Remziye said “*It is a disadvantage that it is a long term practice. Teaching math while referring to science, math, engineering or art instead of passing the information directly would take a long time*”.

In the theme “*STEM practices and education*” about the sub-theme “*Personal beliefs in STEM education*”, Erkan said “*I think I can implement STEM quite willingly. It is already within the possibilities, though. I think we can implement STEM education no matter where we are in our country. I think I can achieve a lot with low cost. I would use STEM in my class*” and Ahmet said “*After I gain more insight about my professional life in a year, It might be more prospective. I might struggle in my first year. But later on, I think I may use STEM for implementation and education in class easily*”.

In the sub-theme “*Suggestions for STEM education*”, Hanife said “*Applied courses are possible. For example, teacher candidates that go to schools for training, in other words to take "school experience" course may compromise with the teachers there and teach this course together in second semester. They can implement STEM together in the class*” and also Mahmut said “*Although seminars and conferences are organized there*”.

can be teachers that are unavailable and uninformed. This is a big problem. We must inform those teachers in one way or another. First, principals should be informed and educated about this practice and then they should play an active role in the education of teachers”.

Conclusions

The quantitative results of the current research showed that pre-service teachers' STEM teaching intentions were high. In the research that Kırılmazkaya (2017) conducted, it is identified that the class instructors have a general positive view towards STEM education.

In the current research, according to the sub-factors of the scale, one of the sub-factors (value) level were “I agree exactly”, three of the sub-factors (knowledge, attitude, perceived behavioral control and behavioral intention) level was “I agree”. As a result of the STEM teaching intentions study conducted by Kırılmazkaya (2017) it was stated that the STEM teaching orientations corresponded to the "agreeing" range of views of STEM teaching orientation in values, attitude, perceived behavioral control and behavioral orientation dimensions. This finding shows similarity with the studies that express that the teacher candidates have positive attitudes towards STEM education (Adams, Miller, Saul & Pegg, 2014; Çorlu, Capraro & Çorlu, 2015). In the literature, there are studies investigating the attitudes of teacher candidates towards teaching STEM. In some researches carried out, it has been revealed that, it was concluded that the prospective teachers were in a positive attitude towards teaching STEM (Akaygün ve Aslan-Tutak, 2016; Çorlu, Capraro & Çorlu, 2015).

According to the result of the qualitative part, it was shown that the teacher candidates believed themselves using STEM in their classes and if they had problems they believed to solve them while implementation of STEM. Also they believed the importance of STEM teaching. The opposite results according to current research was Yıldırım and Selvi's (2016) study, in their study, show that teacher candidates do not have not enough knowledge and ability in STEM education and that it is difficult to associate STEM knowledge with everyday life practices and at the same time have some misconceptions about STEM education.

In the light of the results, it may be advised to conduct new studies in different branches and with different scales in a larger sample group due to the fact that different results have been obtained both in the literature and in the current study.

It may be advised that the academicians can implement STEM in their teaching method courses with pre-service teachers.

Mixed method is used in this study and case studies or action researches may be conducted in order to obtain in-depth results in schools with teachers.

References

- Adams, A. E., Miller, B. G., Saul, M. ve Pegg, J. (2014). Supporting elementary pre-service teachers to teach STEM through place-based teaching and learning experiences. *Electronic Journal of Science Education*, 18(5), 1-22.
- Akaygün, S., ve Aslan-Tutak, F. (2016). STEM images revealing STEM conceptions of pre-service chemistry and mathematics teachers. *International Journal of Education in Mathematics, Science and Technology*, 4(1), 56-71.
- Berg, B. L. ve Lune, H. (2015). *Sosyal bilimlerde nitel araştırma yöntemleri*. (Çev. Ed. Aydın, H.). Konya: Eğitim Yayınevi.
- Bybee, R. W. (2010). Advancing STEM education: A 2020 vision. *Technology and Engineering Teacher*, 70(1), 30-35.
- Chang, S. H., Ku, A. C., Yu, L. C., Wu, T. C. and Kuo, B.C. (2015). A Science, Technology, Engineering and Mathematics Course with Computer-Assisted Remedial Learning System Support for Vocational High School Students. *Journal of Baltic Science Education*, 14 (5), 641-654.
- Christensen, L. B., Johnson, R. K. ve Turner, L. A. (2015). *Araştırma yöntemleri, desen ve analiz*. (Çev. Ed. Aypay, A.) Ankara: Anı Yayıncılık.
- Creswell, J. W. (2012). *Educational research, planning, conducting, and evaluating quantitative and qualitative research*. 4th Ed. Boston: Pearson Education, Inc.
- Creswell, J. W. ve Plano Clark, V. L. (2015). *Karma yöntem araştırmaları, Tasarımı ve Yürütülmesi*. (Çev. Ed. Dede, Y. ve Demir, S.B.) Ankara: Anı Yayıncılık.
- Çolakoğlu, M. H. ve Gökben, A. G. (2017). Türkiye’de Eğitim Fakültelerinde FeTeMM (STEM) Çalışmaları. *Journal of Research in Informal Environments (JRINEN)*, 3, 46-69.

- Çorlu, M.S., Capraro, R.M. & Capraro, M.M. (2014). Introducing STEM education: Implications for educating our teachers in the age of innovation. *Education and Science*, 39(171), 74-85.
- Çorlu, S., Capraro, R.M., & Çorlu, M.A. (2015). Investigating the Mental Readiness of Pre-service Teachers for Integrated Teaching. *International Online Journal of Educational Sciences*, 7(1), 17-28.
- Dugger, E. W. (2010). Evaluation of STEM in the United States. 6th Biennial International Conference on Technology Education Research. Australia.
- Gonzalez, H. B., Kuenzi, J. J. (2012). Science, technology, engineering, and mathematics (STEM) education: (CRS Report No. R42642). Congressional Research Service website: <https://fas.org/sgp/crs/misc/R42642.pdf> adresinden 18.04.2017 tarihinde erişilmiştir.
- Hacıömeroğlu, G., Bulut, A.S. (2016). Integrative Stem Teaching Intention Questionnaire: A Validity and Reliability Study Of The Turkish Form. *Journal of Theory and Practice in Education*, 12(3), 654-669.
- Kırılmazkaya, G. (2017). Sınıf Öğretmeni Adaylarının FeTeMM Öğretimine İlişkin Görüşlerinin Araştırılması (Şanlıurfa Örneği). *Harran Education Journal*, 2(2), 59-73
- Langdon, D., McKittrick, G., Beede, D., Khan, B., Doms, M. (2011). STEM: Good Jobs Now And For The Future. http://www.esa.doc.gov/sites/default/files/stemfinalyuly_14_1.pdf adresinden 12.02.2017 tarihinde erişilmiştir.
- MEB. (2016a). PISA 2015 Ulusal Raporu. Ankara: Ölçme, Değerlendirme Ve Sınav Hizmetleri Genel Müdürlüğü.
- MEB. (2016b). TIMSS 2015 Ulusal Matematik ve Fen Bilimleri Ön Raporu. Ankara: Ölçme, Değerlendirme Ve Sınav Hizmetleri Genel Müdürlüğü.
- NRC (National Research Council) (2012). A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas. Washington, DC: The National Academies Press. doi:<https://doi.org/10.17226/13165>.
- OECD Education at a Glance (2017). Where will tomorrow's science professionals come from? 23 Aralık 2017 tarihinde <http://www.oecd.org/edu/education-at-a-glance-19991487.htm> adresinden erişilmiştir.
- Sanders, M. (2009). Stem, stem education, stemmania. *The Technology Teacher*, 68(4), 20-26.
- Teddlie, C., & Tashakkori, A. (2009). Foundations of mixed methods research. Thousand Oaks, CA: Sage.
- Toulmin, C. N., & Groome, M. (2007). Building a Science, Technology, Engineering, and Math Agenda. In: National Governors Association. <https://files.eric.ed.gov/fulltext/ED496324.pdf> adresinden 02.03.2017 tarihinde erişilmiştir.
- Wang, H. (2012). A New era of science education: science teachers' perceptions and classroom practices of science, technology, engineering, and mathematics (STEM) integration. (Doctoral dissertation). Proquest veritabanından erişilmiştir. (3494678).
- Wells, J. G. (2008, November). STEM education: The potential of technology education. In 95th Mississippi Valley Technology Teacher Education Conference, St. Louis, MO (Vol. 41).
- Yıldırım, B. ve Selvi, M. (2016). Examination of the effects of STEM education integrated as a part of science, technology, society and environment courses. *Journal of Human Sciences*, 13(3), 3684-3695.
- Yıldırım, A. ve Şimşek, H. (2013). Sosyal bilimlerde nitel araştırma yöntemleri. (Beşinci Baskı). Ankara: Seçkin Yayıncılık.

Problems And Trends In South Korean Lifelong Education

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Abstract

This paper focused on the characteristics, problems and trends in Korean lifelong education policy. Major Characteristics of the Korean lifelong education policy are seen as government's leadership, program provisions focusing on humanities and cultural refinement, high rates of participation in lifelong learning, insufficient policy-making from the learners' point of view, role of NILE as a flagship policy implementation agency, and evidence-based plan and research. Furthermore, SWOT analysis, a strategic planning method used commonly with a broad range of projects or initiatives, was performed on the Korean lifelong education policy. Finally, for the improvement of lifelong education some suggestions were made, for instance, it is required to emphasize public awareness, promotion and the development of cultural sensitivity, to diversify the sources of education programs, to build networks between them, to maintain a balance between educational opportunities for the rich and the poor, and to establish a nation-wide recognition and validation system for the outcomes of adult and lifelong education.

Introduction

It has not been an easy task to build a nation-wide lifelong learning and education system given the historical and socio-economic context of Korean society. The initiative was initiated while the country's education experts were still concerned with school education as the next-generation visions and the people were more focusing on providing formal education to their children and supporting them get ready for entrance exams, rather than pursuing the realization of their own needs for lifelong learning. In short, the overall climate, historical and cultural tradition and socio-economic basis of the country were less than perfect advocates of lifelong learning and adult education policies to bring the agenda to the spotlight of policy-making and to start building a feasible system. Nevertheless, Korean society has performed a progress for itself from a social education-oriented state to a lifelong learning oriented stage. The society is also in the process of refining the transition in the form of a nation system. Korea is performing its transition from a literacy-challenged country into a lifelong learning-leading one. Behind the transformation lies a contributing factor that was the remarkable development of school education and diffusion of higher education among Koreans. In virtue of continued growth of adult education and common integration of lifelong learning, Korean society is striving yet another leap forward to get development as a lifelong learning society.

Building a policy framework for adult education in the acute circumstances and improving it towards the ultimate policy goal of creating a lifelong learning society has not only compromises made in real terms, but also required strategies rested on unconventional methodology. That the country has created tangible outcomes and systems out of its lack of preparation indicates that its lifelong education policy strategy has been in association with its diffusion of school education. Namely, the course in lifelong education policy that Korea has taken was not the best option essentially; it was rather a second-best choice based on real-life considerations. Thus, one should find strategic significance not in the course itself but in the dynamic interactions between internal and external conditions, circumstances and environments that have forced the country to take such a course.

Characteristics Of Lifelong Education In Korea

The characteristics of the Korean lifelong education have carried out both as policy-promoting factors and potentially compromising ones that forbid the country attaining further development in lifelong learning. Some of the major characteristics of the Korean lifelong education policy development are summarized as follows.

Government's leadership, implementation agencies and legal systems

Among countries around the world that have reported on adult learning policies, only about half have indicated adult education as an independent national policy-making plan. Even these countries are not implementing policies through separate, independent adult education laws. Instead, they are utilizing special provisions included in their education law. Mostly, their adult education policies are performed as provisional programs, requiring a broad structure, budgets and legal support. However, Korea has made adult education as part of its leading action for encouraging a lifelong learning framework legal and clearly installed implementation organizations and long-term policy plans (UNESCO UIL, 2010).

Many countries choose a top-down bureaucratic style of centrally-managing adult education funds granted from international development organizations or overseas ODA. They have various impressive highest-ranking commissions and committees that stand only in name. Moreover, their comparatively tight-budgeted local governments have no choice but to rely on their central government's national organizations for survival. Thus, it is very difficult to implement regionally-sensitive adult education policies (Ahmed, 2009). In comparison, Korean adult education policy is led by clearly defined leadership by the central government and is supervised based on a conciliatory approach that at the same time recognizes the regional implementation systems and demands regional initiatives and matching funds. In spite of the obvious leadership by the central government, actual programming and performance evaluations are performed out by the leadership of local governing bodies. By reason of higher power by local governments in securing budgets than the one by the central government, a bottom-up approach in policy development and benchmarking is prevailing.

program provisions focusing on humanities and cultural refinement

In most countries, adult education is pursued with regard to two goals, vocational ability development and social integration, with a tendency to put more emphasis on the former. Adult education policies concentrating on human resources development are gaining in particular strong impetus. Private capital is merging with public capital to take part in education sector and create an immense adult education and training market (Medel-Anonuevo, 2003). However, in Korea adult education and adult training are separated, and the learners' participation in non-vocational education (in terms of rates and number of hours invested) is higher than their involvement in work-related training. One of the reasons of these phenomena is that the country still has relatively lower employment rates compared to other advanced countries, and thus stay-at-home mothers and other non-working demographic groups enjoy participating regularly in non-vocational adult learning.

In contrast, the active working populations are subjected to the nearly universal lack of time and money to spend on learning other than compulsory education. Also, in Korea, there is not enough sufficient connecting system between vocational training and academic diploma which is regulated by the Ministry of Education and the Ministry of Employment and Labor respectively. The former mostly handles the supervision of academic ability-related programs, complementary education programs, the establishment of academic certification systems for adult learning outcomes, and the implementation of educational support projects for lower-income learners and etc. On the contrary, the Ministry of Employment and Labor independently implements vocational training and work-skill development programs under the certification framework.

High rates of participation in lifelong learning

Countries around the world can be divided into four groups correspondingly their people's level of participation in lifelong learning. Group A consists of countries (mostly Northern European states) that top 50% participation rates. Group B includes countries showing 35-50% participation rates, including Anglo-Saxon countries and some European states (Austria, Luxemburg, the Netherlands and Switzerland). Group C consists of mostly Eastern European countries, several Southern European states and emerging countries in Asia with a 20-35% participation rate. Lastly, Group D includes countries with less than 20% participation rates, such as Eastern/Southern European countries (Portugal, Greece and Poland), South American countries and the majority of countries in the rest of the world (UNESCO, 2007). Korea belongs to Group C, likewise similarly performing countries in terms of participation rates - e.g., the Czech Republic, Spain and Australia. Interestingly, when considering per-capita income, which has a correlation with the rate of lifelong learning participation, European countries with a similar level of national income have all shown lower participation rates than that of Korea. Taking that fact into account, Korea's lifelong learning participation against its per-capita income is considered to be relatively high (Han, 2010).

Insufficient policy-making from the learners' point of view

It can be allowed that Korea has built, supplied and expanded a lifelong education program led by strong public initiatives, and has encouraged the socially weak to participate in learning. Instead, there has been very little support for improving conditions that will be more inductive to learning as seen from the learners' point of view. For example, paid or unpaid vacation for learning is more or less not very common in Korean society. Funding for learning is available through only a handful of circumstances including vocational skill development and practical training. As a whole, lifelong learning policy as a means to supply education is being actively put into place on the national and local government and private levels. Notwithstanding, this relatively insufficient support is ready for use in practical matters, such as funding to directly promote learners' participation as in the number of hours spent in learning, educational expenses and increased access to opportunities to get learning. Evaluation of the policy implementation discloses one distinct characteristic of the Korean lifelong education policy. That is the imbalance existing between support for education supply and support for learner demands.

Role of NILE as a flagship policy implementation agency

There are many countries, which have a semi-governmental agency(s) and/or government-funded private organization(s) that lead the countries' adult education and lifelong learning policies. For example, there is NIACE (National Institute of Adult Continuing Education) in England and Wales; ALA (Adult Learning Australia Inc.) in Australia; and DVV (Deutscher Volkshochschul-Verband) or the German Adult Education Association in Germany. Korea has a similar institution called the National Institute for Lifelong Education (NILE), which is being recognized as an agency representing the superiority of Korea's lifelong education program. NILE is producing competitive outcomes regarding planning, work scope and performance compared to its overseas counterparts. The biggest role of NILE is to present a blueprint for the country's future lifelong learning framework by establishing the Comprehensive Lifelong Learning Development Plan (CLLDP). Korea's Lifelong Education Act (LEA), which was amended in 2007, assists the central and metropolitan (city and provincial) governments to establish and update CLLDP to help promote lifelong learning and report to the Minister of Education on a regular basis. Having been updated twice over the past decade, CLLDP has fulfilled its mission of leading the lifelong education policy and its implementation along the long-term planning. The plan's latest edition divides adult education practice regarding a learner's developmental stages and prepares to start programs and legal systems that strive for achieving balanced growth between the stages (Presidential Committee on Education Innovation, 2007).

Evidence-based plan and research

In order to promote more scientific management of lifelong education policy, surveys and studies have been conducted. These were carried out by routinely compiling statistical data on the practice of lifelong education and giving surveys on adult learners' learning practices (Lengrand, 1979). Adopting the latest approach of evidence-based research and consequently providing reference data, the surveys and studies help identify the Korean people's lifelong learning patterns and can therefore provide a kind of infrastructure upon which the government could plan out detailed policies. The surveys started in 2007 and have been performed on a yearly basis since. This type of annual survey implementation is a slightly rare practice compared to many countries around the world.

Assessment Of Korean Lifelong Education System

In this paper, Korea's lifelong education policy was defined as an adult education policy that intends to establish a paradigm on the lifelong learning society. For the success of the policy, several considerations can be suggested. First, adult education programs should be provided and policies be offered to promote the participation of adult learners. Second, the policy should be subjected to reflection for its visions and prospects, and be permitted to define itself as it progresses conjointly society's development to a lifelong learning framework. Third, on the base of the visions, a more active initiative is required to build robust, organic networks between core education areas which include school and higher education, and non-core education areas like culture, employment and welfare. SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis, a strategic planning method used commonly with a broad range of projects or initiatives, was performed on the Korean lifelong education policy. The results are summarized below (Han, 2010).

Strengths

Lifelong education and learning in Korea is growing firmly based on the result of the country's solid public education and the signature, nation-wide enthusiasm for education. Specifically, now that the country has entered into a fully developed phase of disseminating higher education, educational planning may come to pass with highly educated learners as one of its main targets (Han, 2008). Also, the relatively equal opportunity in school education and the distribution system across the education sector contributes positively to the equal opportunity in adult education as well. Korea has a highly developed modern legal system that supports the continuing implementation of lifelong education policies, and government agencies that manage the policy implementation exclusively. Presently, there are only a few countries around the world that have both the lifelong education law and policy implementation system. Successful implementation cases are often found among the countries with exclusive agencies and legal programs besides the law and the system. There are quite a few lifelong education research groups and experts available in Korea, making it easier for the country to secure expertise in lifelong education policy. Having an sufficient group of lifelong education specialists is a phenomenon seen rarely in the world. That advantage greatly facilitates the connection and collaboration between higher educational institutions and implementation programs in Korea.

Weaknesses

The insufficient public investment in lifelong education is one of the biggest weaknesses. Public investments in adult education are very small compared with those in school education. School-aged children aged 6 to 18 get the most investment, while adults aged 20 to 65 receive the least amount of investment, which remains an obstinate trend that adult education is viewed as an "out-of-pocket" affair. Learning is understood in relatively narrow terms.

That is, it is considered as one of the social functions including developing leisure and pastime skills, securing employment and increasing cultural sensitivity rather than as part of the core task of human beings (i.e., development and growth over a lifetime). Namely, lifelong education is regarded not so much as a policy framework geared towards next-generation education reforms but more as the supply of education happening at some lifelong learning centers. Working hours of Korean employees are much longer than those of OECD member states. Thus, Koreans undergo a lack in time and money to invest in learning. Unfortunately, as household income and finance is affected by the global economic crisis, Korean adults' opportunities for aggressive personal development are decreasing, which leaves workers who are on the turning point of losing their jobs and possibly become depending on the national welfare system.

Opportunities

By reducing, and thus being mostly freed from the burden of having to provide basic literacy training to the people, Korea has been securing the infrastructure with which to satisfy the increasingly diverse needs for the lifelong learning of Korea's adults. The country's wide spread elementary, middle and high school education and very high rates of entering into higher education programs are contributing to the fast-extinct ratio of illiterate individuals in the society while at once they promote a large clientele enthusiastic about satisfying their strong needs for learning through a practice of lifelong learning. Korea is rapidly becoming an aging society. This is taking place in tandem with Korean society's fast-changing perception of lifelong learning and "re-designing" one's life. Many Koreans even plan their post-retirement years when still in early adulthood. They are also anxious more about their lives and engage more actively in initiatives geared towards developing post-retirement or old-age competency. Recently, Korea's academic certification system has begun restructuring as led by the Ministry of Education and the Ministry of Employment and Labor. This is contributing to the rising demand for certificates, licenses and permits and for ongoing education among Korean learners. Well-established academic certification system is known to help increase the need for learning. Korean society's demand for and awareness of arts, humanities and high-class culture programs are expanding. Increases in numbers living as part of the elite class with more money and time on their hands, as well as their need for prestige and luxury, are rapidly forming a new breed of learning markets (Han, 2000).

Threats

Korea's tradition of valuing academic degrees is obstinately viable. Therefore, lifelong learning in Korea confronts the risk of expanding an already "degree-obsessed" society by misusing the systems and programs created originally to realize a lifelong learning society as an secondary means to earn a college degree. Notwithstanding that Korea is expanding its public investment in lifelong learning with its public lifelong educational institutions growing at their maximum, the pace of growth falls short of the government's expectation. That gap, if remaining steadily, will likely be filled rapidly with for-profit education service providers. In that case, Korea's lifelong education system that has been established for years could be compromised and the division of Korean society may speed up according to the expanding market for lifelong learning.

Discussion: Suggestions For International Cooperation

Lifelong education can be carried out only on the stable foundation of basic public education. The development of general education through public education is the condition for the development and implementation of the lifelong education policy. It is important to set goals for the policy and to build independent bodies of related laws and regulations. The majority of successful instruments of implementation of the lifelong education policy have efficient authorities that independently manage the policy. Issues in lifelong education must be considered by policy makers are as follows: continuous initiatives in order to increase people's participation and the creation of a lifelong learning society - a new context and a concrete policy goal. Only efforts with vision can successfully lead the policy to build a lifelong learning society. It is required to emphasize public awareness, promotion and the development of cultural sensitivity in order to help expand people's participation in learning as it becomes more necessary to their daily lives. Moreover, it is needed that the sources of education programs should be diversified and networks between them should be formed. This is necessary in ensuring that adult education is well balanced efforts including literacy, humanities and cultural refinement, technical training and specialized education all within its sphere. A balance between educational opportunities for the rich and the poor should be maintained. Provided economic growth continues world-wide, demand for the former will lessen finally, whereas demand for the latter will continue to increase. The right time for a system-to-system transition is deeply related to the migration of the balancing point between these two types of education. It is also required, to establish a nation-wide recognition and validation system for the outcomes of adult and lifelong education.

As a whole, dynamics between learning and academic certification serves as the driving force behind the growth of adult education. Countries need to nurture and train lifelong education professionals with greater vigor and enthusiasm, and assign them first and foremost to public adult education programs. They act as the source that

enables the establishment of lifelong learning framework. No policy is successful without feasible data to back it up. Thus, countries should participate in surveying adult learners' participation in lifelong learning, like the one given on OECD member states, and should devote to their own statistical survey of lifelong education facilities. Macro indexes will add great power to building and implementing the policy.

References

- Ahmed, M. (2009). *The State and Development of Adult Learning and Education in Asia and Pacific: Regional Synthesis Report*. Hamburg: UNESCO.
- Han, S. (2008). The lifelong learning ecosystem in Korea: Evolution of learning capitalism? *International Journal of Lifelong Education*, 27(5). 517-524.
- Han, S. (2000). Korea's Lifelong Education: Development of Implemental Discourses and the Contestation. *The Journal of Lifelong Education*, 6(1), 1-20.
- Han, S. (2010). *Lifelong Learning and Adult Education Policy. Understanding Korean Educational Policy*. 10. Korean Educational Development Institute (KEDI).
- Lengrand, P. (1979). *Prospects of lifelong education. Lifelong education: A stocktaking*. A.J. Cropley. Hamburg: UNESCO Institute for Education.
- Medel-Anonuevo, C., Ed. (2003). *Lifelong learning discourses in Europe*. Paris: UNESCO.
- Presidential Committee on Education Innovation (2007). *Innovative Architecture for Learning Society in Korea*. Seoul: PCEI.
- UNESCO (2007). *EFA Global Monitoring Report 2008: Education for All by 2015 will we make it?* Oxford: Oxford University Press. 103.
- UNESCO UIL (2010). *Global Report on Adult Learning and Education*. Hamburg: UNESCO Institute for Lifelong Learning.

Problems Faced By Teachers Of Gifted / Talented Students

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Abstract

The purpose of this research is to identify the problems faced by teachers with gifted / talented children. The study was conducted in 2017-2018 academic year and includes the teachers of the children whose children are gifted / intelligent. In addition to the demographic information of the teachers in the study, the perspective of the society as a teacher with a talented / intelligent student, where the teachers helped the children to learn what they should do as a teacher with a gifted / talented student who had problems with themselves or other members of the family, It has been tried not to be determined through open-ended questions, whether there is a private center or institution that is continuing outside the Art Center, whether the students have received relevant guidance support, and what kind of support they need. The data were evaluated by the content analysis technique of the qualitative data analysis method. Nvivo 10 program was used for qualitative data analysis. As a result of the research, the problems experienced by the teachers of the gifted / talented students were determined and suggested solutions. They also tried to get an idea of what the problems would be in their research.

Key words: *Gifted, talented, teacher*

Introduction

It is known that those who direct the important developments in the world are highly talented individuals. While the development of gifted students in line with their abilities has advantages both in terms of themselves and society, it is a disadvantage that these students are not developed in line with their abilities. The lack of support for the positive features of students with superior ability may have some negative consequences for students with disabilities or gifted students. These negative behaviors can be mischievous, unresponsive to the school, unsuccessful, unspeakable jokes and speeches that will escape the peace of the class. Therefore, the identification of students with superior ability requires special knowledge and expertise. In the classroom environment where individuals with superior ability are present, the negative behavior of some of these children may lead to disciplinary problems in the classroom environment.

Ataman (1998) refers to gifted children as individuals with superior performance or intellectually superior to their peers in terms of mental abilities or intelligence, strong creativity as well as high sense of accomplishment in beginning work. In the I. Special Education Council, the "gifted" in terms of their general or special abilities are defined by their experts as being determined to perform at a high level according to their peers (MEB, 1991). Renzulli (1978), who stated that men and women of high talent had attracted the attention of people throughout history, speaks of the three talents of superior talents. These are talent above normal, relativity at higher levels and creativity at higher levels.

Highly talented students in education institutions continue their education together with their peers. By discovering these students, teachers can prepare enriched programs for these students and they can be directed to the Science and Arts Centers that provide education in the direction of the potential of non-school students in our country. The tests to determine gifted students take a long time and there are not enough number of guidance teachers to perform these tests. This is why teachers are not aware of their students' observations and experiences without labeling their students. The early identification of gifted students, their development in the direction of their abilities and the possible negative behaviors can be remedied by the teachers in the educational institutions knowing and directing the characteristics of these students. When the studies are examined, it is found that the teachers in the educational institutions are deficient in knowing the characteristics of the gifted students and determining these students (Alkan, 2013).

The identification of the problems experienced by gifted students and the opinions of teachers living in classrooms with them is important for the education of gifted students and the solution of their problems. With this in mind, the problems faced by teachers who directly observe the behaviors of gifted students in the research are examined.

- "What are the problems faced by teachers who are gifted students? Format. The following questions were searched within the framework of this problem.
- What kind of students do you consider to be special education?
- What special education groups did you belong to?
- What kind of features do students have in mind when it comes to gifted / talented students?
- Do you have gifted / talented students in your class? What distinguishes this student / student from other students?

- Are your gifted / talented students in your class experiencing problems in class / school (with other students or with you)?
- In your opinion, is the school environment sufficient to meet the needs of gifted / talented students? If not, what can be done?

Purpose Of The Research

In the scope of the study, it was aimed to reveal the problems encountered by the teachers who have gifted / intelligent knowledge to their students.

Method

In this section, information about research model, universe and sampling, data collection tool, data collection and analysis will be given.

Model Of Your Research

Survey screening model was applied. The main purpose of screening research is to describe the situation as it exists. Everything that is subject to research is tried to be defined as if it is within its own conditions (Karasar, 2005). The answers taken by teachers from open-ended questions constitute the screening part of the data.

Universe And Sampling

The universe of the research is composed of teachers who have gifted / intelligent knowledge to their students during 2017/2018 education period. The sample is composed of 54 teachers in various branches with a gifted / intelligent recognition to their students during 2017/2018 education period. The data were obtained by face-to-face interview with 54 teachers.

Data Collection And Analysis

In the research, the opinions of the teachers who have gifted / intelligent gifted to their students, scale questions prepared by the researchers and face to face interview method were collected. The scale consists of two parts. The first part consists of the items that teachers want to get demographic information and the second part consists of the difficulties they have with regard to having a gifted student. SPSS program and Nvivo 10 program were utilized in the analysis of the data.

Findings And Comment

- Demographic questions from the scale in this study consist of closed-ended questions. Teachers were asked open-ended questions about their views. Demographic questions were analyzed by frequency (quantitative) and open ended questions were analyzed by content (qualitative).
- Teachers' demographic characteristics
- Branches
- Vocational seniorities
- Educational status,
- The information on the education of children with special needs is given in the following tables.

1- Participant Branches

Table 1. Survey Branches

Participants Branches	Frequency	Percent
math	7	%13
The English	8	%16
Classroom Teacher	7	%13
Turkish	5	%9
Physical education	4	%8
Social studies	3	%5
science	6	%11
Religion culture	3	%5
Computer	2	%4
Visual arts	3	%5
Music	2	%4
PDR	3	%5
Pre-school	1	%2
Total	54	%100

As Table 1 reveals, most of the respondents are branch teachers.

2- Participant Professional Seniority

Table 2. Occupational Seniority

Participants Vocational Senior	Frequency	Percent
1-5	19	%36
6-10	19	%36
11-15	11	%20
16-20	0	%0
20-Top	5	%8
Total	54	%100

As seen in Table 2, the occupational seniority of teachers is mainly composed of the first 10 years of teachers. As a result of research conducted by Rash and Miller (2000) on the examination of the practices of teachers of gifted students, a positive correlation was found between the use of different methods as the duration of the teachers' professional experience and their work with gifted talents increased.

3-Educational Levels of Participant Teachers

Table 3. Teacher Education Levels

Teacher Education Levels	Frequency	Percent
License	38	%71
Graduate	13	%24
Doctorate	3	%5
Total	54	%100

Table 3 shows that the level of education of teachers at doctoral level is very low.

4-Are you trained in "special needs children" in university?

Table 4. Teachers Receiving Special Education

Special Education	Frequency	Percent
Yes	14	%25
No	40	%75
Total	54	%100

Table 4 shows that very few of our teachers have been trained in special needs children in university education. A study conducted by Hansen and Feldhusen (1994) with a study of trained and untrained teachers of gifted students shows that trained teachers for the training of gifted talents exhibit better teaching skills and a more positive classroom environment than untrained teachers for gifted talent. In this case, the teachers participating in the research show that they will have difficulty in solving the problems with special children. As a result of the questionnaire survey conducted by the Science Art Center in the process internal audit report (MEB, 2010), a large majority of respondents agree that the teachers in the schools do not have enough knowledge about the distinguishing features of gifted or gifted students.

5- Do you have in-service training about "children with special needs"?

Table 5. Teachers Receiving In-Service Training

In-service Training	Frequency	Percent
Yes	12	%22
No	42	%78
Collection	54	%100

Table 5 shows that very little of the teachers' special needs children are receiving in-service training. This shows that teachers have difficulty in solving problems with special children. Mills (2003) conducted a survey titled "Characteristic Characteristics of Effective Teachers in the Education of Gifted Children: Teachers' Past Experiences and Students' Personality Types" they do not have a certificate. The study of Nugent and Shaunessy (2003) on "Using Film in Teacher Training: Giftedness from Different Lenses" shows that the quality, social and emotional needs of the gifted students in the films after pre-service, in-service and after-service teachers' their parents' problems, the characteristics of their teachers, the availability of films related to available strategies, and the fact that these films are not used and used too much in teacher education.

As a result of the work titled "In-service Training Needs of Elementary School Teachers Related to Education" in Gültekin, Çubukçu and Dal, (2010), primary school teachers should be informed about student education, teaching planning, material development, teaching, managing teaching, It has been understood that they need training in all areas of competence, such as building, developing basic skills, serving special needs students, educating adults, having extracurricular activities, self-improvement, school development, and improving school-environment relationships.

6-What kind of students do you think are included in special education? The themes and sub-themes obtained from the answers given by the teachers in question.

Table 6. Themes and Sub-themes

Question	Theme	Sub themes
Which students do you understand as special education?	Children with intelligence back and forth 35%	Outstanding children Children above standard Children under the standard Those with developmental disabilities
	Different thinking 30%	Children with superior character Failed children Children who need individual attention Understanding children Children with high perception ability
	Gifted and disabled children 20%	Children with learning disabilities Failed children Mainstreaming students Children who need special attention and interest
	Children with learning strength 15%	Children out of normal education Children whose level of learning is different from normal students Mental retardation Autistic children Children with down's syndrome

As can be understood from Table 6, teachers have very different opinions in defining special children. It is understood from the above table that many teachers make literate definitions for special children, even though they do not receive education.

7-Which students belong to which special education groups? Themes and sub-themes of the answers given in the question.

Table 7. Themes and Sub-themes

Question	Theme	Sub themes
What special training group do you have?	Gifted 35%	Bilsem Student Going to the Children's University Special Education
	Mentally handicapped 20%	Light mental Middle Mental Advanced mental Having a learning disability
	Autistic 10%	Light Middle Advanced
	DEHB %5	Hyperactive Lack of attention

		Dyslexia
	Down %5	can learn can not learn
	No %25	Never met I do not know if I compared it I know these kind of students, Not in my class.

From Table 7, it can be seen that the most prevalent among the special children is the mentally retarded in the other group of gifted students.

8-Students who have what kind of characteristics are considered as gifted / intelligent students come to your mind, the themes and sub-themes related to the answers given in the question.

Table 8. Themes and Sub-themes

Question	Theme	Sub themes
What qualities do children have when it comes to gifted talent?	Quick on the draw 30%	Quick learner Academic success is high Easy to implement You can think of it as versatile
	Self-confident 25%	Trouble listening to lesson Academic failure is low Innovator Having new ideas
	Resolve problems quickly 20%	Quick thinking Different thinking Comment katan Who have their own truths
	Communication is weak 15%	Asocial Alone Incompatible Rebel and spoiled
	Analytical thinking and questioning 10%	Leader Insistent investigating detailed eye

The data in Table 8 show that teachers responded well to gifted students' behaviors they had shown. It is a promising future for the solution of problems of gifted children in the future. In a meta-study of Moore's (2009) study on teacher perceptions of academic superiority in elementary school classes, qualitative research has shown that teachers have a gifted education and positive thinking about identifying gifted children.

9-Are your gifted / talented students in your class experiencing problems in class / school (with other students or with you)? How is your approach to the problems you are experiencing? Themes and sub-themes of the answers given in the question.

Table 9. Themes and Sub-themes

Question	Theme	Sub themes
Do you have problems with your students? How do you solve it?	No problem 55%	I never met I did not live No problem
	I'm having a problem 35%	Attention Deficit (Warning, Motivation, Orientation, Different education, Empathy) Incompatibility (group work, help from guidance service, family discussion, referral to social activities)

		Self Confidence Explosion (Additional study, direction to research, preparation of presentation, project making)
Rarely 10%		Breaking the Classroom (Warning, Guidance, Parental Interview) Seeing yourself differently (Orientation in the direction of the ability to identify areas of interest)

In Table 9, the teachers are mainly given no answers. They either have trouble finding a solution or they may not want to expose problems because they are usually investigated in private schools.

10-Are your school environments sufficient to meet the needs of gifted / talented students? If not, how can it be done? Themes and sub-themes of the answers given in the question.

Table 9. Themes and Sub-themes

Question	Theme	Sub themes
Are the needs of talented students satisfied? What can be done?	Enough 25%	Out-of-school expert support can be better
	Partially Enough 30%	Teachers must be trained in these children There must be workshops for such children
	Insufficient 45%	Custom classes must be created Ensure environment for project work

An important part of the teachers in Table 10 states that school environments are inadequate for educational environments for gifted students. In this case, it can be said that our country needs to prepare enriched environments for these children, which is an important wealth in terms of human resources.

Conclusion And Discussion

Surveys were reached through face-to-face interviews with teachers working in various state and private schools of various countries. There are 54 teachers in various branches of the research. When the data from our teachers contributing to the study were analyzed, it was determined that most of our teachers were undergraduates and very few were trained in faculties where special needs children were taught and in in-service trainings. In this case, it was observed that our teachers could have problems with the behavior that they should exhibit when they meet children with superior ability. The answers to the qualitative questions of the research were carried out by qualitative analysis methods and it was observed that the teachers with gifted students who were diagnosed according to the answers to the questions had problems. They are hesitant about what to do to solve their problems and which organizations may apply. Teachers can not get the necessary support because of the limited number of institutions that can respond to their problems. Official and non-governmental organizations can be used to reach teachers by providing materials such as seminars, films, books, posters and brochures that will inform the teachers about the education of highly talented students. Raising consciousness training in all sections of the society on the issue of diagnosed children can be helped to overcome the problems of teachers who are aware of the fact that these children are very important values in terms of our country and have a talented student in their class. Educating high-gifted learners about how to behave towards these students, organizing appropriate training programs and preparing appropriate training environments can be an important step for the future of our country.

Suggestions

- Teachers with gifted students can introduce common skills of gifted children and gain the ability to cope with these characteristics.
- Teachers with gifted students can be trained to gain listening, communication, time management and social skills.
- Considering the common characteristics of gifted students, efforts to address the needs of organized education can be increased.
- Observed shortcomings of Science and Art Centers can be eliminated.
- Official and non-governmental organizations can be used to reach families by providing materials such as seminars, films, books, banners and brochures to inform parents about the education of highly talented students.
- Improvement of the school environment of gifted students can be done.

- Gifted students can establish workshops for schools to reveal the skills of students.
- For children with special abilities at the genius level, separate schools can be upgraded to an educational model. Depending on the facilities, such kind of schools can be opened in certain regions.

References

- Alkan, A.(2013). Öğretmenler için “Üstün Zekalı/Yetenekli Öğrencilerin Belirlenmesi Eğitim Yazılımı’nın geliştirilmesi ve Değerlendirilmesi. Doktora tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Ataman, A. (1998). *Üstün Zekâlılar ve Üstün Yetenekliler*. (Ed: Süleyman Eripek). Özel Eğitim, T.C. Anadolu Üniversitesi Yayınları, Eskişehir.
- Gültekin, M., Çubukçu, Z. ve Dal, S. (2010). İlköğretim Öğretmenlerinin Eğitim Öğretimle İlgili Hizmet İçi Eğitim Gereksinimleri. *Selçuk Üniversitesi, Ahmet Keleşoğlu Eğitim Fakültesi Dergisi, Sayı 29, Sayfa 131-152*.
- MEB, (1991). *I. Özel Eğitim Konseyi*. Milli Eğitim Bakanlığı, s.223-246, Ankara.
- Renzulli, J. S.(1978). *What Makes Giftedness Reexamining a Definition*, [http://www.mishawaka.k12.in.us/documents/HA%20docs/EDPS%20540%20articles/M](http://www.mishawaka.k12.in.us/documents/HA%20docs/EDPS%20540%20articles/Module%201%20-%202%20(January%2026)/Renzulli.pdf)odule%201%20-%202%20(January%2026)/Renzulli.pdf, 13.07.11 tarihinde erişilmiştir.
- Hansen J. B. ve Feldhusen J. F. (1994). Comparison of trained and untrained teachers of gifted students. *Gifted Child Quarterly, Vol. 38, No.3, Summer*.
- Karasar, N. (2005). *Bilimsel Araştırma Yöntemi*. (14. Baskı).Nobel Yayın Dağıtım, Ankara.
- Rash, P. K. And Miller, A. D. (2000). A survey of practices of teachers of the gifted. *Roeper Review, Vol. 22, Issue 3*.
- MEB, (2010). *Bilim ve Sanat Merkezleri Süreçleri (Üstün Yetenekli Bireylerin Eğitimi) İç Denetim Raporu*. T.C. Milli Eğitim Bakanlığı iç Denetim Birimi Başkanlığı
- Mills, C. J. (2003). Characteristics of effective teachers of gifted students: teacher background and personality styles of students. *Gifted Child Quarterly, Vol. 47, No. 4, Fall*.
- Moore, E. J. (2009). *Teacher perceptions of academic giftedness in elementary classrooms: A study of metaphors*. Ed.D., United States – Ohio, <http://search.proquest.com/docview/304863092?accountid=11054>, 30.08.11 tarihinde erişilmiştir.
- Nugent, S.A. and Shaunessy,E. (2003). Using film in teacher training: viewing the gifted through different lenses. *Roeper Review, Vol. 25*.

Process Model Of Intercultural Competence: A Self-Regulated Learning Perspective

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Abstract

To respect diversity, fostering intercultural competence among students is an important goal of public education, including universities worldwide. As valid assessments are lacking, the aim of the present paper is to introduce a new learning model of intercultural competence and to empirically test the theoretical structure of the model. In the Process Model of Intercultural Competence (PICO-Model), intercultural competence is conceptualized as a lifelong self-regulated learning task in intercultural situations. For this model, theories on intercultural competence were combined with theories on self-regulated learning. In the present study, 236 university students were assessed by the newly developed questionnaire. Analyses with MPlus validated the factor structure of the questionnaire and demonstrated the usefulness of the PICO-model and questionnaire for university students.

Keywords: *Self-regulated learning, intercultural competence, learning model, intercultural social work, university students*

Introduction

Fostering intercultural competence among students is an important goal of many degree programs offered at universities worldwide. Assuming that the development of intercultural competence is a lifelong self-regulated learning task, it is important to better understand the learning process of students in intercultural situations. To model the learning process in intercultural situations, theories on self-regulated learning were innovatively combined with state-of-the-art scholarly knowledge on intercultural competence development. The aim of the present paper is (1) to introduce a new learning model of intercultural competence and (2) to empirically test the theoretical structure of the model. Based on the new theoretical model, we developed a self-report questionnaire to measure the relevant determinants.

Models Of Self-Regulated Learning

Theories on self-regulated learning (Pintrich, 2003; Zimmerman, 2000a) conceptualize learning as an active and adaptive process of learners to reach their goals. In the model of self-regulated learning developed by Zimmerman (2000a), the learning action of a learner consist of three phases, each comprising necessary motivational and volitional constructs (see figure 1). In the first phase (= forethought phase), a learning action is initiated and planned. Based on the expectancy-value theory of motivation (Wigfield & Eccles, 2000), learners start to learn if they believe that they can be successful in performing a task (= expectancy component) and if they consider the task to be important (= value component).

In the performance phase, the execution of the learning action takes place. Thus, learning only remains attractive for learners when they also know HOW to learn successfully (Weinstein & Hume, 1998). To control and regulate their learning, learners need to use various cognitive and metacognitive strategies (Pintrich, 1999). Finally, in the self-reflection phase, a functional assessment of the learning action happens, so that continued learning remains attractive in the future. Only persons who attribute success to their own merit and see failure as something that can be coped with and controlled will be able to maintain their appreciation for and expectation of success in the context of learning. Therefore, it is desirable that learners have a reference norm conducive to motivation, a functional style of attribution and strategies for how to deal with performance feedback (Weiner, 2005).

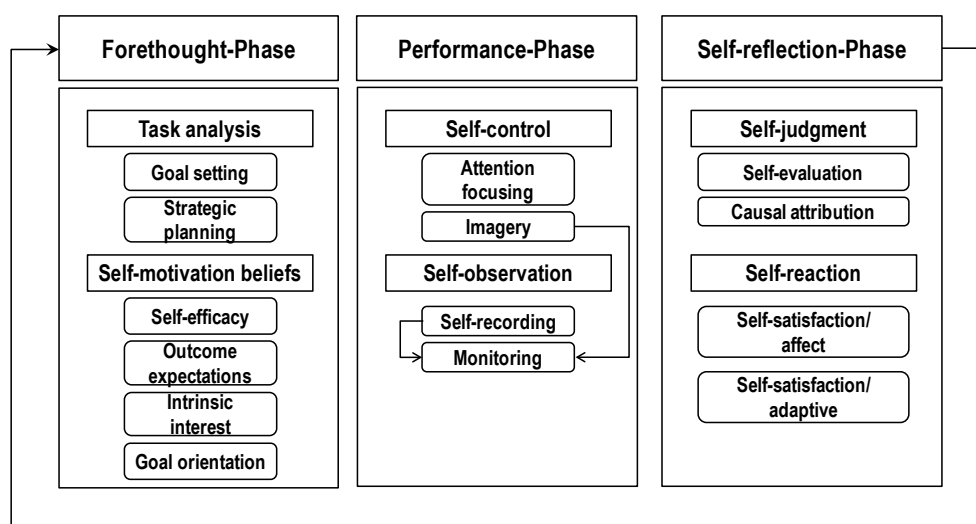


Figure 1. Model of Self-Regulated Learning (Zimmerman, 2000a)

Models Of Intercultural Competence

Acknowledging that social groups of any size can have their distinct cultures and that every individual belongs simultaneously to many different social groups, Barrett (2013) suggests applying an intergroup perspective to the concept of intercultural competence. According to the intergroup perspective, the context or the situation defines the importance of particular cultural affiliations. When cultural signs are salient and prompt individuals to shift their frame of reference, every situation can change from an interpersonal to an intercultural one.

In an intercultural situation, a huge number of key factors are considered as relevant for the development of intercultural competence. Common aspects of component models are three competence domains, namely (1) the knowledge domain, (2) the attitude domain, and (3) the communication domain. The knowledge domain includes aspects as knowledge about other cultures and subjects of own culture, knowledge about cultural similarities and differences, self-reflection, and personal development. The attitude domain includes aspects as empathy, openness, acceptance of inconsistencies, respect towards one's own and other cultures, and frustration tolerance. The communication domain contains aspects as communication skills, mediation skills, active engagement, and behavioural options (cp. Bolten, 2006; Erll & Gymnich, 2010; Spitzberg & Changnon, 2009; Ting-Toomey & Kurogi, 1998).

Although these models offer a useful structure to identify a multitude of personal characteristics, which are potentially necessary in an intercultural situation, they have also many shortcomings. The rather static view on "trait-like" personal characteristics of such models neglecting the dynamic, constructivist and developmental perspective of intercultural competence is a critical point (Hammer, 2015). Moreover, the lack of empirical validation of interconnections and causal pathways between the sets of cognitions, affects and behaviors suggested in the compositional models is problematic (cp. Barrett, 2013; Spitzberg & Changnon, 2009). Although there is a large number of measures available (Fantini, 2009), a review of available tests to assess intercultural competence (Matsumoto & Hwang, 2013) identified only three instruments which provided satisfying evidence regarding their underlying theoretical factors. Thus, there is still a need to develop theoretically sound measurements of intercultural competence.

To measure intercultural competence, we argue that it is important to shift the paradigm to the development of intercultural learning competence instead of conceptualizing intercultural competence as a trait-like personal characteristic. Such a paradigm shift offers several theoretical advantages. Most importantly, it implies that intercultural competence development is a life-long learning process (Deardorff, 2015). Consequently, any intercultural situation potentially offers new learning opportunities. Such a theoretical perspective also acknowledges that intercultural learning is a cyclical process, because learning actions follow each other as they are initiated, monitored and evaluated (for a similar approach see also Holmes & O'Neill, 2012).

Process Model Of Intercultural Competence

The Process Model of Intercultural Competence (PICO-Model) is an innovative combination of self-regulated learning theories and theories of intercultural competence, which acknowledges that intercultural competence is a cyclical learning process. Based on the model of self-regulated learning by Zimmerman (2000a), the development of intercultural competence in the PICO-model consist of three phases, the forethought phase, the performance phase, and the self-reflection phase.

In the *forethought phase*, learners (1) need to set their goals. Borrowing ideas from the composite models of intercultural competence (cp. Ting-Toomey & Kurogi, 1998), learners might want to improve their knowledge, attitudes or communication skills in an intercultural situation. For instance, they might wish to improve their knowledge regarding a particular country, their cultural perspective taking, or their ability to communicate. Thus, we theorize that from the perspective of the self-regulated learner the competence domains defined in the composite models of intercultural competence reflect potential learning goals in particular intercultural situations. The more learners aim to achieve particular goals during particular intercultural situations, the more their intercultural competence will develop over time.

Furthermore, learners will initiate a learning process in intercultural situations if they (1) believe that they can master the demands and they can influence things to their advantage, and if they understand their progress as evidence for their success. That means the learners need to have flexible implicit theories of learning, and a high intercultural self-efficacy and confidence in their own abilities (cp. Zimmerman, 2000b). Additionally, they need to be (2) interested in intercultural topics and their goal orientation should center on their personal development, that means high interest and a distinct goal of competence expansion (cp. Ames, 1990).

During the *performance phase* learners will (1) imagine their steps and instruct themselves how to proceed, (2) they are aware of and are able to manage their (negative) feelings, and (3) they show persistency especially when the situation turns out to be challenging. Learners (4) monitor and (5) record their behaviors, and (6) they try different strategies to find the most effective one. The PICO-Model assumes that the intercultural competence will improve over time depending on the frequency and quality of learners' strategy use during intercultural situations. During the *self-reflection-phase* competent learners will (1) evaluate their performance. After acting during an intercultural situation, it is helpful when the learners compare their performance with their initial goals. In both successes and failures, competent learners will ask themselves whether they put appropriate effort into the situation. When confronted with a failure, competent learners will analyze the situation to be able to identify aspects, which can be improved in future intercultural situations. Competent learners generally have a low level of feelings of helplessness but have plenty of ideas for adaptive reactions. The self-reflection-phase is also important for future performances. This is because the PICO-Model describes a cyclical learning process in which each reflection phase ultimately leads to the next *forethought phase* (cp. Strohmeier, Grading, & Wagner, 2017).

Empirical Study

The empirical study aims to test the theoretical structure of the model. In this study, we especially focus on the first phase of the self-regulated learning process, the *forethought phase* (see figure 2). We argue that the *forethought phase* is the most important learning phase because this phase comprises motivational beliefs necessary to initiate and plan an intercultural interaction. Heckhausen (1991) compared the *forethought* with "Caesar's step across the rubicon", that means, in this phase, the learners make the decision to start with the action phase of learning or not.

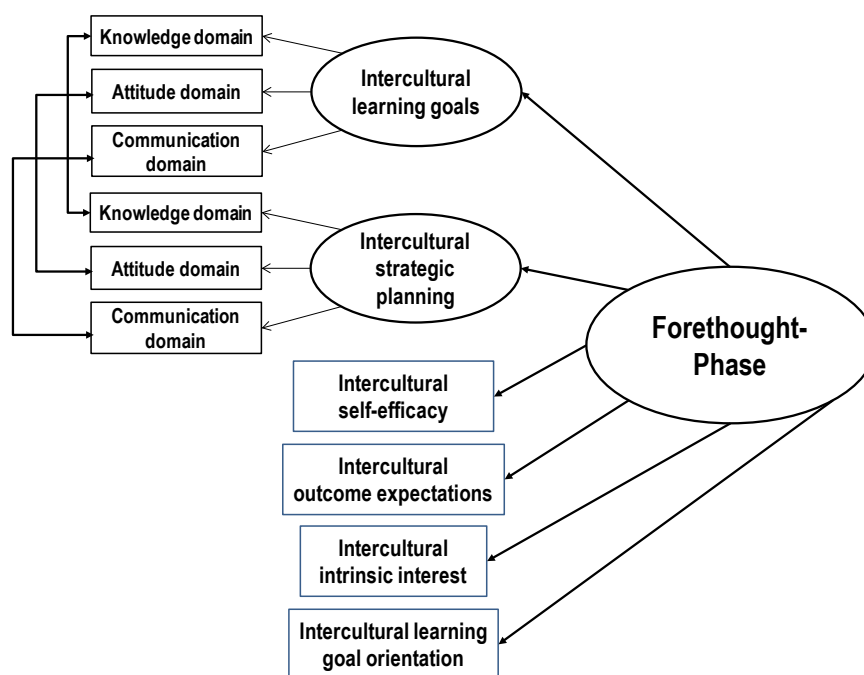


Figure 2. Process Model of Intercultural Competencies (PICO-Model) – Forethought Phase

Method

Participants

At the beginning of the academic year in 2012, all students ($n=262$) enrolled in either the bachelor or the master program of Social Work at the University of Applied Sciences Upper Austria were invited to participate in the study. Data collection took place during regular lessons at the University of Applied Sciences in the following week. The participation rate was very high (90%) and the final sample comprised 236 students; 169 students were enrolled in the bachelor program, and 67 students were enrolled in the master program. There were 188 women and 48 men aged 18 to 47 years ($M=26.41$, $SD=6.19$).

Measures

A self-report questionnaire was developed to measure the psychological constructs relevant in the forethought phase. Several items were newly developed or if available they were adapted from existing instruments. The whole questionnaire including all items can be found in the Appendix. A definition of intercultural competence was provided before participants were asked to answer the items: *Below we ask you some questions regarding your intercultural competence. Please think how you perceive yourself right now. The term "intercultural competence" can have different meanings for different people. In order to make it easier for you to answer the questions below, we provide you with a definition. Intercultural competence means that one's own knowledge, feelings and actions are focused to act appropriately in intercultural situations.*

We omitted the term "effectively" in this definition because being effective is something very ambivalent in social work. Social workers usually intervene in rather challenging situations where acting appropriately rather than acting effectively is usually considered more important. The answer options for all items were a six point scale ranging between 0 "I fully disagree", 1 "I disagree", 2 "I rather disagree", 3 "I rather agree", 4 "I agree", and 5 "I fully agree".

Intercultural goal setting. We hypothesized that learners set priorities in three different domains before acting in intercultural situations (Bolten, 2006; Erll & Gymnich, 2010; Ting-Toomey & Kurogi, 1998).

Knowledge domain. Based on the composite models of intercultural competence, seven new items were developed (see table 1), e.g. "To improve my intercultural competence, I set myself the goal to acquire a broad cultural and country-specific knowledge."

Attitude domain. Based on the composite models of intercultural competence, five new items were developed (see table 1), e.g. "To improve my intercultural competence, I set myself the goal to improve my ability to better understand others' feelings."

Communication domain. Based on the composite models of intercultural competence, four new items were developed (see table 1), e.g. "To improve my intercultural competence, I set myself the goal to improve my conflict resolution strategies."

Intercultural strategic planning. We hypothesized that learners strategically plan their intercultural learning in three different domains. Participants were asked the following question before they were presented with the items in the three domains: "Which procedures do you plan in order to improve your intercultural competence?"

Knowledge domain. Based on the composite models of intercultural competence, seven new items were developed (see table 1), e.g., "I plan strategically, how I can acquire a broad cultural – and country-specific knowledge."

Attitude domain. Based on the composite models of intercultural competence, five new items were developed (see table 1), e.g. "I plan strategically, how I can improve my ability to better understand others' feelings."

Communication domain. Based on the composite models of intercultural competence, four new items were developed (see table 1), e.g., "I plan strategically, how I can improve my conflict resolution strategies."

Intercultural self-efficacy describes the motivational believe in one's ability to reach intercultural goals, to continue an action and to put in some effort even if the circumstances are very challenging. Learners who have high levels of intercultural self-efficacy believe in their future successes and keep on trying even if they experience some drawbacks in intercultural situations. By modifying existing items (cp. Jerusalem & Satow, 1999), four items were newly developed (see table 1), e.g., "I can act interculturally competent even in difficult situations, if I make an effort."

Intercultural outcome expectations refer to belief that intercultural achievement is a changeable construct and one can improve his intercultural skills. Therefore four existing items (cp. Dweck, 1999; Schober, 2002) were adapted (see table 1), e.g., "It is not determined how interculturally competent I am; I can learn step by step and constantly improve myself."

Intercultural intrinsic interest is characterized by an unconditional and essential interest in the intercultural topic. Learners who have a high level of intercultural intrinsic interest think that developing their intercultural competence is an end in itself. By modifying existing items (cp. Schmitz, Perels, Bruder & Otto, 2003; Schiefele, Krapp, Wild & Winteler, 1993), four items were newly developed (see table 1), e.g., "My major goal is to improve my intercultural competence."

Intercultural learning goal orientation. Previous findings have consistently shown that learning goal orientation supports the self-regulatory process significantly better than an outcome goal orientation (cp. Dweck, 1999; Zimmerman, 2000a). We measured the intercultural learning goal orientation by three adapted items (cp. Dweck, 1999; Schober, 2002; see table 1), e.g., "My major goal is to improve my intercultural competence."

Data Analytical Strategy

All data analyses were carried out using Mplus 7. We computed measurement models (CFA's) to evaluate the construct validity of all constructs (Table 2), and a structural model on the factorial structure of the forethought phase (Figure 2). To evaluate the model fit three criteria were used: the chi-square test, the Comparative Fit Index (CFI; Bentler, 1990), and the root mean squared error of approximation (RMSEA; Steiger, 1990). Non-significant chi-square values indicate good model fit. However, because chi-square is known to be sensitive to sample size, CFI and RMSEA indices of fit were also important to examine. CFI ranges from 0 to 1.00 with values above 0.95 indicating good, values above 0.90 indicating adequate fit. RMSEA ranges from 0 to ∞ , with values below 0.05 indicating good, values below 0.08 indicating adequate fit. Maximum likelihood estimation using the MLR estimator of Mplus was implemented providing standard errors and test statistics that are robust to non-normality of the data and to non-independence of observations.

Results

Measurement Models

To establish the factor structure of all constructs, confirmatory factor analyses (CFA) were applied separately for each construct. As shown in table 1, all constructs showed satisfying construct validity (all CFA's > 0.90). Although the RMSEA's of two scales (outcome expectations, intrinsic interest) were higher than 0.08, no item was dropped for the subsequent analyses.

Table 1. Summary of the Confirmatory Factor Analyses

Variables	Items	α	Chi ²	df	p	CFI	RMSEA	SRMR
Forethought-Phase								
Intercultural learning goals – Knowledge domain	7	.72	24.38	11	.01	0.957	0.072	0.040
Intercultural learning goals – Attitude domain	5	.83	6.10	4	.19	0.995	0.047	0.020
Intercultural learning goals – Communication domain	4	.46	0.03	1	.88	1.000	0.000	0.002
Intercultural strategic planning – Knowledge domain	7	.80	17.96	11	.08	0.986	0.052	0.030
Intercultural strategic planning – Attitude domain	5	.87	7.37	4	.12	0.994	0.060	0.015
Intercultural strategic planning – Communication domain	4	.66	2.40	1	.12	0.991	0.077	0.020
Intercultural self-efficacy	4	.81	2.34	1	.13	0.996	0.075	0.011
Intercultural outcome expectations	4	.71	11.24	2	<.001	0.951	0.140	0.037
Intercultural intrinsic interest	4	.84	7.22	1	<.001	0.984	0.162	0.018
Intercultural learning goal orientation	3	.64	0.00	0	<.001	1.000	0.000	0.000

Structural Models

To construct the structural models, parcels (=scale means) were used. The means, standard deviations and bivariate correlations of all manifest variables are presented in table 2. Parcels are preferred for the consecutive analyses because, compared with items, parcels have superior psychometric quality that reduce both Type I and Type II sources of error but do not bias or otherwise inflate construct relations (for details see Little, 1997).

Table 2. Means, Standard Deviations, and Bivariate Correlations between the Study Variables

Constructs	M (SD) n=236	1	2	3	4	5	6	7	8	9
Intercultural learning goals – Knowledge domain (1)	3.84 (0.61)	-								
Intercultural learning goals – Attitude domain (2)	4.09 (0.71)	.48	-							
Intercultural learning goals – Communication domain (3)	3.67 (0.65)	.38	.42	-						
Intercultural strategic planning – Knowledge domain (4)	3.74 (0.72)	.71	.49	.33	-					
Intercultural strategic planning – Attitude domain (5)	3.98 (0.80)	.37	.78	.43	.57	-				
Intercultural strategic planning – Communication domain (6)	3.66 (0.76)	.32	.45	.77	.39	.54	-			
Intercultural self-efficacy (7)	3.45 (0.70)	.24	.12 ^{ns}	.20	.17	.08 ^{ns}	.20	-		
Intercultural outcome expectations (8)	4.38 (0.58)	.13 ^{ns}	.21	.13 ^{ns}	.13 ^{ns}	.13 ^{ns}	.13 ^{ns}	.05 ^{ns}	-	
Intercultural intrinsic interest (9)	3.89 (0.88)	.47	.44	.30	.45	.40	.30	.24	.37	-
Intercultural learning goal orientation (10)	3.70 (0.72)	.50	.47	.32	.52	.47	.30	.16	.23	.55

Note. All items range between 0 and 5. All bivariate correlations were statistically significant at $p < .01$ level, except the ones marked with ^{ns}.

In line with the theoretical model presented in figure 2, the *forethought phase* was constructed. The model consisted of two latent factors and four manifest factors and showed an excellent fit, $\chi^2(31) = 67.79$, $p < .01$, $CFI = .952$, $RMSEA = .072$. The three indicators of the two latent factors (goal setting & strategic planning) were allowed to correlate, because the items capture the same three intercultural domains and therefore their content domains are identical (see figure 3).

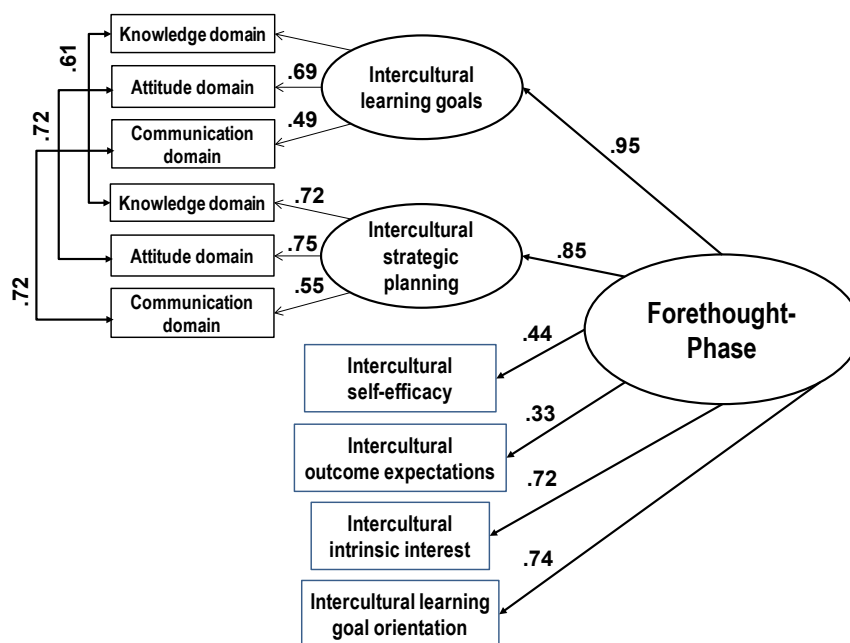


Figure 3. SEM Model: Empirical Structure of the Forethought-Phase (standardized estimates)

Discussion

Due to increased migration and mobility, intercultural competence has been becoming a key competence for many professions. To better understand the learning process of students in intercultural situations we developed a Process Model of Intercultural Competence (PICO-Model). Although many theoretical models of intercultural competence have been developed (cp. Spitzberg & Chanon, 2009), we are not aware of a model that conceptualized intercultural competence development from the perspective of self-regulated learning. Applying the self-regulated learning model by Zimmerman (2000a) a cyclical intercultural learning process was proposed. In this study, we investigated the first phase of the self-regulated learning process, the forethought phase. We hypothesized that an intercultural learning process is initiated when learners set themselves intercultural learning goals and plan their intercultural learning in three different domains (knowledge domain, attitude domain, communication domain) before acting in intercultural situations, when their intercultural self-efficacy, intercultural intrinsic interest, and, learning goal orientation are high and when they think that they can improve their intercultural skills (positive outcome expectations). To test these hypotheses we applied confirmatory factor analyses (CFA) separately for each construct. Based on cross-sectional data, the theoretical structure of the forethought phase was empirically validated.

Although all items were constructed relying on validated instruments and the structural validity of the new measures was rigorously tested, it should be kept in mind that self-assessments are only one possibility to investigate intercultural learning processes. Future studies could also collect data via learning diaries which could be completed before, during and after a series of specific real life intercultural situations. Alternatively, experimentally manipulated hypothetical vignettes could be applied. Both methods could be used to investigate the validity of the intercultural learning process across different intercultural situations and to examine the cyclical nature of self-regulated learning longitudinally. Moreover, replication studies with different target groups in other sub-cultures or other countries are recommended to rule out a possible ethnocentric bias inherent in the model.

References

- Ames, C. (1990). Motivation. What teachers need to know. *Teacher College Records*, 91, 409-421.
- Barrett, M. (2013). Intercultural competence: A distinctive hallmark of interculturalism? In M. Barrett (Ed.), *Interculturalism and multiculturalism: Similarities and differences* (pp. 147-168). Strasbourg: Council of Europe Publishing.
- Bentler, P. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238-246.

- Bolten, (2006). Interkultureller Trainingsbedarf aus der Perspektive der Problemerkahrungen entsandter Führungskräfte [Need of intercultural trainings from the perspectives of manager's abroad with problem experiences]. In K. Götz (Ed.), *Interkulturelles Lernen, interkulturelles Training [Intercultural learning, intercultural training]* (pp. 57-75). München: Hampp.
- Deardorff, D. K. (2015). Intercultural competence: Mapping the future research agenda. *International Journal of Intercultural Relations*, 48, 3-5.
- Dweck, C. S. (1999). *Self-Theories: Their Role in Motivation, Personality, and Development*. Philadelphia: Taylor & Francis.
- Fantini, A.E. (2009). Assessing intercultural competence: Issues and tools. *The sage handbook of intercultural competence* (pp.456-476). Thousand Oaks, CA: Sage.
- Erll, A. & Gymnich, M. (2010). *Interkulturelle Kompetenzen – Erfolgreich kommunizieren zwischen den Kulturen [Intercultural competencies – Successful communication between cultures]*. Stuttgart: Klett Lerntraining.
- Hammer, M. R. (2015). The developmental paradigm for intercultural competence research. *International Journal of Intercultural Relations*, 48, 12-13.
- Heckhausen, H. (1991). *Motivation and action*. Berlin: Springer.
- Holmes, P., & O'Neill, G. (2012). Developing and evaluating intercultural competence: Ethnographies of intercultural encounters. *International Journal of Intercultural Relations*, 36, 707-718.
- Jerusalem, M. & Satow, L. (1999). Schulbezogene Selbstwirksamkeitserwartung [Self-efficacy expectations at school]. In R. Schwarzer & M. Jerusalem (Eds.), *Skalen zur Erfassung von Lehrer- und Schülermerkmalen [Scales for measuring teacher's and student's characteristics]* (p. 15). Berlin: FU.
- Matsumoto, D., & Hwang, H. C. (2013). Assessing Cross-Cultural Competence: A review of available tests. *Journal of Cross-Cultural Psychology* 44, 849-873.
- Little, T. (1997). Mean and Covariance Structures (MACS) Analyses of Cross-Cultural-Data: Practical and theoretical issues. *Multivariate Behavioural Research*, 32, 53-76.
- Pintrich, P.R. (1999). The role of motivation in promoting and sustaining self-regulated learning. *International Educational Research*, 31, 459-470.
- Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology*, 95, 667-686.
- Schober, B. (2002). *Entwicklung und Evaluation des Münchner Motivationstrainings (MMT) [Development and evaluation of Munich motivation training]*. Regensburg: Roderer.
- Schiefele, U., Krapp, A., Wild, K.-P. & Winteler, A. (1993). Der „Fragebogen zum Studieninteresse“ (FSI) [The Fragebogen zum Studieninteresse (Study Interest Questionnaire)]. *Diagnostica*, 39, 335-351.
- Schmitz, B., Perels, F., Bruder, S. & Otto, B. (2003). *Fragebogen Selbstregulation. Unveröffentlichter Fragebogen [Questionnaire Selfregulation. Unpublished questionnaire]*. Darmstadt: TU Darmstadt.
- Spitzberg, B. H., & Changnon, G. (2009). Conceptualizing intercultural competence. In D. Deardorff (Ed.), *The sage handbook of intercultural competence* (pp.1-52). Thousand Oaks, CA: Sage.
- Steiger, J. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*, 25, 173-180.
- Strohmeier, D., Grading, P., & Wagner, P. (2017). Intercultural competence development among university students from a self-regulated learning perspective. *Journal of Psychology*, 225, 85-94.
- Ting-Toomey, S., & Kurogi, A. (1998). Facework competence in intercultural conflict: An updated face-negotiation theory. *International Journal of Intercultural Relations*, 11, 187-225.
- Weiner, B. (2005). Motivation from an Attribution Perspective and the Social Psychology of Perceived Competence. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of Competence and Motivation* (pp. 73-84). New York: Guilford Press.
- Weinstein, C. E., & Hume, L. M. (1998). *Study strategies for lifelong learning*. Washington, DC: American Psychological Association.
- Wigfield, A., & Eccles, J. S. (2000). Expectancy-Value Theory of Achievement Motivation. *Contemporary Educational Psychology*, 25, 68-81.
- Zimmerman, B. J. (2000a). Attaining self-regulation. A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13-39). London, UK: Academic Press.
- Zimmerman, B. J. (2000b). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, 25, 82-91.

Appendix

Intercultural learning goals – Knowledge domain

To improve my intercultural competence, I set myself the goal to ...

1. ...acquire a broad cultural- and country-specific knowledge
2. ...engage as intensively as possible with one particular culture

3. ...learn a new language
4. ...acquire knowledge about cultural differences
5. ...acquire knowledge about cultural similarities
6. ... become more aware of my attitudes towards my own culture
7. ...become more aware of my attitudes towards other cultures

Intercultural learning goals – Attitude domain

To improve my intercultural competence, I set myself the goal to ...

1. ...improve my ability to better understand others' feelings
2. ...increase my open-mindedness
3. ...deal better with inconsistencies
4. ...respect other people even more
5. ...not give in immediately in difficult intercultural situations

Intercultural learning goals – Communication domain

To improve my intercultural competence, I set myself the goal to ...

1. ...discuss the way I talk when difficulties in communication occur
2. ...address unpleasant topics indirectly, if it is appropriate in the situation
3. ...address unpleasant topics directly, if it is appropriate in the situation.
4. ...improve my conflict resolution strategies

Intercultural strategic planning – Knowledge domain

I plan strategically, how I can ...

1. ...acquire a broad cultural- and country-specific knowledge
2. ...engage as intensively as possible with one particular culture
3. ...learn a new language
4. ...acquire knowledge about cultural differences
5. ...acquire knowledge about cultural similarities
6. ... become more aware of my attitudes towards my own culture
7. ...become more aware of my attitudes towards other cultures

Intercultural strategic planning – Attitude domain

I plan strategically, how I can ...

1. ...improve my ability to better understand others' feelings
2. ...increase my open-mindedness
3. ...deal better with inconsistencies
4. ...respect other people even more
5. ...not give in immediately in difficult intercultural situations

Intercultural strategic planning – Communication domain

I plan strategically, how I can ...

1. ...discuss the way I talk when difficulties in communication occur
2. ...address unpleasant topics indirectly, if it is appropriate in the situation
3. ...address unpleasant topics directly, if it is appropriate in the situation.
4. ...improve my conflict resolution strategies

Intercultural self-efficacy

1. I can act interculturally competent also in difficult situations, if I make an effort.
2. It is easy for me to act interculturally competent in new situations.
3. Even when situations seem to be difficult at first sight, I still know that I can act interculturally competent, if I think through the situation properly.
4. I know that I can cope with challenges of an intercultural situation.

Intercultural outcome expectations

1. I am not very talented to act interculturally competent and I cannot really change that. (recoded)
2. Although I can learn new contents, I lack the talent to really understand how to act interculturally competent. (recoded)
3. It is not determined how interculturally competent I am; I can learn systematically and constantly improve myself.
4. I can improve my skills to act interculturally competent.

Intercultural intrinsic interest

1. It is important for me to act interculturally competent.

2. Intercultural competence is actually not important for me. (recoded)
3. Engagement with intercultural competence not one of my favourite activities. (recoded)
4. It is a pleasure for me to think and talk about how to act interculturally competent.

Intercultural learning goal orientation

1. My major goal is to improve my intercultural competence.
2. I feel to be successful when I get new ideas how to act interculturally competent in specific situations.
3. Regarding intercultural competence, my major goal is to learn many new things.

Professional Skills Development Of Rural Tourism Enterprises In The Baltic Sea Countries

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Abstract

Nowadays, tourism industry is significantly influenced by geopolitical processes. Due to the growing concerns of geopolitical instability, tourism flow to many so far very popular tourism destinations in Europe has significantly decreased. Changes in lifestyle also play an important role. There is an increasing demand for peaceful countryside idyll, bird watching, trying local specialties and participation in traditional arts and crafts workshops, which are just a few of activities that foreign guest wish to experience during their international travel tour, thus giving preference to visit the countries of Central Baltic Sea area – Latvia, Estonia and Finland – instead of many other attractive European travel destinations. Nevertheless, even as a region, the Central Baltic Sea countries are still quite unknown on the global tourism scale. Therefore, sustainable and well trained enterprise clusters with skills, knowledge and understanding how to enter new challenging markets such as Japan are required in the three Baltic Sea countries. Although the flow of Japanese tourists is annually increasing to Latvia, Estonia and Finland, specific knowledge and joint strategy to enhance cooperation with Japanese tourist agents are also necessary. Although rural tourism has a huge potential owing to specific natural and heritage culture potential in this region, most rural tourism enterprises here are small lifestyle farms and thus lack specific knowledge and market intelligence how to deal with cultural differences. In 2016, a new ambitious INTERREG Central Baltic project CAITO “Meta cluster for attracting Japanese tourism market” was commenced with active participation of the three countries of the Baltic Sea region. The overall objective of this project is to promote and support Latvian, Estonian and Finnish rural tourism enterprises to enhance cooperation with Japanese tourism market by strengthening capacity, mutual collaboration and tourism stakeholders’ coordination in the three Baltic Sea countries. The aim of the current research is to present the data obtained in scope of the project activities in particular focusing on marketing skills’ training. The specific research tasks are: 1) to characterize the attractiveness of the Baltic Sea region rural tourism product offered for Japanese tourists; 2) to analyse the needs of Japanese tourists in the Baltic Sea region countries and characterize the most typical market segments; 3) to identify current gaps in the public transport availability for Japanese travellers in rural areas of Latvia; 4) develop proposals for local entrepreneurs’ skills development to improve current rural tourism products and their marketing communication according to Japanese travellers’ expectations. The research employed monographic, desk study, statistical analysis, comparative analysis and in-depth interviews with rural entrepreneurs in Latvia.

Introduction

Asian tourism has been seen as a new potential growth market for Finland and the Baltic States for some time, and several national and regional tourism strategies count on this market. In previous years, Asian visitors have generally focused on the main tourist attractions and capital cities, but new products have attracted more interest in this market, in line with the worldwide trends in health, wellness and the natural environment. This creates new opportunities, especially for rural tourism, but not without its challenges. Rural tourism provision must meet Asian customers’ needs and demands, which may be sometimes problematic for the existing products. Therefore, to fully exploit this potential new market, companies often need to undertake development activities. This, in turn, assumes that businesses have knowledge of the behaviour of Asian tourists (Japanese tourists in..., 2016, p.5).

Today, the tourism industry in the Baltic Sea region contributes significantly to the economies of the countries in the region. However, the tourism industry in the Baltic Sea region, especially rural tourism that complies with sustainable development principles, needs a strong enhancement both on regional and European level addressing the opportunities and challenges of the industry. Politicians often underestimate the importance and impact of rural tourism on the overall economy and regional development of the countries. Target-oriented enhancement of rural tourism industry would help to eliminate regional disparities and create work places in remote rural areas, which is a particularly serious problem in Latvia and Estonia (Grinberga-Zalite et.al., 2017).

In 2016, a group of university scientists and representatives of rural tourism associations from Latvia, Estonia and Finland started INTERREG Central Baltic project CAITO “Meta cluster for attracting Japanese tourism market”. The project provides extensive cooperation in research and practical activities in Latvia, Estonia, southern part of Finland, and Japan. The overall objectives of the project are: to promote and support rural tourism companies to

enter Japanese tourism market by strengthening their capacity and cooperation in the three Baltic Sea countries. Specific objectives of the project are aimed at the following activities:

- 1) to explore the Japanese tourism market and the requirements for rural tourism in the Baltic Sea countries;
- 2) to develop a guide for rural tourism service providers about Japanese tourists' expectations and desires;
- 3) to organize training seminars for the rural tourism product providers about tourism product development opportunities aimed at Japanese tourism target market;
- 4) to promote rural tourism products for Japanese tourists in tourism fairs; elaborate and disseminate promotion materials and brochures; attract social media and bloggers, thus introducing Japanese tourism operators and media with rural tourism opportunities in Latvia, Estonia and Finland as well as developing a catalogue for tourism operators in Japan accordingly bringing together the proposed rural tourism products;
- 5) to organize decision makers' forums to identify existing problems that hinder, hamper and restrict Japanese tourists' wish to travel around Latvia, Estonia and Finland, as well as to find their solutions.

This will result in strengthened cooperation among the three countries' rural tourism enterprises, tour operators and travel agencies by reducing or preventing the potential risks and barriers to the Japanese tourists' visits, thus improving rural tourism products to attract larger number of tourists from Japan.

The project partners are Estonian University of Life Sciences (lead partner); Latvia University of Life Sciences and Technologies; Laurea University of Applied Sciences; University of Helsinki, Ruralia Institute; Latvian Country Tourism Association "Lauku celotajs"; Estonian Rural Tourism Association; Regional Tourism Association in Southern Finland "Visit South Coast Finland". The total budget of the project is 1 412 734.71 EUR, of which 85% is co-financed by the European Regional Development Fund.

The aim of the current research is to present the data obtained in the second phase of the project (2017-2018) revealing the latest trends regarding Japanese traveller attraction to the Baltic Sea countries and developing training programmes for rural tourism enterprises in the Baltic Sea Countries. The specific research tasks were: 1) to characterize the attractiveness of the Baltic Sea region rural tourism product offered for Japanese tourists; 2) to analyse the needs of Japanese tourists in the Baltic Sea region countries and characterize the most typical market segments; 3) to identify current gaps in the public transport availability for Japanese travellers in rural areas of Latvia; 4) develop proposals for local entrepreneurs' skills development to improve current rural tourism products and their marketing communication according to Japanese travellers' expectations. The current research is a continuation of the data analysis conducted within the initial phase of the project that is supplemented by the latest facts obtained within desk study, statistical analysis, comparative analysis and in-depth interviews with rural entrepreneurs in Latvia.

Increasing Interest Of Japanese Tourists In Rural Tourism And The Baltic Sea Countries

Compared to Central Europe and Western Europe, the Baltic Sea region is comparatively safer for tourism. Estonia, Latvia and Finland so far have not experienced natural disasters, war, strikes, or big events where people may act violently – these aspects are important. People are friendly but not pushy, which Japanese visitors appreciate. Shopping can be done without haggling, unlike in many Eastern countries. Availability of unspoiled nature landscapes, rich cultural heritage and high quality accommodation services and direct flights are highly important factors for Japanese tourists while taking decision of tourism destinations. Owing to direct flights from the largest Japanese cities to Helsinki provided by Finnair, there is an increasing trend of Japanese tourists arrival to all the three Baltic Sea Countries as due to long distances and high costs (travel to Europe costs ~4000EUR), 67% of Japanese tourists usually plan to visit more than just one country.

From marketing view point, travelling is satisfaction of hedonic needs and personal enrichment (self-actualization). The research data that were acquired by Latvian Country Association "Lauku celotajs" in 2016 from rural tourism guest houses and lifestyle farmers who had provided accommodation services for Japanese tourists give evidence that shopping and attending of crowded and polluted cities is not appealing for Japanese savvy tourists any more. Today they are rather looking for sophisticated personal enrichment activities, which are not shopping. Accordingly, popular tourism attractions offering very predictable and mainstream products many-to-many, which lately are losing their topicality compared to highly personalized and exclusive rural tourism niche products.

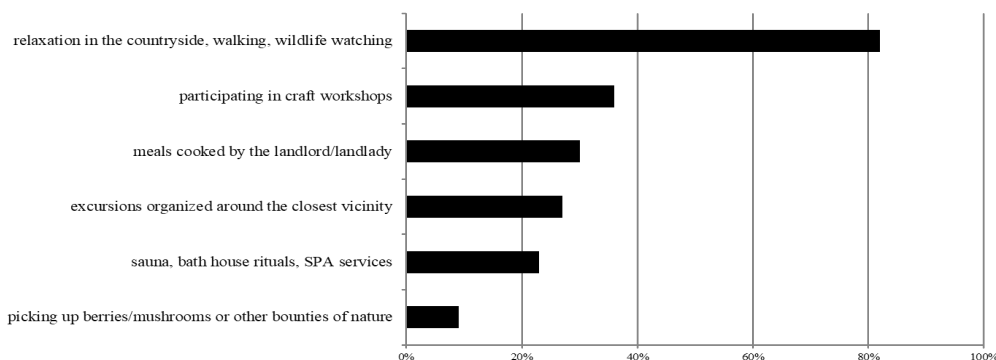


Fig. 1. **Most popular activities of Japanese tourists during rural tourism visits in Latvia, %**

Source: Latvian Country Association in-depth interviews with rural tourism service providers, n=34

Figure 1 reveals that peaceful countryside idyll, bird watching, trying local specialities and participation in traditional arts and crafts workshops are activities that foreign guests wish to experience, thus giving preference to visit the countries of Central Baltic Sea instead of many other attractive travel destinations. The analysis of aggregated data suggests that the most typical Japanese tourists' market segment in the Baltic Sea countries is senior couples (60+) who can be characterized as savvy seniors. For them, visiting the Baltic Sea countries is "must-see-in life" intention as they have already been almost in all most popular European tourism destinations, while the Baltics region only lately has become affordable destination for them owing to direct flights to Helsinki. Another important segment is males (40-50) who have business connections in the Baltics. Although business travel is their main priority, still politeness often requires from them to be informed of their business partners' country historical and cultural heritage. And finally, according to in-depth interviews with rural entrepreneurs in Latvia, the number of young Japanese women (20-30), so called "culture oriented girls" is also rapidly growing and is regarded as a very attractive market segment for rural tourism product. These female tourists are looking for sophisticated culture experience and interaction with unspoilt nature (organic, eco, raw etc.).

In authors' opinion, rural tourism has a wide variety of activities to offer for all the three market segments as all of them are both deliberately and unknowingly looking for "feel good" products, i.e. products that make the world a better place. Accordingly, collective intelligence (e.g. accumulating knowledge of collection and proper use of organic medicinal herbs), enhancing of animal welfare (responsible and caring animal husbandry), cultivation of environmentally friendly products, cooking technologies of healthy food as well as producing products that enhance society's integration (e.g. by employing blind people on the farm thus helping them to socialize and create something useful).

Rural Entrepreneurs' Professional Skills To Be Improved In Scope Of Marketing Mix Elements

According to marketing theory assumptions (Kotler & Keller, 2007; Simkova (2010)), there are eight marketing mix elements in tourism: product, price, place/distribution, promotion, people, packaging, programming and partnership, which all need to be well balanced and regularly updated in line with customers' needs. In the current research, the authors have analysed the gaps in Latvian rural tourism product within the above mentioned eight rural tourism marketing mix elements to identify areas for rural entrepreneurs' skills improvement, which will be integrated in specially tailored courses/seminars/guide-books developed in scope of CAITO project activities.

Place

To find out the viewpoints of foreign guests in the above mentioned countries regarding their experience of traveling by public transport, the partners of INTERREG Central Baltic Sea "CAITO – Meta cluster for attracting the Japanese tourism market" project group conducted structured interviews with a wide range of rural tourism stakeholders.

Tourists who have visited Latvia, Estonia and Finland admit that in the cities public transport system is good, various modes of public transport are optimally integrated to meet the needs of passengers. However, in remote rural areas the situation is not as optimistic – there is a need for more frequent trains/buses, and timetables of various modes of transport often are not integrated in a single system thus causing problems with travel planning. As tourists often wish to see as many sightseeing objects of one area as possible, it is highly important to have a well-planned route, which efficiently combines several modes of transport. Research results show that currently there are just a few internet sites available where travellers can obtain information about all transport services' providers, as each transport enterprise mainly provides information only about its own routes, thus travellers often have problems to combine routes of two or more different transport service providers. Moreover, buying tickets is another challenge as, unlike in most of cities, in rural areas traffic time-tables (directions, departure/arrival times) are available only in official language but not in English. A significant problem for travellers in Latvia is that, in

accordance with the Latvian State Language Law (Article 21 of the State Language Law), all information that is intended for the public and provided by state or local government institutions must be in Latvian only with a few exceptions (for example, information in international transport centres). In this respect, the authors conclude that currently it is very important to improve Latvian rural entrepreneurs' awareness of their duty to be ready to explain (in English language or in a pre-prepared written material) directions to Japanese tourists as well as convince them that without their assistance Japanese tourists can be exposed to serious risks (e.g. get lost, get a penalty for using public transport without appropriate ticket).

Product

Careful planning of a travel is highly important as paid vacation in Japan is only 10 days, thus all activities on the farm have to be precisely scheduled. The understanding of the most appropriate time for travelling for Japanese tourists is also necessary. Often Latvian rural entrepreneurs consider that Japanese tourists can be treated in the same way as other European tourists; however, it is not true. Unlike other European travellers, Japanese tourists are interested in travelling in autumn (September and October). Thus, this fact may extend the season, which is very important for Latvian rural enterprises. Moreover, most of all rural tourists from Japan value nature, landscape and the aurora borealis and they might also be modern humanists (experienced tourists) seeking experiences in exotic and unspoilt nature (forests, sauna, snow, walking on the ice) with local people.

Price

According to in-depth interviews, conducted in scope of the project activities, the average cost of European journey for a Japanese traveller consists of approximately 4000 EUR, which is expensive travel compared with other closer tourism destinations (Australia, South Korea), thus the high price must have appropriate justification (ability to visit several North Europe countries during the stay in Baltics, enjoy regional importance cultural events; ability to learn new specific methods of sustainable cooking, gardening etc.).

Promotion

The lack of Japanese web pages, Facebook pages and marketing material is a problem, especially in Latvia. This reduces visibility and awareness of rural tourism enterprises and travel packages. Moreover, for young generations Instagram is recommended. The authors' in-depth interviews with rural entrepreneurs revealed that lack of skills necessary for conducting digital marketing activities is one of most problematic aspects. Rural entrepreneurs are very interested to master these skills; however, digital marketing courses in Latvia currently are very demanded and thus too expensive for small life style farmers.

People

Rural tourism is definitely people-to people business. Therefore, interaction with customers is highly important and necessary. As many guest houses are run by lifestyle farmers who often are retired and thus are less motivated to improve their English language speaking skills to such extent as to be able to conduct practical workshops (e.g. cooking a traditional meal). Therefore, in scope of the project activities rural entrepreneurs should receive a special training material with most common conversation themes in English language, which could be easily mastered by everyone and used in everyday situations.

Packaging and partnership

These marketing mix elements, especially the element "partnership" are relatively new in marketing theory (Kotler & Keller, 2014); thus small local businesses are not fully aware of their necessity. Packaging tool can be understood as building of service packages, i.e. combining various products and services for which customers pay a total price so as to exactly match their wishes and requirements. A combination of related and complementary services forms a complex offer with which is very closely associated a content specification of programmes (programming) intended for various types of clients (different market segments). Creating service packages associated with specialized programmes is the most distinct tendency influencing the current development of tourism, including rural tourism (Pourova, 1999). If a customer buys rural tourism product package, it means that it is a set of several benefits – picking-up at the airport, shuttle services, reservation of a workshop activity, arrangement of an inter-city tour etc.). Therefore, rural entrepreneurs should be prepared to actively cooperate with other service providers, often their direct and indirect competitors, to provide the most appropriate and affordable in price set of activities to be offered for Japanese tourists. Very often small rural enterprises underestimate the benefits of being a member of a network (association, cluster, suppliers' organizations) as it initially seems as additional costs in the form of commission, membership etc. However, the new economy is a network economy (Rifkin, 2001), thus even members of such small sub-industries as rural tourism have to cooperate and look for opportunities how to build win-win relations with their direct and indirect competitors, suppliers and customer organizations. Consequently, partnership element is topical, too. In addition to the above said, rural tourism product is a "feel good product", which in the era of sustainable development is a product that can make the world a better place by promoting a healthy lifestyle, taking care of nature and animal welfare, cultivating healthy and locally grown food. However, in order to survive in the countryside, local businesses cannot implement same business strategies as large companies located in urban areas where businesses do not have seasonal character and

workforce availability is not a serious problem. Therefore, often partnerships with social entrepreneurs and NGOs can significantly support and enhance the success of the product offered by a small rural entrepreneur (Donovan & Henley, 2010). There are many good examples how rural entrepreneurs have become social entrepreneurs and built original and target oriented win-win partnerships with seniors' organizations, new mothers, disabled people etc., which consequently have added a unique social value to their product, thus making it much more attractive for customers who want to buy "feel-good" product instead of a mainstream commercial one giving only a short instant gratification.

Conclusions

The data obtained in Latvia, Estonia and Finland during the initial phase of the INTERREG Central Baltic project CAITO "Meta cluster for attracting Japanese tourism market" show that enhancing of cooperation among Finnish, Estonian and Latvian rural tourism agencies is of high importance in the interests of all the three Baltic Sea region countries both in terms of financial investments in rural tourism industry development and in information exchange. Enhancing of cooperation with Latvian Country Association and network of rural enterprises could enable Japanese tourists to enjoy even safer, more meaningful and diverse travel experience in the Baltics.

The next objectives of the CAITO project should be focused on conducting specially tailored training courses for rural tourism companies to better meet the needs of Japanese tourists. The most topical aspects that need to be integrated in these trainings are: digital marketing for small enterprises; English basics for hospitality industry; product development and market positioning for rural tourism enterprises as well as building networks within the industry. For this reason, project partners have to elaborate a special guide-book devoted to specifics of Japanese tourism market and recommendations for improvement of sustainable tourism products, which initially needs to be approved in each of the project countries to identify potential gaps in its content and afterwards should be prepared and distributed to rural entrepreneurs working with Japanese tourists in Latvia, Estonia and Finland.

Acknowledgements

The paper was elaborated in scope of the INTERREG Central Baltic project CAITO "Meta cluster for attracting Japanese tourism market".

References

- Donovan, R., Henley N. (2010). *Principles of social marketing*. (pp.44-68). An International perspective. New York: Cambridge University Press (p.320). TarcherPerigee.
- Grinberga-Zalite G., Vitolina, Z., Rivza, B. (2017). *Knowledge and skills transfer for sustainable rural tourism in the Baltic Sea countries*. (pp. 350-354). Turkish Online Journal of Educational Technology. - Special Issue for INTE 2017 (November 2017).
- Kotler, P., Keller, K.L. (2011). *Marketing management*. (p. 816p). Pearson, 14th edition.
- Latvian State Language Law* (1991). The Saeima of the Republic of Latvia. Available: http://www.minelres.lv/NationalLegislation/Latvia/Latvia_Language_English.htm, retrieved: 11.08.2018.
- Pourova, M. (1999). *Agritourism business in the Czech Republic*. (pp.25-28). Acta Universitatis Bohemiae Meridionales 2(3).
- Suvanto, H., Sudakova, L., Kattai, K., Grinberga-Zalite, G., Bulderberga, Z. (2017). *Japanese tourists in Finland, Estonia and Latvia – a Literature Review*. (p.45). Helsinki, University of Helsinki. Ruralia Institute; Reports 166).

Proje Uygulama Çalışması Dersine Ait Öz-Yeterlik Düzeylerinin Belirlenmesinde Bilimsel Araştırma Metotları Dersinin Rolü

Nurhan Doğan

Afyon Kocatepe Üniversitesi, Biyoistatistik ve Tıbbi Bilişim Anabilim Dalı Öğretim Üyesi

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Esin Erdinç

Afyon Kocatepe Üniversitesi 3.Sınıf Tıp Fakültesi Öğrencisi

Özet

Amaç

Afyon Kocatepe Üniversitesi Tıp Fakültesi öğrencilerinin Proje Uygulama Çalışması dersine ait öz-yeterlik düzeylerini belirlemek ve bu ders ile Bilimsel Araştırma Metotları dersine ait tutumları arasındaki ilişkiyi ortaya çıkarmak araştırmanın temel amaçlarını oluşturmaktadır. Ayrıca incelenen konu üzerinde etkili olabileceği düşünülen çeşitli etkenler ile öğrencilerin Proje Uygulama Çalışması dersine ait bakış açıları belirlenmeye çalışılmıştır.

Anahtar kelimeler: Öz-yeterlik, Bilimsel Araştırma Metotları, Yapısal Eşitlik Modellemesi

Gereç ve Yöntem

Araştırmanın toplumunu Afyon Kocatepe Üniversitesi Tıp Fakültesi 4., 5. ve 6. Sınıf öğrencileri, örneklemini ise 2017-2018 akademik yılı güz döneminde eğitim-öğretim görmekte olan, Proje Uygulama Çalışması dersini alan ve çalışmaya katılmak isteyen öğrenciler oluşturmaktadır. Öğrencilerin öz-yeterlik düzeylerini belirlemek amacıyla Bilimsel Araştırma Öz-yeterlik ölçeği ve Bilimsel Araştırma Metotları dersine yönelik tutum ölçeği kullanıldı. Verilerin değerlendirilmesinde ise Student-t testi, Mann-Whitney U testi ve Yapısal Eşitlik Modellemesi kullanıldı. İstatistiksel anlamlılık için $p < 0.05$ değeri kabul edildi. Verilerin değerlendirilmesinde SPSS (version 20) paket programı ve AMOS (21.0) kullanıldı.

Bulgular

Araştırmaya yaş ortalaması 22.63 ± 1.5 olan toplam 155 öğrenci (75 erkek, 80 kız) katıldı. Öğrencilerin %33.5'i bu derste en önemli amaçlarının bilimsel bir araştırma yapmak olduğunu ve %64.5'i ise Bilimsel Araştırma Metotları dersinin proje uygulama çalışması dersine faydalı olduğunu ifade etmişlerdir. Bilimsel Araştırma Metotları dersinin faydalı olduğunu düşünen öğrencilerin öz-yeterlik puanları diğer öğrencilere göre anlamlı derecede yüksektir ($p < 0.05$). Bilimsel Araştırma Metotları dersinin Proje Uygulama Çalışması dersine faydalı olduğunu düşünen öğrenciler; bilimsel araştırmanın önemi, bilişsel özgüveni (başarabilme gücü), olumlu tutumu (araştırmaya yönelik) ve günlük yaşantı - mesleki ilişki alt boyutlarına ait puanları diğer öğrencilere göre anlamlı derecede daha yüksektir ($p < 0.05$).

BAM ölçeği ile Öz-yeterlik ölçeği arasındaki test edilen Yapısal Eşitlik Modeli anlamlı bulunmuştur. BAM ölçeği öz-yeterlik ölçeğini yüksek düzeyde açıklamaktadır.

Sonuç

Bilimsel Araştırma Metotları dersine karşı ilgili olan, araştırmanın öneminin farkına varan ve olumlu bakan, bu dersi başarabilme gücü olan ve günlük yaşantısı ile ilişkilendiren öğrencilerin Proje Uygulama Çalışması dersine ait öz-yeterlikleri daha yüksek olduğu gözlenmiştir. Dolayısıyla, öğrencilere Bilimsel Araştırma Metotları dersinin önemini vurgulayarak bu derse olan ilgilerini artırarak bilimsel kültüre yönelik pozitif duruş sergileyen öğrencilerin yetiştirilebilmesine katkı sağlayacağı düşünülmektedir.

Promoting Active Learning Through Group Based Assessment Mixing Low And High Achievers In Group-Based Quizzes

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Abstract

The shift in the educational concepts from “teacher-centred education” to “student-centred education” led to the necessity of re-assessing teaching, learning and assessment strategies used in education. Active learning strategies are examples of the conceptual shift in education. Group based assessments are examples of active learning strategies that are believed to support this change in educational ideologies.

This study highlights the concept of active learning and group-based assessment through an experience of applying two different methods of group-based quizzes on fourth year students of architectural engineering program. The two methods are: quiz bowl, and sit group quiz. The study also tries to track the effect of the selected quiz methods on students’ academic progress through their performance in these group assessments as well as in the individual assessments. The output of this experience is compared to previous semesters in which only individual assessment strategies were applied. It is found that incorporating group based quizzes helps in boosting the academic progress of low achievers, and reducing the gap between low and high achievers.

Keywords: *Active learning; Learner-centered education; group-based quiz; quiz bowl; sit group quiz; low achievers; peer learning; student’s academic progress; Small Group Learning (SGL).*

Introduction

Context And Background

The change in educational concepts from a teacher-centred approach to a student-centred one has set the issue of class management as a continuous challenge facing teachers. Many studies have focused on this change in education and its effect on teaching, learning and assessment strategies as the corner stone in how the class is managed, and how the course is communicated to the students. The student-centred approach engages students in the education process and converts them from passive receivers of information set by the instructor into active learners. Many studies highlight the integration between teaching, learning and assessment (Gaudet et al., 2010; Simms and George, 2014; Carless, 2015). Gaudet et al. (2010) believe that Small Group Learning (SGL) may represent one of the most accessible methods for converting a classroom from a teacher-centred setting to an active learner-centred environment (p. 1). Mixed teaching approach, student’s involvement in education, peer learning, and group-based assessment are among many concepts that have been researched. Johnson et al. (1998) (as cited in Gaudet, et al., 2010, p. 8) compiled results from 305 studies on cooperative, competitive, and individualistic learning since 1924, and found that cooperative techniques were substantially better at promoting learning compared to the other two approaches.

This paper focuses on group-based quizzes as an example of group-based assessment strategies that are currently under research focus. The researcher tries to track the effect of such strategies on students’ academic progress. An experiment was conducted on third year students of architectural engineering during the course “introduction to project management” in one semester. The researcher designed two different types of group-based quizzes. The students were given one quiz before the midterm exam and the other one after the midterm exam. The students’ groups were a mixture of high and low achievers in order to make a balance between the groups on one hand, and to depict the mutual effect between them on the other hand. Students’ progress in previous semesters, in which only individual assessment strategies were applied, was analyzed as well in order to compare between the effect of both group-based and individual assessment strategies on students’ progress in general and low achievers progress in specific.

Motivation and Importance The significance of this research is motivated by the challenge of transforming teaching and learning process into an interactive process that enhances student’s active participation and involvement in the class. The researcher tried to apply some changes to the conventional assessment strategies in the course “introduction to project management” and to test the effect of such strategies on the students’ attitude and academic progress. It was easily noticed how the mood of the class has dramatically changed during the application of the new assessment strategies.

The importance of this study stems from the shift in the educational process from a teacher-centred approach to a student-centred approach. This shift is reflected on the concept of learning outcomes. In the past, learning outcomes of the academic programs and courses were limited to knowledge, understanding and subject specific skills. Nowadays, it is important to incorporate additional skills and competencies in the design of any course. General and transferable skills, such as practicing leadership and the ability to work effectively in a team are

examples of skills that should be developed and practiced in the design of any course. Applying group-based assessment is believed to reinforce such skills and competencies.

Academic progress of students in general and low achieving students in specific is another important issue related to this study. Many studies have focused on highlighting the problem of students with low GPA (low achievers) from different points of view (Mahenthiran and Rouse, 2000; Gaudet et al., 2010; Jabeen and Khan, 2013). Jabeen and Khan (2013) conducted a survey to compare between some attributes related to learning motivation in low and high achievers. They found that 'high achievers have high 'ego-ideal' (and) are self confident (and) competitive' while 'low achievers possess low ego-ideal, hardly bother to have a high position or status, (and) are not competitive' (p. 227). The experiment implemented in the current study demonstrates an attempt to merge low achieving students with high achieving ones in group-based assessment strategies, and to measure the effect on academic performance and progress of low-achievers.

Research Question

The paper attempts to discuss how group-based assessment can promote in-class active learning and academic progress of low achieving students in the course. An experiment is designed to test the effect of using two types of group-based quizzes (quiz bowl and sit group quiz) on the student's satisfaction and academic progress. In order to validate the experiment, the researcher analyzed students' academic progress in previous academic semesters in which only individual assessment strategies were applied.

Following are the two questions that the research tries to answer:

- Do group quizzes promote low achievers academic progress?
- Do group quizzes reduce the gap between low achievers and high achievers?

Research Objectives

The research aims at:

1. Highlighting the conceptual shift in higher education and its effect on collaborative and active learning.
2. Highlighting group-based quiz as an example of group-based assessment strategies.
3. Experimenting the effect of using group-based assessment on academic progress.
- 4.

Research Structure

The research is structured on six sections. The first section introduces the topic's context and background as well as the motivation behind conducting the research and its importance. The research question is also highlighted in this section. The second section underlines the shift in the educational concept from a teacher-centred approach to a student-centred approach, and its reflection on active and collaborative learning. The third section focuses on group-based assessment strategies, and their relationship with active and collaborative learning. The fourth section presents the experimental study of using group-based quizzes through highlighting experiment objectives, methodology, planning, implementation and results. The fifth section includes a discussion about the experiment results, limitations and implications. The sixth section contains the conclusion, recommendations and directions for further research.

Active And Collaborative Learning

This part of the study presents a theoretical background that covers some concepts related to the experimental study context with reflections on the conceptual shift of education from teacher-centred approach to student-centred approach. It underscores the definition, origin, features and benefits of two concepts related to education: active learning and collaborative learning.

Active Learning: A change in concept

Research indicates that the focus in the classroom should shift from the instructor to the student (Khalid and Nuhfer-Halten, 2012, p.1). Learning is an active endeavour that requires an effort and motivation from the learner in order to be able to understand, memorise, analyse, and synthesise what s/he received. Many studies have focused on active learning strategy (Meyers, 1993; Barr, 2011; Domenech et al., 2015; Khalid and Nuhfer-Halten, 2012; Hryciw and Dantas, 2016). Carefully designed assessments play a vital role in promoting active learning. Domenech et al. (2015) believe that 'it is of paramount importance to design assessment methods that properly motivate students to learn' (P. 154). In their study about active learning in polytechnic universities, Khalid and Nuhfer-Halten (2012) indicate that 'it is observed that tools like using props, making connections with past, and quiz bowl keep students interested and involved' (P. 1). Hryciw and Dantas (2016) found that 'scaffolded learning using active learning-lectures, small-group discussions and collaborative workshops, may enable students to develop their experimental design skills, but more importantly can be used to develop written scientific skills' (P. 1). Active learning is affected by the type of students' response to in-class assessment. Barr (2014) compared between using clickers and raising hand as a response method to questions answered during class. Statistical results

in her experiment demonstrate a significant difference both in participation and in comprehension with the different response methods (P. 317)

Active learning 'derives from two basic assumptions: (1) that learning is by nature an active endeavour and (2) that different people learn in different ways' (Meyers, 1993). Barr (2014) states that 'participation in the classroom has been shown to have a positive impact on cognitive, meta-cognitive, and affective learning' (P. 309). Group-based learning reinforces active learning because each student in the group will gain an experience from the learning styles of his/her peers. This experience helps in motivating students in a sense that each one will try to acquire a certain role in the process. Motivation of each individual in a group will not be the same by default. This is because interpersonal skills differ from one student to another.

Collaborative Learning: A Conceptual Shift

Collaborative Learning, sometimes called "cooperative learning", is a "mature concept with a solid research base accumulated over several decades". Cooperative learning is defined as 'students' collaboration to maximise their own and each other's learning, which is characterised primarily by group interdependence and individual accountability' (Dudley *et al.*, 1997; Johnson *et al.*, 1993 as cited in Mahenthiran and Rouse, 2000, p. 255). Studies have found out that in order for Cooperative learning strategies to lead to significant results, two components should be taken into consideration. The first component is promoting interdependence within groups, whereas the second component is holding students individually accountable for demonstrating their understanding of the material (Walters, 2000, p. 1). Yokomoto & Ware (n.d.) refer to two difficulties often reported by instructors when they use collaborative learning techniques in the class. The first difficulty is related to encouraging student acceptance of active learning, the second difficulty is to change the instructor's role from lecturer to facilitator. The instructor should design the scenario of collaborative learning in a way that demonstrates clearly the role of each student in the learning process. Moreover, assessment criteria associated with collaborative learning activities should combine assessing individual efforts, interpersonal skills and overall output of the group.

Walters (2000) believes that 'cooperative learning encourages social and interpersonal development as students learn how to work together and to appreciate diversity' (p. 3). Gaudet *et al.* (2010) state that Small Group Learning (SGL) can help in achieving effective teaching of science courses (p. 1). Through experimenting the effect of SGL, they found out that 'when students were given the opportunity to work on a quiz in pairs, the atmosphere in the classroom changed dramatically from solemn and serious to spirited and engaged' (p. 2). When asking students about the limitations of SGL, Gaudet *et al.* (2010) recorded minor issues related to coordinating schedules, managing time in class, disparate motivation and communication (p. 6). Kefale (2015) points to human and non-human constraints facing the implementation of cooperative learning. He refers to non-human factors such as class size, physical environment, shortage of instructional material and organisation of curriculum material (PP. 21-25). On the other hand, a meta-analysis, conducted by Springer *et al.* (1999), indicates that SGL improved academic achievement and reduced attrition in undergraduate science, math, engineering, and technology courses (as cited in Gaudet, *et al.*, 2010, p. 1). Discussion with peers can lead to the development of a new concept of understanding, so that students can answer conceptual questions better as individuals than they do prior to the group work (Smith (2009) as cited in Gaudet *et al.*, 2010, p. 8). A study conducted by Dohaney *et al.* (2012) tested the effect of collaborative learning on students learning gain. They found out that the learning gain of groups is systematically greater than the learning gain of individuals.

Group-Based Assessment: An Active Learning Strategy

Group-based quizzes are studied as an example of group-based assessment strategies, and then experimented in the next section of the study. In addition, this section highlights the concept of students' academic progress through the course, as one of the research objectives is to depict the effect of group-based assessment on students' academic progress in general and low-achieving students in specific.

Group-based Quizzes

Many experimental studies have been conducted to compare between collaborative group-based quizzes and individual quizzes. Giuliadori *et al.* (2009) examined the behaviour of both low performing and high performing students in group testing through physiology course. They tried to investigate whether students with individual correct answers change their answers when repeating the same experience in a group testing setting. Moreover, they tried to monitor the mutual effect between low and high performing (achieving) students. (p. 24)

Yokomoto & Ware (n.d.) highlight some benefits of the use of group-based quizzes in collaborative learning sitting. These benefits are, but not limited to, assisting in the development of course's instructional materials that can positively reflect on the learning process, training students to develop their learning skills, promoting active learning and interaction among students, and reducing students' anxiety with quizzes. Yokomoto & Ware (n.d.) advise instructors to include instructions that improve student's critical thinking and problem solving skills when designing a group-based quiz.

Yokomoto & Ware (n.d.) experience three variations related to the discussion time offered for students in case of group quizzes. The first variation is to allow students' discussion on certain principles related to the quiz topic before reading the quiz; the second variation is to allow students' discussion within 2 to 3 minutes after reading the quiz; the third variation is to allow students' discussion on certain principles related to the quiz topic before sitting for individual quizzes. Yokomoto & Ware (n.d.) conclude features of successful group quiz design. They clarify that it is important not to allow students to write anything during the discussion period in order to leave a space for students' brain storming process; it is advised that only one student from the group to write the solution whereas other members actively participate in the group; it is advised to adopt harder grading scheme that assures fairness in judging students' achievement and to prevent the group from just leaving the work to the best student; it is important to focus on basic principles of the subject rather than memorization; and finally students should be given any information that would be difficult to recall under the stress accompanying quizzes.

In their experiment on group-based quizzes, Gaudet *et al.* (2010) found out that course and quiz design seemed to encourage group discussion and debate about potential answers before writing down a single answer for the group. However, they recorded minor disadvantages as 'some students reported anxiety associated with the quizzes. Some students could not participate confidently in group discussions because they did not have time to read the quiz questions before a group member jumped in with an answer' (p. 2). These results imply that the instructor should prepare some instructions that regulate the quiz implementation in an organised way. In addition, he should present necessary basic information that may help students in their response to the quiz.

Quiz bowl is an example of group-based quizzes. Khalid and Nuhfer-Halten (2012) explain that quiz bowl is an 'enjoyable, educational technique that uses a game format derived from the TV show *College Bowl*, the quiz bowl questions are based entirely on one subject, typically the subject covered in the previous lecture'. They add that one of the distinctive features of quiz bowl method is that the instructor's role shifts to a facilitator. He "helps them relax, laugh at their own mistakes, and get caught up in the contagious spirit of the game" (p. 5)

Effect on Students' Academic Progress

Some studies have been conducted to measure the effect of group-based quizzes on students' academic progress through the course, which can be measured through student's marks in sit exams. Yokomoto & Ware (n.d.) found that both group quizzes and individual quizzes demonstrate correlation coefficients with semester exam averages that are significantly different from zero.

Mahenthiran and Rouse (2000) revealed that students can be grouped in a variety of ways such as by gender, grade point average (GPA), or majors. They noted that random grouping of students can lead to positive results if the group has a good attitude towards work. On the other hand, it may lead to negative results if the group has low ability (p. 257). They believe that teachers should intervene to balance the groups in a way that each group consists of high and low ability students (p. 259). The experiment conducted in the current study follows this model of mixed students' groups.

When Gaudet *et al.* (2010) tested the effect of experiment about group-based quizzes on high achieving students; they found that they benefited from the 'explanations provided by their peers in Small-group setting' (p. 6). On the other hand, it was found that low-achieving students developed 'a better conceptual understanding of material over the term' (p. 8). These findings imply that all students got benefited from the group-based quiz setting. The current study tries to depict that effect.

Experimental Study

This section of the study covers the experimental study that was conducted by the researcher in his class. The section starts with the experimental study objectives and methodology, and then moves to the planning and implementation of the experiment. Finally, the section concludes with results and implications of the experimental study.

Experimental Study Objectives

The experimental study aims at:

- i. Applying group-based quizzes as example of group-based assessment strategies used to test students' attainment of Course's Intended Learning Outcomes (CILOs).
- ii. Investigating the effect of applied group-based quizzes on low achievers' academic progress in the course throughout the semester.
- iii. Comparing between low achievers' progress throughout the semesters in which individual quizzes are applied and their progress throughout the semesters in which group-based quizzes were applied.
- iv. Measuring the gap between low achievers and high achievers throughout the semesters in both cases of applying individual quizzes and group-based quizzes,

Experimental Study Background and Methodology

The researcher has taught the course “Introduction to Project Management” over 11 semesters. The instructor used individual quizzes strategy in the first 9 semesters (79 students). However, he changed his strategy in the 10th and 11th semester (30 students) to group-based quizzes. The instructor used two types of group-based quizzes. The first type was the “quiz bowl” which was applied at the beginning of the second quarter in the semester before midterm exams. The second type was the “sit-group quiz” and it was applied at the beginning of the third quarter of the semester between midterm and final exams.

The experimental study methodology is based on four interlinked stages. The *first* stage is the planning stage, in which the group-based quizzes and their evaluation criteria were designed and the students groups were identified. The *second* stage is the implementation stage, in which students’ groups sat for the quizzes and their performance was graded over two semesters. The *third* stage is the analysis stage, in which students’ achievement in both group-based quizzes and individual-based assessment strategies were analyzed in order to come up with some findings. The *fourth* stage is the comparative analysis stage, in which students’ performance and progress rate in the two semesters where group-based quizzes were applied is compared to the results of the previous nine semesters in which no group quizzes were applied at all (only individual-based quizzes) in order to trace the effect on low achievers. The following section explains in detail the stages of the experimental study.

Experimental Study Planning

The experimental study was applied in the course “Introduction to Project Management” during 11 semesters (total of 109 students). Students were classified according to their academic abilities (achievement) into two categories: Low Achievers (LA) (Those students with Cumulative Grade Point Average (CGPA) less than 2.7 out of 4) and high achievers (HA) (Those students with CGPA between 3 and 4 out of 4). Students with CGPA between 2.7 and 3 (medium achievers) were excluded from the experiment.

The instructor decided to use group-based quizzes in the 10th and 11th semesters (30 students). The class in both semesters was divided into groups of 3 or 4 students. The distribution of students among groups was based on their CGPA in a way that assures the balance between averages of students’ CGPA in each group. Another important factor was to combine low achievers with high achievers in each group.

The instructor decided to apply two different types of group-based quizzes during the semester. The first type (quiz bowl) was conducted after passing the first quarter of the semester (before the midterm exam), whereas the second type (sit group quiz) was conducted after passing the third quarter of the semester (between the midterm and final exams).

Applying Quiz Bowl Method

The instructor prepared the first group-based quiz (quiz bowl) with some rules to facilitate the smooth running of the experiment. The quiz bowl was based on twenty questions. Questions were structured on finding the suitable technical term or expression that was missing in an argument. A desktop bell (buzzer) was given to each group. The maximum allowed time for answering each question was 30 seconds. After listening to each question from the instructor, the timer started and each group had to try to answer before the other groups. Accordingly, the group which knew the answer had to activate the buzzer “ring the bell” (in this case, the other groups had to stay silent). If the first group’s answer was correct, a mark was recorded, and the next question had to start. However, if the group’s answer was wrong, a 15 seconds chance was given to the other groups to guess the correct answer. If any of the other groups’ answer was correct, a mark was recorded, and the next question had to start. If the other group’s answer was wrong, the instructor stated the correct answer and moved to the next questions. In this case, no mark was recorded for any group. In all cases, only one answer trial was allowed for each group. Figure (1) shows the quiz bowl flow chart.

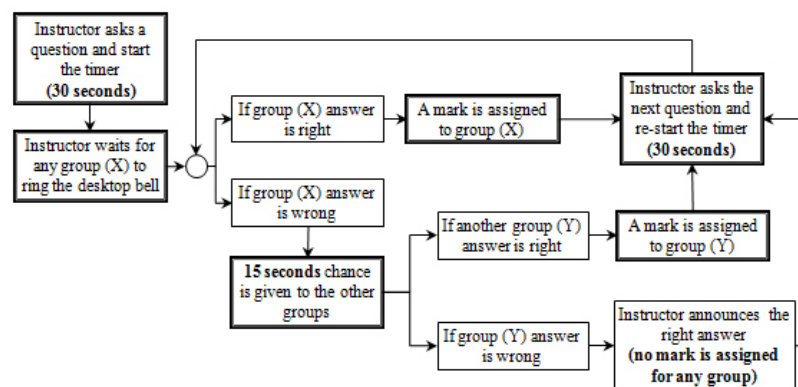


Fig. 1 Quiz bowl flow chart

Because of the time factor, which characterises quiz bowl method and differentiates it from individual sit quiz, a non-linear marking scheme was designed by the instructor. Table (1) demonstrates the difference between marking scheme of individual sit quiz and quiz bowl.

Table (1): Comparison between marking scheme of individual sit quiz and quiz bowl

Number of correct answers (out of 20)	Marking Scheme (out of 10)	
	Individual sit quiz	Quiz bowl
Zero	Zero	Zero
1 to 3	0.5 to 1.5	2.5
4 to 6	2.0 to 3.0	5.0
7 to 9	3.5 to 4.5	7.0
10 to 12	5.0 to 6.0	8.5
13 to 15	6.5 to 7.5	9.5
16 to 20	8.0 to 10.5	10

Applying Sit Group Quiz Method

The instructor prepared another type of group-based quizzes during the second half of the semester and after the midterm exam. The quiz was “group sit quiz”; it covered a further part of the course. The quiz consisted of 10 questions that should be answered in 5 minutes (30 seconds per question). The questions were printed and submitted for each group. The groups sit apart, each group’s members started to collaborate in answering the questions. The quiz was collected and marked (10 % of the mark is given for each correct answer). Figure (2) shows the sit group quiz flow chart

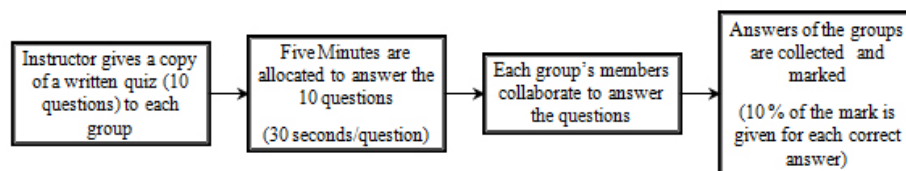


Fig. 2 Sit Group Quiz Flow Chart

Results of group-based quizzes semesters

The primary target of analyzing results of applying the previously mentioned group-based quizzes was to measure their effect on students’ performance and academic progress throughout the semester. The gap between low-achievers and high achievers was also investigated. The results of both group based quizzes and the two major exams (midterm exam and final exam) were analyzed in order to measure student’s academic progress in the course. Table (2) shows average of low achievers marks, high achievers marks and entire students’ marks in the four assessments. The table also illustrates the average of students’ marks in individual assessments (midterm and final exams) and the average of student’s marks in group-based assessments (quiz bowl and sit-group quiz). The academic progress curves and comparisons bar charts are generated from this table.

Table (2): Average of students’ marks in group-based quizzes and individual major exams

	Student's Marks (%)				Average of Individual Assessments Marks	Average of Group-Based Assessments Marks
	Quiz Bowl	Midterm exam	Sit-group Quiz	Final Exam		
Average marks of students (2 semesters-30 students)	72.33	86.97	76.50	76.30	81.63	74.42
Average marks of Low achievers (12 students)	69.58	81.63	74.17	70.90	76.26	71.88
Average marks of high achievers (18 students)	74.17	90.53	78.06	79.90	85.22	76.11
Average of students' progress (%)	72.33	79.65	78.60	78.03		
Average of low achievers progress (%)	69.58	75.61	75.13	74.07		
Average of high achievers progress (%)	74.17	82.35	80.92	80.67		

Figure (3) shows average marks of both low achievers and high achievers in the four assessment strategies. It also demonstrates the average performance of all students. The figure shows that:

- The class average lies between the low achievers average and the high achievers average in all the assessment strategies.

- The average performance of both low and high achievers in the sit group quiz is higher than their average performance in quiz bowl.
- The average performance of low achievers in the final exam (individual assessment) is lower than their average performance in the sit group quiz (group-based assessment).

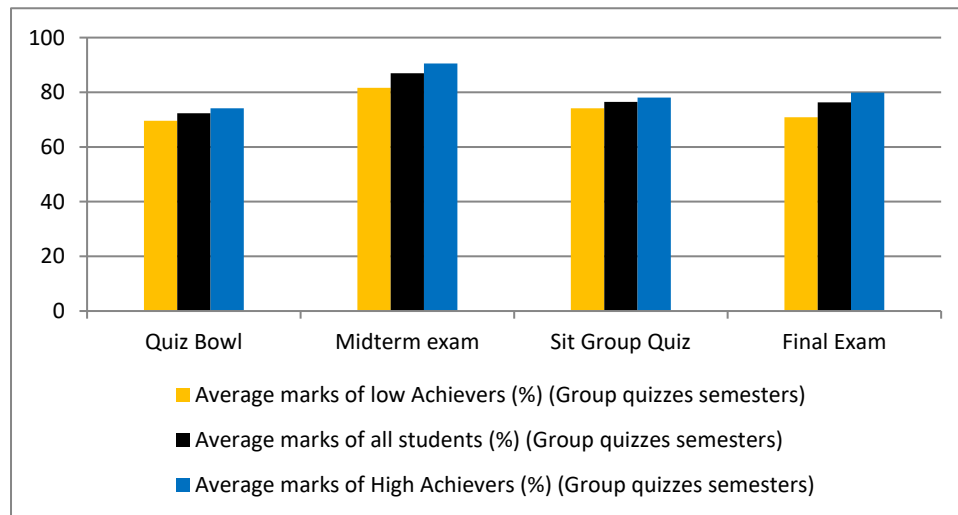


Fig. 3 Average low achievers, high achievers and entire students marks (group-based quizzes semesters)

Figure (4) shows the average progress curves of low and high achievers, in addition to the entire classes in the four assessment strategies. The curves reveal that:

- The trend of academic progress for low and high achievers is similar, reflecting maximum progress after passing the midterm
- Both low and high achievers recorded the minimum marks in the first assessment. However, they progressed throughout the semester.
- The gap between low and high achievers was 4.58 in the quiz bowl. It increased in the midterm exam (6.74%), then decreased to (5.79%) in the sit group quiz. Finally, it slightly increased to (6.6%) at the end of the semester. See figure (5)

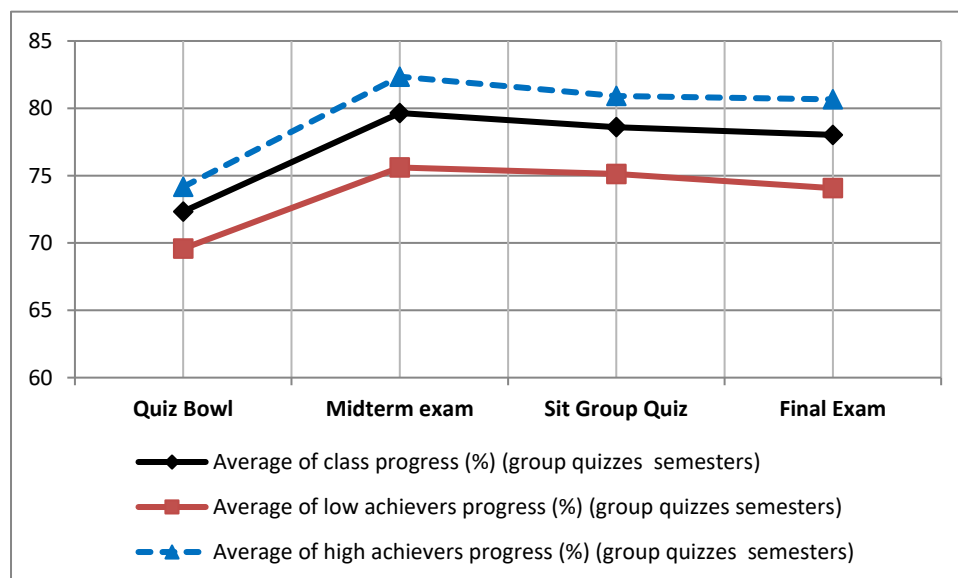


Fig. 4 Students' progress curves classified by students' levels (in group quizzes semesters)

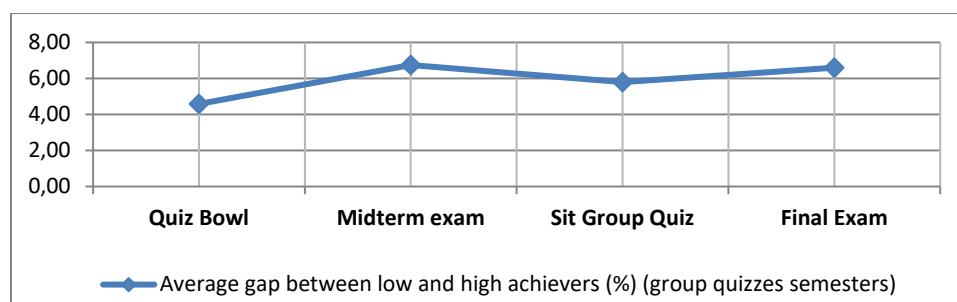


Fig. 5 Average gap between low and high achievers (in group quizzes semesters)

Results of Individual quizzes semesters

As mentioned before, the instructor used individual quizzes strategy in nine semesters. The number of students over the 9 semester after excluding the medium achievers (students with CGPA between 2.7 and 3) was 79 (29 low achievers and 50 high achievers). The average marks of low and high achievers as well as the entire students' over the nine semesters were calculated. Table (3) shows the numerical data.

Table (3): Average of students' marks in individual quizzes semesters

	Student's Marks (%)				Average of Individual Assessments Marks
	Quiz 1	Midterm exam	Quiz 2	Final exam	
Average marks of all students (Individual quizzes semesters)	77.78	79.51	79.30	73.73	77.58
Low Achievers average (Individual quizzes semesters)	56.90	63.48	56.90	75.06	78.21
High Achievers average (Individual quizzes semesters)	89.90	88.80	92.30	78.43	87.36
Average of students' progress (%) (Individual quizzes semesters)	77.78	78.65	78.86	77.58	
Average of low achievers progress (%) (Individual quizzes semesters)	56.90	60.19	59.09	63.08	
Average of high achievers progress (%) (Individual quizzes semesters)	89.90	89.35	90.33	87.36	

Figure (6) shows average marks of both low and high achievers in the four assessment strategies. It also demonstrates the average performance of all students. The figure shows that:

- The class average lies between the low achievers average and the high achievers average in all the assessment strategies except the final exam.
- The average marks of low achievers in the midterm and final exams were higher than their average marks in the two quizzes. They recorded a higher average in the final exam. However, the average marks of high achievers in the midterm and final exams were lower than their average marks in the two quizzes. They recorded a lower average in the final exam.

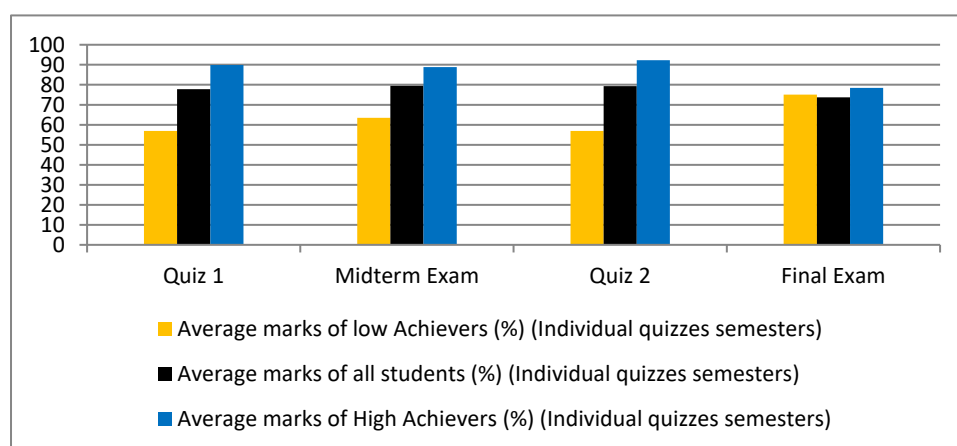


Fig. 6 Average marks of low achievers, high achievers and entire students (individual quizzes semesters)

Figure (7) shows the average progress curves of low and high achievers, in addition to the entire classes in the four assessment strategies. The curves reveal that:

- The trend of academic progress for low achievers showed a positive progress towards the end of the semester. However, high achievers progress declined slightly towards the end of the semester.
- The gap between low achievers and high achievers was the highest at the beginning of the semester according to marks recorded in the first individual quiz. The gap decreased after midterm exam,

then increased again after sitting for the second individual quiz. Finally, the gap decreased significantly after marking the final exam. See figure (8)

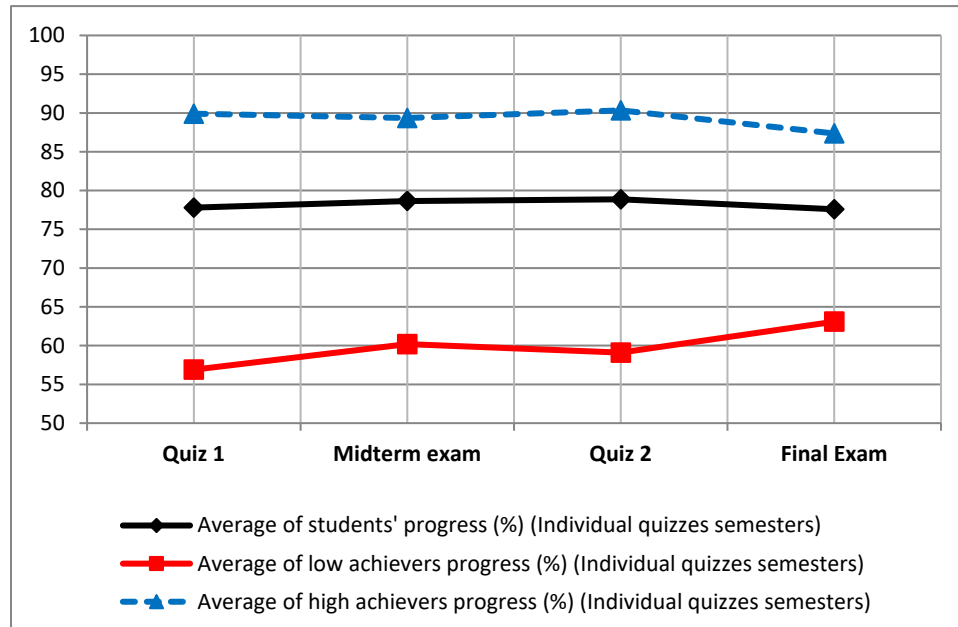


Fig. 7 Students' progress curves classified by students' levels (in individual quizzes semesters)

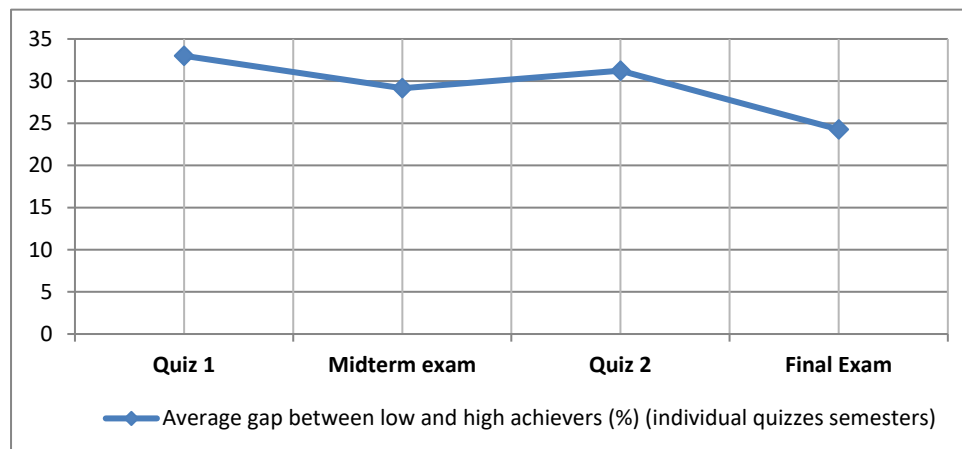


Fig. 8 Average gap between low and high achievers (in individual quizzes semesters)

Group-based quizzes semesters vs. individual quizzes semesters

This section of the experimental study aims at comparing between low achievers performance and the academic progress in both cases of applying individual quizzes and group-based quizzes based on the previously highlighted data. The gap between low and high achievers in both cases is also studied. Figures (9) and (10) combine these comparison factors.

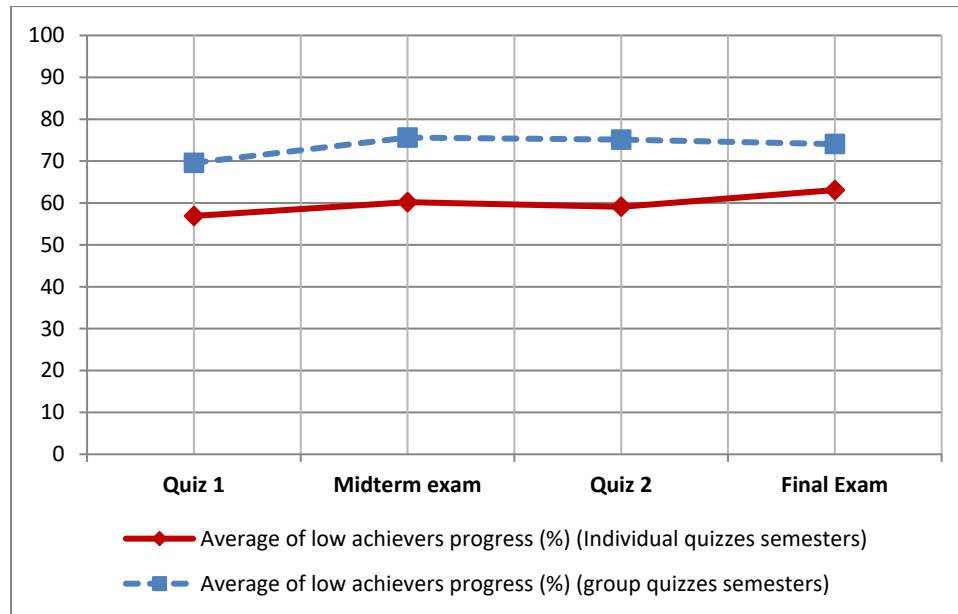


Fig. 9 Average progress of low achievers (individual quizzes semesters and group-based quizzes semesters)

Figure (9) clearly shows that, low achievers' marks during semesters in which group-based quizzes were applied were higher than low achievers marks during semesters in which individual quizzes were applied. This is noticed in all assessment milestones (1st quiz-midterm exam-2nd quiz-final exam). Figure (10) shows that the gap between low and high achievers' marks decreased significantly in all four assessment milestones after applying group-based quizzes in the course assessment strategies.

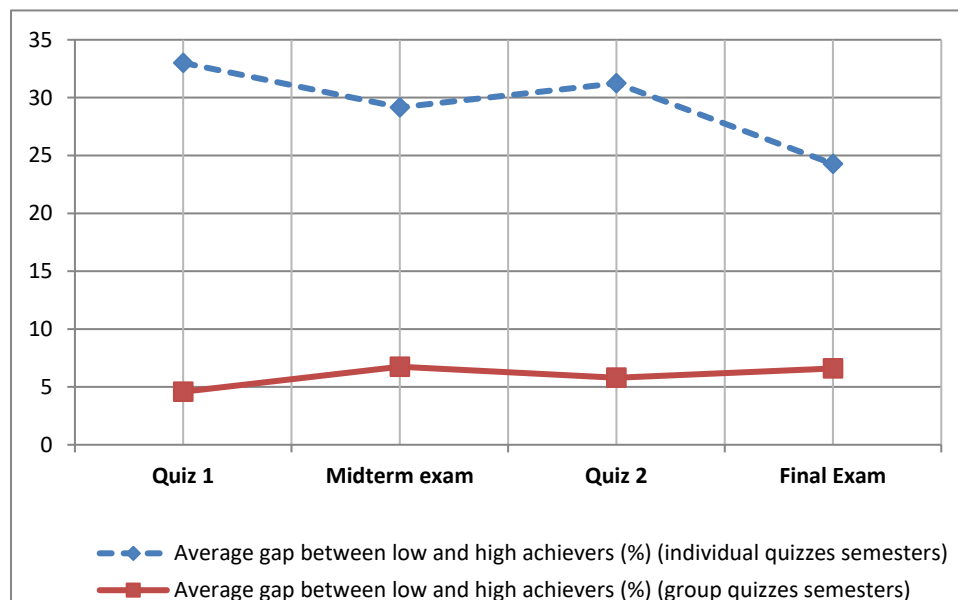


Fig. 10 Average gap between low and high achievers (individual quizzes semesters and group-based quizzes semesters)

In order to answer the research questions, inferential statistics methods were implemented to compare between low achievers' performance in both cases of applying individual quizzes and group-based quizzes. Accordingly, the null hypothesis (H_0) and alternative hypothesis (H_1) are as follows:

- H_0 : There is no significant difference between average marks of low achievers in individual quizzes semesters and group-based quizzes semesters
 - H_1 : Average of low achievers marks increase significantly when applying group-based quizzes
- In order to test the previous hypotheses, we need to compare between the average marks of two populations:
- Population I: Low achievers in group-based quizzes semesters
 - Population II: Low achievers in individual quizzes semesters

Table (4) shows the samples statistics related to the two populations

Table (4): Samples statistics

	Population I	Population II
Sample size (n)	$n_1 = 12$	$n_2 = 29$
Average mark of low achievers (\bar{X})	$\bar{X}_1 = 73.89$	$\bar{X}_2 = 60.73$
Standard deviation (s)	$S_1 = 6.49$	$S_2 = 17.73$
Variance (s^2)	$S_1^2 = 42.1201$	$S_2^2 = 314.3529$

As the populations with unknown variance, t test will be used according to the following equations:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{Sp^2}{n_1} + \frac{Sp^2}{n_2}}}$$

Where

$$Sp^2 = \frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}$$

By using the values in table 4 and applying equations 1 and 2, the value of t is 2.49. The critical value of t (giving that the alternative hypothesis is positive directional one (one tailed test), degree of freedom = $n_1 + n_2 - 2 = 39$ and significance level $\alpha = 0.05$) is 1.684. Accordingly, calculated t lies in the rejection zone of H_0 . This reveals that there is a significant increase with significance level $\alpha = 0.05$ in low achievers average mark when applying group-based quizzes in the course.

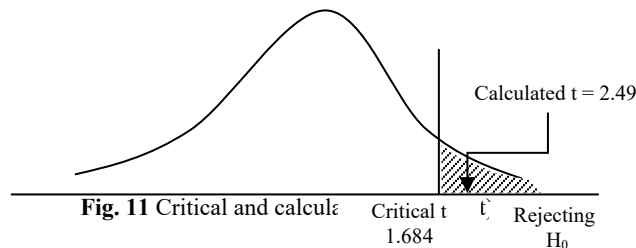


Fig. 11 Critical and calculate Critical t 1.684 t_c Rejecting H_0

Discussion And Limitations

This section of the study attempts to discuss the results and limitations of the experimental study with reflections on the theoretical background and the research question. Finally, the study ends with a conclusion, recommendations and directions for further research.

Discussion

- Yokomoto & Ware (n.d.) refer to a concern that the instructor may think of when incorporating collaborative learning, which is how can grades be assigned meaningfully if some students receive higher grades on group-based assignments than they would earn individually. This case frequently occurred in the current experiment. Many studies have recommended mixing both individual assessment and group-based assessment strategies in course management. This mixture helps in testing each student's individual performance, in addition to his interpersonal skills. From another point of view, Yokomoto & Ware (n.d.) defend the use of group quizzes as assessment strategies. They explain that incorporating group quiz scores in individual's course grade is unlike using homework scores. In their experiment, Gaudet et al. (2010) found out that group quiz mark was higher than the individual quiz mark of highest achievers in each group (p. 1). This reveals that mixing low-achievers with high-achievers has a positive impact on both groups. The current study supports this result.
- It is preferred to mix group-based and individual assessments and try to monitor and compare between students' performance in both types. The current study partially points to this comparison through including both midterm and final exams' marks. Individual homework assignments (20% of the course's total mark) were not included in the experiment as they were not fully monitored by the instructor. Yokomoto & Ware (n.d.) note that students often seek assistance on their homework, and hence it is difficult to determine how far a student's paper represents his/her individual work.
- The theoretical and practical parts of the study pinpoint the importance of bridging the gap between low and high achievers. Yokomoto & Ware (n.d.) uses the term 'academic vacuum' to describe this gap. One

of the academic advising challenges is to monitor the academic progress of at-risk students through finding possible ways that help low achieving students to raise their GPAs so that the gap between them and high achievers can be reduced.

- The type of questions offered in both group-based quizzes allowed the instructor to give an instant mark for both groups direct after finishing the quizzes. For students, this raised the degree of excitement. In the quiz bowl, students could easily calculate their marks after each question based on the detailed criteria that was given to them. Students appreciated receiving feedback from the instructor on the spot, especially in case of quiz bowl method. Carless (2015) asserts the importance of “same-day feedback”. Through an experiment on learning-oriented assessment, he found that “the same-day discussion and debate also brings elements of dialogue into the feedback process” and “feedback aims to clarify issues immediately and feed-forward to future related tasks” (p. 973).

Limitations

- In the group-based quizzes semesters, students were classified according to their CGPA in the previous semester into two groups: low achievers and high achievers. Medium achievers were neglected. Some previous studies have included medium achievers as well. Dohaney et al, (2012) conducted a study to test the effect of collaborative learning on students learning gain. They mixed between low, medium and high achievers in the same group.
- The experimental study was limited to in-class assessment strategies (quizzes, midterm exam and final exam). These assessment strategies formed 80 % of the total course mark. Assignments and homework (20%) were, intentionally, not included in the experiment for the reason stressed by Yokomoto & Ware (n.d.) as mentioned in the discussion section.
- The experimental study was applied to one course (introduction to project management) over several semesters. Applying the experiment in different types of courses is highly recommended.

Conclusion And Recommendations

Conclusion

The researcher demonstrated the transformation of higher education concepts. He pinpointed the idea of active and collaborative learning through group-based assessment strategies as one of the features of that transformation. The applied part of the study aimed at comparing between the effect of collaborative learning through group-based quizzes and the effect of traditional individual quizzes on the academic performance and progress of low achieving students. Two examples of group-based quizzes were applied during two semesters in the course of “introduction to project management”. The academic performance of low and high achievers, in addition to the entire class was measured during these semesters and compared to the academic performance in previous individual quizzes-based semesters. It was found that academic performance of low- achievers in quizzes as well as midterm and final exams was considerably higher during semesters through which group-based quizzes were applied. Moreover, using group-based quizzes significantly helped in reducing the gap between low and high achievers’ academic performance.

Recommendations and directions for further research

- It is preferred to combine group-based and individual assessments and to monitor and compare between students’ performance in both types. This study partially outlined this comparison.
- It is very important that the instructor monitors the behaviour and contribution of each student within a group. One of the possible drawbacks of cooperative learning is the potential unbalanced role of students within the group. Walter (2000) states that ‘cooperative learning is most likely to go wrong when one of the students does all the work while others watch’ (p. 1).
- Generally, it is highly advised that the instructor utilises various types of group-based quizzes that put groups in an exciting and active learning situation.
- It is important to strengthen the effectiveness of academic advising in monitoring the academic progress of at-risk students through finding possible ways that help them to raise their GPA so that the gap between low and high achievers can be reduced.
- Further study is required to observe and analyze the behaviour and motivation of low-achievers during implementation of active and collaborative learning. Different ways of grouping students can be experimented. For example, a comparative analysis study can be applied on various students’ group settings (grouping low-achievers together vs. combining low and high achievers).
- Further study is needed to examine the effect of other methods of group-based quizzes on students’ academic performance during the semester.

References

- Barr, M. L. (2014). Encouraging college student active engagement in learning: The influence of response methods, *Innovative higher education*, Springer, Vol. 39, Issue 4, PP. 307-319
- Carless, D. (2015) Exploring learning-oriented assessment processes, *Journal of higher education*, Springer, Vol. 69, issue 6, PP. 963-976
- Dohaney, J., Brogat, E. and Kennedy, B. (2012). Successful curriculum development and evaluation of group work in an introductory mineralogy laboratory, *Journal of geosciences education*, Vol. 60, No. 1, pp. 21-33
- Domenech, J., Blazquez, D., De la Poza, E., Munoz-Miquel, A. (2015). Exploring the impact of cumulative testing on academic performance of undergraduate students in Spain, *Journal of educational assessment, evaluation and accountability*, Springer, Vol. 27, Issue 2, PP. 153-169
- Gaudet, A.D., Ramer, L.M., Nakonechny, J., Cragg, J.J. and Ramer, M.S. (2010). Small-Group Learning in an Upper-Level University Biology Class Enhances Academic Performance and Student Attitudes Toward Group Work. *PLoS*, Vol. 5, Issue 12, e15821, Doi:10.1371/journal.pone.0015821
- Giuliodori, M., Lujan, H. and Dicarlo, S. (2009). Student interaction characteristics during collaborative group testing, *Advances in physiology education*, Vol. 33, No. 1, pp. 24-29
- Hryciw, D. and Dantas, A. (2016). Scaffolded research-based learning for the development of scientific communication in undergraduate physiology students. *International journal of innovation in science and mathematics education*. Vol. 24, No. 1
- Jabeen, S. and Khan, M. (2013). A study on need achievement of high and low achievers, *Journal of education and practice*, Vol. 4, No. 4, ISSN 2222-1753
- Johnson, D.W., Johnson, R.T. and Smith, K.A. (1998). Active Learning: Cooperation in the College Classroom. Edina, m. N.: Interactive Book Company
- Kefale, Y. (2015). Problems affecting the implementation of cooperative learning: primary schools in focus, Master thesis, Addis Ababa University, PP. 21-25
- Khalid, A. & Nuhfer-Halten, B. (2012). Enhancing Learning at the Polytechnic University: Interactive Classroom Techniques, *International Journal of Polytechnic Studies*, Vol. 1, No. 2
- Mahenthiran, S. And Rouse, P. (2000). The impact of group selection on student performance and satisfaction, *International Journal of Educational Management*, Vol. 14, No. 6, MCB University Press, pp. 255-264
- Meyers, C. & Jones, T. B. (1993). *Promoting Active learning: Strategies for the College Classroom*. San Francisco, CA: Jossey Bass
- Simms, M. and George, B. Approaching assessment from a learning perspective: elevating assessment beyond technique, *Journal of educational assessment, evaluation and accountability*, Springer, Vol. 26, Issue 1, PP. 95-104
- Smith, M.K.; Wood, W.B.; Adams, W.K.; Wieman, C.; Knight, J.K.; et al. (2009). Why peer discussion improves student performance on in-class concept questions. *Science*, Vol. 323, pp. 122-124
- Springer, L., Donovan, D.S., Stanne, M.E. (1999). Effects of Small Group Learning on Undergraduates in Science, Mathematics, Engineering and Technology: A Meta-Analysis. *Review of Educational Research*, Vol. 69, pp. 21-51
- Walters, L. S. (2000) Putting Cooperative Learning to the Test, *Harvard Education Letter*, Vol. 16, No. 3
- Yokomoto, C.F. & Ware, R. (n.d.). Variations of the Group Quiz that Promote Collaborative Learning. *Indiana University-Purdue University*. Indianapolis, Retrieved on June, 2014 from: <https://wiki.queensu.ca/download/.../groupquiz.pdf>

Promoting Best Practices Of Computer Based National Exam (Unbk) Achievement In Indonesia

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Abstract

The crucial issues of the Computer Based National Exam (UNBK) implementation in Indonesia related to distribution of achievements and resources. Responding to those issues, it requires study with aimed at generating hypothesis of best practices of UNBK achievement which contribute to formulate policy on national assessment program. Case studies of senior high schools in some provinces and local policies of the Yogyakarta Office of Education are selected for comparative analysis that can be a useful way to generate hypothesis. The study shows that in teaching and learning processes, the schools not only focus on UNBK achievement, but they also focus on broader achievement to enhance education quality. Further, the study generates hypothesis that in order to improve UNBK achievement and education quality require multi-approaches which supported by public participation and sociocultural strength.

Keywords: *Computer Based National Exam (UNBK), multi-approaches, public participation, sociocultural strength.*

Introduction

As an optional program of Indonesia National Exam (UN), Computer Based National Exam (UNBK) receives positive trending response from secondary schools in term of participation (63,20% in 2017), feed back, preparation quality, process, and result (Prakoso, 2017a). In short, UNBK program that really depends on educational technology is able to overcome the issue of assessment program objectively.

The positive trend can be observed from the participation of UNBK participants. For example in senior high school (SMA) level, in 2015 there were 134 science programs (IPA) and 129 social programs (IPS) that have implemented UNBK. In 2016 has increased to be 1209 for IPA programs and 1192 for IPS programs. The rapid increase has occurred in 2017, there were 6857 IPA programs and 8176 IPS programs.

In the context of achievement score, data by province shows a varied progress. As representative illustrations are presented five provinces that have the highest average score of UNBK for SMA IPA and IPS study program. In the following data, it appears that the five provinces in 2017 had an average score above the national average score of 66.23 for the IPA program and 63.58 for the IPS program. Selected data in 2016 and 2017 were considered to be consistently comparable (shown in **Table 1**).

Table 1. Provinces with highest average of UNBK for IPA & IPS programs

No	Prog	Provinces				
		Bali	Kalbar	DIY	Jateng	Jakarta
2017	IPA	71,95	71,53	67,62	66,43	66,21
2016	IPA	69,44	65,28	60,70	62,87	63,66
2017	IPS	67,71	68,97	68,96	65,46	66,67
2016	IPS	62,39	59,21	63,74	62,39	60,74
UNBK in %		39%	20%	99%	64%	99%

Source: Puspendik 2016 & 2017

More specifically, Roebianto et. al. (2017) stated that in IPA program, the average scores of Bahasa Indonesia, English, Physics, and Chemistry subjects have increased. Mathematics and Biology subjects actually decreased the average scores. While in IPS program has increased average score for all subjects, except Geography.

In the context of city participant, Roebianto et. al. (2017) stated that Surabaya city has the highest number of schools implementing UNBK from 2015 to 2017 in the province of East Java. Another note that the average score of UNBK in 2017 is still below the national and provincial UNBK averages. Nevertheless, Surabaya city has the highest Integrity Index of National Exam (IIUN).

Those data provide clue and crucial problems of the UNBK implementation. Firstly, most provinces have an average score below the national average score (academic achievements) for IPA and IPS programs. Secondly, there are still 36.80% of SMA/MA in Indonesia (<http://un.kemdikbud.go.id>) were not able to implement UNBK either as implementing schools or participating in other schools (facilities and challenges).

Observing those conditions, in order to improve education quality in Indonesia, it is necessary to formulate educational policies related to academic achievements and school facilities. One of the first ways that can be conducted is to provide best practices contributing inspirations and benefits both to policy makers and stakeholders.

One of the strategies to improve education quality is formulating best practice. According to Merriam-Webster, best practice is a procedure that has been shown by research and experience to produce optimal results and that is established or proposed as a standard suitable for widespread adoption. As a transformative function, Boissiere (2004) affirmed that quality has been at the core of the motivating forces for reforms in education. Furthermore, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) stated that “good practice is a key element of the network’s strategy to contribute to promoting quality education ...” (<http://www.unesco.org/new/en/education/networks/global-networks/aspnet/good-practices/>).

To produce policy research that has a multi perspective approach, this study tries to enhance sharpness the draft study of Roebianto which only used quantitative data and single perspective. However, to improve the education quality through assessment program, it requires a multi perspective that matches to complex challenges. In the midst of data limitations, access difficulties, and time constraint, the purpose of this study is to generate hypothesis of best practices for UNBK implementation.

Research Method

To answer complex problem statements with limited data, and difficulty in access, the case study is selected as a research method. Yin (1984) stated that comparative analysis of cases can be a useful way to generate hypothesis about phenomena that combine complex phenomena, long-term dynamics, and difficulty in access.

Qualitative and quantitative of primary and secondary data are used at this study (Eisenhardt and Bourgeois, 1988). Spiral analysis is taken by generating raw data, organizing data, reading and making notes, identifying themes, amalgamating themes, interpreting data, and back to reading and making notes (Creswell, 2009).

Mixed data of some areas and schools are used in data collection. In order to be consistent in comparison each year, data of schools were also utilized in succession following UNBK. To complement quantitative data, interviews with school principals have been conducted in 4 cities (Malang, Palangkaraya, Surabaya, and Yogyakarta). Based on secondary data, five schools have been visited to obtain qualitative data are referral schools that have high average score for UNBK.

Case Studies

Here are the mean score and standard deviation data that commonly asked by schools and public related to the UNBK achievement. To complement quantitative data, this study provides strategic points that are relevant to the research aim.

Case Study 1: SMAN 5 Surabaya

Table 2. Mean Score for SMAN 5 Surabaya

		IPA Program			IPS Program		
		2017	2016	2015	2017	2016	2015
1	Mean	81.97	79.68	82.31	77.83	75.70	79.78
	Std. Deviation	(27.17)	(39.44)	(35.14)	(39.69)	(48.19)	(22.50)

Strategies to improve the UNBK score and implementation:

1. Cultivating the understanding that the UN score will affect the academic achievement of the students in universities

2. Providing reward to the team of subject teachers through academic achievement competition of among subjects
 3. Providing school contract for academic achievement that "SMAN 5 Surabaya will achieves the top 10 ranking in East Java."
 4. Inviting the Tuition Center (bimbel) for the deepening of the UN materials
- Source: Rahmah Zulaiha, November 2017

Case Study 2: SMAN 6 Surabaya

Table 3. Mean Score for SMAN 6 Surabaya

		IPA Program			IPS Program		
		2017	2016	2015	2017	2016	2015
1	Mean	74.74	72.17	71.28	72.36	65.75	61.92
	Std. Deviation	(29.58)	(46.49)	(46.17)	(40.19)	(46.22)	(32.78)

Strategies to improve the UNBK score and implementation:

1. Implementing Focus on Learning. The placement of students in the classroom based on permanent administrative criteria and flexible academic achievement. Administrative criteria is attended on Monday, while on academic achievement criteria is attended from Tuesday to Friday. The students of certain parallel class 12 may move to another parallel class according to the UTS score of the UN's subjects that have been ranked.
 2. Providing motivation of learning and achievement by parents of students conducting every Monday of the third week
 3. Optimizing the role of School Committees to assist the process and output of learning
 4. Cooperating with Tuition Center (bimbel) for deepening of the material and giving insight on the universities
 5. Visiting to some universities to add insight and motivation
 6. Visiting the Indonesia Naval Academy (AAL) aimed at instilling discipline to students
- Source: Rahmah Zulaiha, November 2017

Case Study 3: SMAN 1 Malang

Table 4. Mean Score for SMAN 1 Malang

		IPA Program			IPS Program		
		2017	2016	2015	2017	2016	2015
1	Mean	76.66	73.27	77.43	79.21	76.13	70.92
	Std. Deviation	(29.99)	(48.68)	(46.27)	(28.74)	(43.88)	(65.27)

Strategies to improve the UNBK score and implementation:

1. Doing socialization of standard operating procedure of UN (POS) and UN exam content outline (kisi-kisi), and conducting workshops for teachers on UN items and higher order thinking.
 2. Doing in-depth material and tutoring begin semester 6. It conducted at 06.30 - 08.30 before starting KBM. On Saturday, the 12th graders were given 4 hours of material deepening.
 3. Applying 5 semester program, in semester 6 students only review and get enrichment of UN subjects.
 4. Carrying out try out which conducted by schools and MKKS, as well as by the Education Office of Malang.
 5. Improving completeness of supporting facilities for teaching and learning process, collaborating with parents and local government.
 6. Improving cooperation and communication among schools, parents and the environment.
- Source: Heni Handayani, November 2017

Case Study 4: SMAK Albertus Malang

Table 5. Mean Score for SMAK Albertus Malang

		IPA Program			IPS Program		
		2017	2016	2015	2017	2016	2015
1	Mean	72.75	65.93	73.65	71.39	63.17	67.57
	Std. Deviation	(36.37)	(55.49)	(47.20)	(31.86)	(52.90)	(36.55)

Strategies to improve the UNBK score and implementation:

1. Doing socialization of POS and UN exam content outline (kisi-kisi) and conduct workshops to teachers on UN issues and higher order thinking.
2. Doing in-depth material and tutoring to students starting in the 6th semester, conducted before KBM.
3. Attending the semester 5 semester program. On the 6th semester, class 12 only review and enrich the subject of UN.
4. Doing in-depth material is carried out by school teachers, and evaluated by principal and vice principal of curriculum.
5. Carrying out try out made by schools and MKKS.
6. Improving completeness of supporting facilities for teaching and learning process, cooperating with parents and government.
7. Improving cooperation and communication among schools, parents, and surrounding environment to socialize POS UN.

Students who enter this school are quite heterogeneous. It appears from the composition of students that 50% come from various provinces in Indonesia, and not all students have high academic achievement. The role of the principal in motivating students through regular visits to each class seems to have benefit for academic achievement.

Source: Heni Handayani, November 2017

Case Study 5: SMAN 2 Palangkaraya

The Central Kalimantan Province (Kalteng) has become one of the concerns due to a significant progress for the IPA program score. By 2016, Central Kalimantan has an average score of UNBK of 47.64 (national average of 54.38) rose to 54.27 in 2017 (national average of 57.15). It is very interesting to be explored and searched for the cause.

Strategies to improve the UNBK score and implementation:

1. Carrying out three times try out, and once conducted by the Provincial Office of Education
2. Carrying out a Learning Clinic with aimed at assisting students who have learning difficulties.
3. Carrying out a Peer Tutoring by creating opportunity for higher score students to study together with lower score students
4. Intensifying the reinforcement of subjects starting from grade 12
5. Constructing the predicted exam content outline (kisi-kisi) that will appear at the UN
6. Constructing many items coming from each basic competency (KD)
7. Providing undigitized item banks managed by school and teachers

Source: Bagus Prakoso, November 2017

Case Study 6: DIY Provincial Office of Education

Strategies to improve the UNBK score and implementation:

1. The Provincial Office of Education coordinates with the District/City Office of Education to improve the UN ranking.
2. Conducting quality assessment test for schools, district, city, and province level
3. Professor Goes to School to motivate students and teachers to be more enthusiastic about learning
4. Providing awareness to parents about the importance of learning for children
5. The Local Government does not grant permission of crowd event at the time of exams
6. Improving awareness of parents to lend a computer for exam purposes

Source: Nuraeni Eka Ningrum, November 2017

Discussion

Innovative Strategies for UNBK Implementation

In discussing to improve education quality through assessing UNBK implementation, ideally not only focus on educational assessment concepts such as item and response quality, exam and scoring process which are too technical. Moreover, it requires multidisciplinary approaches which have conceptual and strategic approaches.

As Van der Berg, et. al. (2011) stated that to improve education quality, it requires to employ six strategies such as (1) Developing capacity within the teaching force, (2) School Management for Instructional Leadership, (3) Strengthening relationships of accountability and support amongst stakeholders throughout the school system, (4) Sharpening accountability through better information to parents and education authorities, (5) Improve understanding of the language issues, and (6) Improve the quality of Early Childhood Development (ECD) facilities.

Van der Berg's strategy has indicated the importance of technical and managerial approaches, and multidiscipline. As best practices for UNBK implementation, the five schools are able to employ the five of Van der Berg's strategy with different weight of focus, process, and result. An unclear activity that can not be easily identified is related to improve the quality of Early Childhood Development facilities.

In general, the five schools have four main strategies to improve UNBK scores such as developing teacher competence, socialization of POS UN (standard operating procedure of UNBK), material deepening, and UNBK try out. However, they have innovative strategies that apparently contributed to school achievements and UNBK scores as well.

In implementing innovative strategies at school effectively, school principals and teachers must have competencies of how to build cooperation, participation, and commitment from inside and outside the school. The following table (Table 6) represents the selected innovations of each institution.

Table 6. Innovative strategies: Reflection of Concept and Practice

Innovation	Concepts	Benefits
SMAN 5 Surabaya Giving rewards for the team of subject teachers through competition of academic achievement of among subjects	Competition of academic achievement Chumacero, et al (2016)	"... competition has a positive, statistically significant, and economically relevant educational impact on private & public schools."
SMAN 6 Surabaya Implementing Focus on Learning. The placement of students in the classroom based on permanent administrative criteria and flexible academic achievement	Focus on Learning Glasser (1992)	In a school-reform effort needs to enhance the quality. Education is the process through which we discover that learning adds quality to our lives.
SMAN 1 Malang Conducting workshops for teachers on UN items and higher order thinking skills (HOTS)	HOTS (Barnett & Francis 2012) (Weeden, Winter, and Broadfoot, 2002)	Higher order thinking questions may encourage students to think deeply about the subject matter. The instrument assessment of higher order thinking can give stimulation as assessment for learning to develop students' higher order thinking.
SMAK Albertus Malang Improving communication and cooperation with student parents and government, and completeness of supporting facilities for teaching and learning process.	Parental Involvement (Borgonovi, 2012)	Parental Involvement can amplify a positive impact. The role of mediators (school) can be crucial for creating and maintaining trust among the school, pupil, family and community
Innovation	Concepts	Benefits
SMAN 2 Palangkaraya Peer Tutoring, giving opportunity for higher score students to study together with lower score students	Peer Tutoring Dineen, J. P. et al (1977)	Peer tutoring is profitable for the tutor as well as the tutee, provide a basis for recommending peer tutoring as one method of individualizing education.

Lesson Learned from DIY: Participation and Cooperation

D.I. Yogyakarta province (DIY) in many performances provides best practices not only in the education sector like UN, UNBK, IIUN and UKG (teacher competency test), but also in good governance. DIY position on the governance index is at the first rank (IGI Report, 2012). Good governance, character education, and local wisdom have a positive contribution to the quality of education including the implementation of UN and UNBK (Prakoso, 2017b).

In the context of education quality, the Provincial Office of Education has an innovative program which called Professor Goes to School. This program motivates students and teachers with aims to improve the educational equality and quality for education unit in DIY. When the program can be realized, people no longer need to flock to school in the capital city of DIY.

Associated with the UNBK implementation, Provincial Office of Education promotes awareness of parents to lend a computer for exam purposes. The purpose of this activity is the implementation of UNBK 100%. The result is quite successful and competitive when compared to DKI Jakarta province which has the highest education budget in Indonesia (22.3 percent).

In practice, both programs strongly require participation and cooperation. In cultural values, some schools (e.g. SMPN 4 Sleman DIY) practice some values of dedication, habituation, strong example, and how are good and right (*apik'e piye, benere piye*). These daily values have been supported by the teacher's accompaniment for the students from the incubation process until the hatching process (interviewed by Bagus, September 5, 2017).

At the province level, it might be observed from its policy governance. In December 2010, DIY has launched the Spirit of Mutual Cooperation called "*Agawe Majune Ngayogyakarta*" (*Segoro Amarto*). *Segoro Amarto* principle is independence, social awareness, mutual help, and discipline. *Segoro Amarto* policy aims to enhance social justice, and make life more comfortable, prosperous, and independent (Suroatmojo, 2015).

The lesson learned of this case that governance's participation within school can be carried out through active participation of school committees consisting of various stakeholders. All elements of school stakeholders work together. Good participation to cooperate can occur because there are supportive sociocultural factors. In Javanese culture, mutual assistance and interpersonal skill are part of the internalization process in capability development (Wardani, et al. (2013).

Education and Governance: Equality and Integrity

Khan (2003) comprehensively stated that governance is a multifaceted concept with wide ramifications. No country can afford to continue with a governance system that is outdated, slow, ineffective, expensive, and corrupt in this age of globalization.

In measuring governance, it measures the compliance of government and bureaucracy on the six principles of good governance such as transparency, participation, accountability, fairness, efficiency and effectiveness (<http://fia.ub.ac.id/wp-content/uploads/2014/01/handout-pgi.pdf>). Governance practice in education quality can be traced and identified from the average score of the Integrity Index of National Exam (IIUN). IIUN is an instrument to measure integrity of students when they participate in UNBK. To this case, British and Irish Ombudsman Association (2009) stated that "integrity" is part of six principles in governance. Then, Aulich stated that integrity agencies as one pillar of integrity through development of a system (Aulich, 2011).

People may state that we have not any doubt to those five schools as best practices. They can do anything they want. It is because these schools have much better of family and social economic background. For this matter, Gamoran, Secada, & Marrett (2000) stated that student's family background is far more important school social composition and school resources for understanding student outcomes – still retains much of its currency. How are the other schools in Indonesia that the majority they are inadequate of input, capacity, stakeholders, and other resources?

Connected to that problem, the researcher states that the adequacy of input, capacity, stakeholders, and other resources at school level can be felt directly the significance. However, at the macro level, sufficiency of those advantages is not enough. Other factors affecting academic achievement or education quality are related to teacher competency and governance.

Prakoso (2017b) has found that inadequate quality of governance, unsupportive socioeconomic and cultural factors apparently become the reasons for weak quality of education in Indonesia. That statement is affirmed by Office of Democracy and Governance (2003) that good governance provides policy and legal mechanisms which enable countries to address issues of educational equity, support education for all, provides for citizen participation in the design and oversight of public services.

Data in table 7 may provide a comparative description among governance performance (Indonesia Governance Index or IGI), teacher competence or UKG (Muzenda, 2013), and educational budget on education quality indirectly.

Table 7. Performance of Provincial Governance

N	Provinces with highest UNBK score	IGI Ranking	IGI (2012)	UKG (2015)	Education Budget (%)
1	DI. Yogyakarta	1	6,80 (high)	67,02	9,7
2	Jawa Timur	2	6,43 (high)	60,75	1,7
3	DKI Jakarta	3	6,37 (high)	62,58	22,3
4	Bali	5	6,23 (high)	60,12	3,7
5	Kalimantan Tengah	12	5,95 (medium)	51,78	3,0
6	Jawa Tengah	16	5,88 (medium)	63,30	2,9
7	Bengkulu	31	4,81 (low)	54,13	7,6
8	Maluku Utara	33	4,45 (low)	44,78	9,2
	National			56,69	

Source: IGI Report (2012), npd.data.kemdikbud.go.id/, and <http://www.kemendagri.go.id/news/2014/10/15/ini-hasil-tata-kelola-daerah-versi-igi>

As an instrument, IIUN is quite effective to reduce the systematic dishonesty for every school implementing UN. It can be noted that there was improvement of integrity index on 24 from 34 provinces observed (<http://www.cnnindonesia.com/nasional/20160510011843-20-129580/indeks-integritas-sma-meningkat-nilai-ujian-nasional-turun/>). In this case, Prakoso (2017) has a more specific opinion that is employing IIUN is quite effective to enhance academic integrity for a particular scope.

The UNBK implementation which connects to IIUN result actually created some challenges. As stated by Haryo (2017) that the geographical factor and difficulty of access are also suspected to have an impact on the quality of information system, monitoring and evaluation, and exam implementation. Besides that, supporting facilities and infrastructure (electricity, computer laboratory, and internet) are strongly suspected to affect the level of the UN result in integrity and objectivity context.

Conclusion

Based on the case studies and conceptual reflections, this study proposes some hypothesis that firstly, in order to improve UNBK score and school achievement requires technical and strategic approaches. Secondly, in order to improve UNBK score and education quality in the macro (broader) level, the technical and strategic approaches at each school should be supported by participation and cooperation (governance) among stakeholders (schools, community, government, and business sector) which supported by social culture strength.

References

- Aulich, Chris, 2011. *Integrity Agencies as One Pillar of Integrity and Good Governance*. Public Policy and Administration. Vol. 10, No. 1 (p41-52)
- Barnett, J. E and Francis, A.L. 2012. Using higher order thinking questions to foster critical thinking: a classroom study. *Educational Psychology: An International Journal of Experimental Educational Psychology*.
- Boissiere, M. 2004. *Determinants of Primary Education Outcomes in Developing Countries*. Washington DC: World Bank.
- Borgonovi, F. and G. Montt (2012). *Parental Involvement in Selected PISA Countries and Economies*. OECD Education Working Papers, No. 73, OECD Publishing. <http://dx.doi.org/10.1787/5k990rk0jsjj-en>
- Chumacero, R. A., Mardones, J. G., Paredes, R. D. (2016). *Pressures and Academic Performance in Chile*. *Estudios de Economia*. Vol. 43 No. (pp217-232) <http://www.scielo.cl/pdf/ede/v43n2/art03.pdf>
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 3rd Edition. Los Angeles: Sage Publications, Inc.
- Dineen, J. P., Clark, H. B., and Risley, T.R., (1977). *Peer tutoring among elementary students: educational benefits to the tutor*. *Journal of Applied Behavior Analysis*. Summer; 10(2): 231–238.
- Elsenhardt, K., & Bourgeois, L. J. (1988). *Politics of strategic decision making in high velocity environments: Toward a mid-range theory*. *Academy of Management Journal*, 31,737-770.
- Gamoran, A., Secada, W. G., & Marrett, C. B. (2000). The organizational context of teaching and learning: Changing theoretical perspectives. In M. T. Hallinan (Ed.), *Handbook of research in the sociology of education* (pp. 37–63). New York: Kluwer Academic/Plenum.
- Glasser, W. (1992). *The quality school: Managing students without coercion* (2d ed.). New York: Harperperennial. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.167.1923&rep=rep1&type=pdf>

- Muzenda, Allexander. (2013). *Lecturers' Competences and Students' Academic Performance*. International Journal of Humanities and Social Science Invention. Volume 3, Issue 1, January. 2013, PP.06-13. Retrieved from [http://www.ijhssi.org/papers/v3\(1\)/Version-2/B310206013.pdf](http://www.ijhssi.org/papers/v3(1)/Version-2/B310206013.pdf)
- Office of Democracy and Governance (2003). *Approaching Education from a Good Governance Perspective*. U.S. Agency for International Development http://pdf.usaid.gov/pdf_docs/Pnacr222.pdf
- Prakoso, B. H. (2017a). *Promoting Academic Integrity in Secondary Education*. Turkish Online Journal of Educational (TOJET), December
- Prakoso, B. H. (2017b). *Educational Quality and Governance in Indonesia: Challenges and Impacts*. Proceeding International Conference on Education, Psychology, and Learning (ICEPL). Fukuoka Japan, November 7-9. (pp 6 –18)
- Roebianto, A., Faela, Y., Dwirifqi. M., (2017). *UNBK Best Practices of Selected Municipalities/Districts and UNBK Score Trend at Madrasah Aliyah*. Puspendik: Research Draft.
- Suroatmojo, Wahyu. (2015). *Program Analysis of Segoro Amarto as Implementation of Good Governance in Regional City of Yogyakarta*. Journal of Government Science. Vol. 8, No.1, (43-50)
- Van der Berg, S. et. al. (2011). *Improving Education Quality in South Africa*. Department of Economics, University of Stellenbosch:
- Wardani, S., Kadarohman, A., Buchari, Permanasari, A. (2013). *Java Culture Internalization in Elektrometri Learning Based Inquiry Laboratory Activities to Increase Inter-Intrapersonal Intelligence*. International Journal of Science and Research (IJSR), India Online ISSN: 2319-7064 Volume 2 Issue 5, May 2013
- Weeden, P., Winter, J., & Broadfoot, P. (2002). *Assessment: What's in it for schools?* London: Mohamad Routledge Falmer.
- Yin, Robert, K. (1984). *Case study research: Design and methods*. Beverly Hills, CA: Sage Publications.
- <http://www.ombudsmanassociation.org/docs/BIOAGovernanceGuideOct09.pdf>
- <https://resep.sun.ac.za/wp-content/uploads/2012/10/2011-Report-for-NPC.pdf>
- <https://www.kemendagri.go.id/news/2014/10/15/ini-hasil-tata-kelola-daerah-versi-igi>
- <https://ubk.kemdikbud.go.id/>
- <https://un.kemdikbud.go.id/>
- <https://www.merriam-webster.com/dictionary/best%20practice>
- (<http://www.cnnindonesia.com/nasional/20160510011843-20-129580/indeks-integritas-sma-meningkat-nilai-ujian-nasional-turun/>)
- <http://www.npd.data.kemdikbud.go.id/>, and
- <http://www.kemendagri.go.id/news/2014/10/15/ini-hasil-tata-kelola-daerah-versi-igi>

Acknowledgments

The author expresses his utmost gratitude to Nuraeni Eka Ningrum, Rahmah Zulaiha, Heni Handayani, and Haryo Susetyo for valuable data on UNBK collected from some schools.

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Promoting Stem Education With Arduino Activities In A Blended Learning Course

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ABSTRACT

The purpose of this paper is to promote the understanding of students on STEM (Science, Technology, Engineering, and Mathematics) concepts. To work towards this fundamental aim in a time efficient method, we developed a blended learning course consisting of online material and practical on site activities. More specifically, a structured course consisting of units with specific objectives, video lectures, try-out activities and online tests has been developed. A number of schools have been invited to enroll to this course and Arduino kits have been delivered to them in order for the students to implement the practical activities. Each student group had to complete the course within a short period with the supervision of their teacher. Students have enthusiastically completed all the activities with the aid of their teachers. After the course, they could better understand issues like the utility and importance of switches, resistors, capacitors and in general of the principles of electronic circuits.

INTRODUCTION

Students can undoubtedly operate computers and mobile devices quite effectively, but most of them have little understanding of the inner workings of a computer and in general of the working principles of electronic devices. Therefore, the need to promote the understanding on these topics, which fall under the broad term of STEM (Science, Technology, Engineering, and Mathematics) education (Breiner et al., 2012), is essential. Moreover, in a rapidly changing era, students have to develop skills and practices involving innovative technologies, in order to be competitive and successful. To work towards this fundamental aim in a time efficient method, we developed a blended learning course consisting of online material and practical on site activities.

Empirical research has shown that learning can be improved when instructors follow a more student-centered, interactive instruction (Handelsman et al., 2004). STEM education projects are student-centered as the learners have to build and test various tools and systems and comprehend through this process various theoretical concepts and to gain practical skills. Different kinds of STEM projects have been implemented. Online virtual labs and data sets from physical laboratory experiments have been used for large-scale use in education (De Jong, Soteriou & Gillet, 2014). These labs offer the opportunity to students to perform scientific experiments with online labs in pedagogically structured learning spaces. Whitman and Witherspoon (2003) used LEGOs to interest high school students and improve k12 stem education.

Different kinds of enabling technologies and physical artefacts have been developed and have been applied to STEM learning projects. Microcontrollers, like Arduino (<https://www.arduino.cc/en/Guide/Introduction>), are popular in STEM education. Innovative projects have been developed using these devices. For example, a low cost educational robotics kit based on the UNO Arduino platform is discussed in (Junior et al., 2013). The prototype is used in secondary educational schools and is accompanied by documentation that addresses basic physics, mathematics, logic programming and robotics concepts. A low cost robotics system for educational purposes,

based on Raspberry Pi, has been used for teaching STEM concepts (Saleiro et al., 2013). Various Arduino projects have been created for grade levels ranging from grades 7-12 (Herger & Bodarky, 2015). Students have been engaged in basic elements of engineering and computer programming. In general, the introduction of the use of physical artefacts in the teaching of the curriculum of a Computer Science department has been successful in motivating and engaging the students, with a resultant improvement in student progression (Currie & James-Reynolds, 2017).

Arduino is an open-source electronics platform based on easy-to-use hardware and software. Arduino boards are able to read inputs from sensors (digital and analog) and turn it into a digital output - activating a motor, turning on a LED, publishing something online, etc. Arduino has certain advantages from being inexpensive and cross platform to being extensible with additional shields, i.e. electronic boards implementing specialized operations like wifi communication. Arduino comes in different versions with different capabilities. Figure 1, shows an Arduino Uno board and Figure 2 a simple project with an Arduino Mega board.



Figure 1: An Arduino uno microcontroller

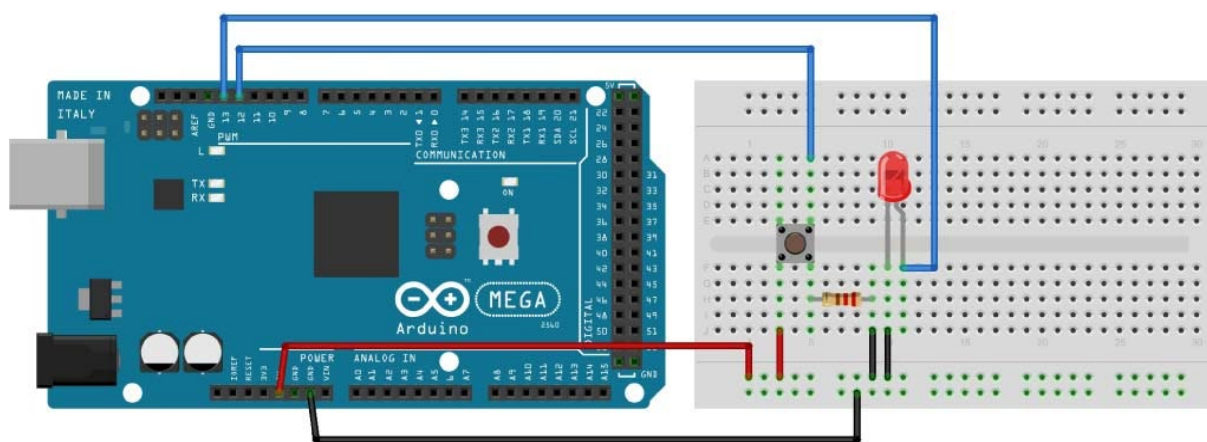


Figure 2: A simple project with resistances, switches and led using Arduino mega

Arduino boards include analog ports for input from analog devices and digital ports for communication (input and output) from and to sensors and other devices. The inputs are processed by the code which is loaded on the board and suitable outputs are produced. The code is developed primarily in a C like programming language using the Arduino IDE, an open-source environment that helps users to write code and upload it to the board. That way different sensors and devices can be connected to Arduino and through coding they can be controlled to create complex systems.

In this work, we focus on helping students to develop Arduino projects through distance learning. In this way, we offer the opportunity to children that are educated in typical public school systems to acquire knowledge in microcontrollers and basic programming concepts. We describe our effort in the rest of the paper.

THE UNIVERSITY OUTREACH PROGRAM

The primary aim of our work was to engage students in Arduino projects in a time efficient mode. Through a university outreach program we aimed at teaching: *i.* Teachers and *ii.* Students of junior and senior high school (ages 12-18). It would be very demanding in terms of time and cost to run the outreach program in live face-to-face sessions. Hence, it was decided to run it in distance learning.

The literature has shown that MOOCs (Massive Open Online Courses) have a low completion rate, there is a lack of student support and interaction with other students and teachers, the teacher to student ratio is low (Eriksson, Adawi & Stöhr, 2017; Guo & Reinecke, 2014; Liyanagunawardena, Adams, & Williams, 2013). So we needed a more supportive structure which could also accommodate a large number of students. To achieve this aim we developed a blended learning course, which is a course consisting of:

- face-to-face meetings,
- online text (in html and pdf format),
- online asynchronous video lectures,
- synchronous sessions and
- focused and prompt support via forums and email.

The organization of the outreach program provides increased support to the participants so as to improve the completion rate and to support the needs of the learners.

An initial face-to-face meeting was held so as to:

- introduce the educational aims,
- showcase the Arduino kits,
- introduce the participants to the online platform,
- run together a project step by step,
- lend the Arduino kits (5 kits – boards with a set of sensors, leds and connection wires) to each school.



Figure 3: The structure of the e-course in Moodle

Then the participants have to study the online video lectures and to complete the activities. The course consists of units with specific objectives, video lectures, try-out activities and online tests and it has been developed in Moodle (see Figures 3 & 4), a popular open source Learning Management System suitable to manage its training content and allow for communication and interaction among students and teachers. The video lectures act as facilitators promoting self-learning, helping students to develop critical thinking skills. The try-out exercises, the quizzes and the assessment activities increase the active participation of the learners and follow a ‘problem solving’ approach. Easy or more difficult problems are posed, which require specific and measurable actions on behalf of the learners.

REALIZATION & EVALUATION OF THE COURSE

The material has been developed between November 2016 and March 2017 and the outreach activities have been deployed in 3 different streams involving various regional areas of Greece from March 2017 to December 2017. Each stream lasted 3 months and the participants were school classes, the students of which, with the help of a

local teacher, studied the online material. It would be difficult for individual students to participate as it would be difficult to distribute the Arduino kits. Therefore it was decided to include entire school classes. That way the Arduino projects would be followed by the school classes and implemented in a school class during school working hours with the help of their local teacher. This organizational model further improves the support to the students and it ensures that all the students will participate in the program. It also reduces the communication load as our support group communicates with only one person per school.



Figure 4: Examples of video and interactive activities of the Moodle course

A number of schools have been invited to follow this course and Arduino kits have been sent to them in order for the students to implement the practical activities. In total 10 schools, 223 students and 12 teachers have participated in the blended learning course. At least 10 projects per school have been implemented. Some new Arduino projects, as a result of the new acquired skills, have been realized. Students have enthusiastically completed all the activities with the aid of their teachers. After the course, they could better understand issues like the utility and importance of switches, resistors, capacitors and in general of the principles of electronic circuits.

CONCLUSIONS

In this paper we discuss a University outreach program with the aim to improve the understanding of STEM concepts of students. An e-course with teaching material (video lectures & interactive activities) about Arduino has been created. The program was run in a blended learning approach. In this mode we managed to effectively support the student groups and to help them complete all the tasks. Students were able to create a few electronic circuits and obtain practical skills. Based on the reports submitted by the participants, the students understood the role of components like resistances, switches, leds, and other sensors and the importance of correct connection of the components. They also did some programming using the Arduino programming environment.

We plan to repeat the activity during the next school year with some extensions and modifications to the learning material. More optional activities will be added, to maintain the interest of the most accomplished learners. To further improve the support towards new learners, we will engage teachers who have completed a previous run of the course, to help us, on a voluntary basis.

ACKNOWLEDGMENTS

The project has been implemented by the Intermedi@KT NPO and the Hellenic Open University with the aid of a grant under the Google RISE program.

REFERENCES

- Breiner, J., Harkness, M., Johnson, C. C., & Koehler, C. (2012). What is STEM? A discussion about conceptions of STEM in education and partnerships. *School Science and Mathematics*, 112(1), 3–11.
- Bybee, R. W. (2010). What is STEM education?. *Science*, 329, 996. doi: 10.1126/science.1194998
- Currie, E., & James-Reynolds, C., (2017). A survey of the benefits and issues arising from the deployment of physical artefacts in computer science teaching, *EAI Endorsed Transactions on e-Learning*, doi: 10.4108/eai.20-6-2017.152745
- De Jong, T., Soteriou, S., & Gillet, D. (2014). Innovations in STEM education: The Go-Lab federation of online labs. *Smart Learning Environments*, 1(3).
- Eriksson, T., Adawi, T., & Stöhr, C. (2017). Time is the bottleneck: a qualitative study exploring why learners drop out of MOOCs. *Journal of Computing in Higher Education* 29, 1, 29-133. DOI: <http://doi.org/10.1007/s12528-016-9127-8>
- Guo, P.J., Reinecke, K. (2014). Demographic differences in how students navigate through moocs. *In*

- Proceedings of the first ACM conference on Learning@ scale conference (L@S 2014)*. ACM, New York, NY, 21–30.
- Handelsman, J., Ebert-May, D., Beichner, R.J., Bruns, P., Chang, A., DeHaan, R., Gentile, J., Lauffer, S., Stewart, J., Tilghman, S.M., & Wood, W.B., (2004). EDUCATION: Scientific Teaching, *Science*, vol. 304, 521-522.
- Herger, L.M., & Bodarky, M. (2015). Engaging students with open source technologies and Arduino. In: *Integrated STEM Education Conference (ISEC)*, Princeton University, New Jersey, 2015 IEEE pp. 27–32.
- Junior, L. A., Neto, O. T., Hernandez, M. F., Martins, P. S., Roger, L. L., Guerra F. A. (2013). A Low-Cost and Simple Arduino-Based Educational Robotics Kit. In: *Cyber Journals: Multidisciplinary Journals in Science and Technology, Journal of Selected Areas in Robotics and Control (JSRC)*, December edition, Volume 3, Issue 12 (2013).
- Liyanagunawardena, T. R., Adams, A. A., and Williams, S. A. (2013). MOOCs: a systematic study of the published literature 2008-2012. *International Review of Research in Open and Distance Learning*, 14(3), 202-227.
- Saleiro, M., Carmo, B., Rodrigues, J.M., & du Buf, J.H., (2013). A low-cost classroom-oriented educational robotics system. In: *ICSR 2013*. Springer, LNAI 8239, pp. 74-83.
- Sartha, J., Vaibhav, A. & Goyal, L. (2014). Raspberry pi based interactive home automation system through e-mail, *2014 International Conference on Reliability, Optimization and Information Technology - ICROIT*, India, Feb 6-8 2014.
- Whitman, L.E., & Witherspoon, T.L. (2003). Using LEGOs to interest high school students and improve k12 stem education. *Proceedings of the 33rd Annual Frontiers in Education*, 2, F3A 6-10.

Prospective Teachers' Perceptions And Attitudes On Renewable Energy: Modelling The Relations Between Sub-factors with SEM

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Abstract

In recent years, after becoming a global problem of energy issue, developed and developing countries enhanced their researches and improved their politics about energy. Certainly one way of these politics passing through education. With qualified and well-organized education programs individuals who will be important parts of our future will be educated with positive attitudes, awareness about energy and future vision. In this context the aim of this study is to demonstrate the perceptions and attitudes of prospective teachers about renewable energy and modeling the relations between sub-factors of perceptions and attitudes. For this aim, “renewable energy perception scale” with 3 sub-factors (renewable energy knowledge, renewable energy future vision and renewable energy tendency) and “renewable energy sources attitude scale” with 4 sub-factors (application request, the importance of education, country interest and environmental awareness and investments) were used. The study was conducted by the analysis of prospective teachers' answers to scales data using Structural Equation Model. The participants in this study included 1145 prospective teachers in Turkey SEM was used with performing LISREL software. Initially KMO and Bartlett's tests were done to test appropriateness of scale to factor analysis. Then theoretical structural model was tested using LISREL. According to results it was found that there is positive relations between the sub-factors of attitude and perceptions.

Keywords: *Renewable energy, attitude, perception, prospective teachers, structural equation model (SEM)*

Protection And Processing Of Personal Data In The Field Of Education And Explicit Consent

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Abstract

The concepts of protection and processing of personal data are two concepts that are closely related to each other. Along with the development and widespread use of technology, as well as becoming mobile, the emergence of personal data has become much easier to collect, store and share. By analyzing these personal data, it has been possible to reach a lot of knowledge about the data owner. In fact, with the beginning of marketing of some of these data, some of which are unknown even to the data owner, data owners have become anxious and this has become a violation of the fundamental rights and freedoms of others and harming them. For this reason, regulations for the protection and processing of personal data have begun to be made. In this context, the education they have received, the content of this education, and a lot of data about it can be included.

Some basic principles on the processing of personal data have been adopted. The first of these principles is that the process must be in accordance with the rule of law and honesty (*bona fide*). In addition, the processed data must be accurate and up-to-date. Another requirement is that the process is done for specific, clear and legitimate purposes. The processed data may be stored for as long as is required by the legislation or for the purpose for which it is being processed.

As a rule of thumb for the processing of personal data, the explicit consent of the data owner is required. In some cases, this explicit consent is not sought. In addition, some personal data are treated as private personal data, and different requirements are sought for their processing. Explicit consent, which is a condition for the processing of the data, must be given in relation to a specific issue. the person to be recruited must also be informed. The consent to be received from the data holder may be in writing, verbally, or by email.

Introduction

The development of social life and its increasingly complex nature also result in the further spread of our own data. This personal data belonging to us is often not a mystery. Many of our information, such as our name, telephone number, home address, whether we are working or not, our business address, our marital status, our family, and so on, are personal details that are not confidential. Even if this data is not disclosed by us, it can be obtained from external observation and simple research. On the other hand, people may want to conceal this data which belongs to them for many reasons. They may not want their job or their marital status or their religious beliefs or values to be known by others. This is because the information that others will obtain about themselves can be used to harm them again (Gürpınar, 2017, p. 681-682).

We do not have to physically come together to communicate with others in the information age we are in and we do not need to be physically at the same place to transfer our information and data to others. Even In order to transfer personal data to more than one person, there is no need to perform separate transactions. Our own data can be delivered via the internet in very different places in the world and in the hands of millions of people. This data, which is processed through developing computer programs, can be used to obtain many results about ourselves that we do not even know about. These results can be used against the data holder or against the society in which he lives and even against the country that we live in. It is perhaps the most innocent way to make an unfair advantage over this data. For this reason, the data belonging to the persons must be protected and should not be processed without the permission of the owner. However, the concept of personal data is such a broad concept that protection and processing must be linked to certain rules. For this purpose both in Turkey and in the European Union, some regulations related to the protection of personal data processing are made.

Regulations Regarding The Processing And The Protecting Of Personal Data In Turkey And The European Union

Regulations In The European Union

The European Convention on Human Rights, adopted by the Council of Europe on 4 November 1950, is regarded as the first accepted regulation on the protection of personal data. It was recognized that the regulation on private life and the right to protection of family life contained in Article 8 of this Convention could also be enforced in the protection of personal data (Akgül, 2017, 181). The Council of Europe later adopted in 1981 the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108). The purpose of the adoption of this convention is to identify the principles to be considered by public and private

organizations in the protection of personal data and to set an example for legislation to be taken at the national level in this respect (Kılınç, 2012, 1112).

In 1995, the European Parliament and the Council adopted Directive on the Protection of Individuals with regard to the Processing of Personal Data and on the Free Movement of Such Data (Directive 95/46/EC) and this Directive entered into force in 1998. The European Parliament has reorganized a regulation adopted on 27 April 2016 and published on the Official Journal of the European Union on 4 May 2016.

This regulation, called " Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC", came into force on 25 May 2018 and Directive 95/46/EC was repealed.

Regulations In Turkey

The basic arrangement in the national legislation concerning the processing of personal data is the article 20/3 added to the Constitution with the amendment made by the law no 5982. According to the relevant regulation: "Everyone has the right to ask for the protection of their personal data. This right contains; informing the individual about his or her own personal data, accessing it, requesting correction or deletion of it, and finding out if it has been used for its purposes or not. Personal data may only be processed in the cases provided for in the law or in the explicit consent of the person. The principles and procedures for the protection of personal data are regulated by law. "

Although the right to protect personal data was included in the Constitution in 2010, the Law on the Protection of Personal Data No. 6698, which regulates the procedures and principles related to this, entered into force on 7 April 2016. With this law, personal data has been defined, from this date it has become clear that personal data, in which situations, and against which acts and how it will be protected.

Concept Of Personal Data

The concept of personal data is defined in Article 3 of the law on the protection of personal data as "any information relating to a specific or identifiable real person". On the grounds of the law, not only the name, surname, date of birth and history of the individual, at the same time, information about the physical, family, economic, social and other characteristics of the person should also be evaluated within the scope of personal data. All the issues involved in the content of the concept of personal data are outlined In this decision of the Constitutional Court (see: 2013/122-2014/72 9/4/2014): "The concept of personal data refers to all information about a person who can be identified or identified. In this context, it is not only the information that reveals the individual's identity, such as name, surname, date of birth and place of birth; but also the informations of IP addresses, e-mail addresses, hobbies, preferences, contacts, group memberships, contacts, phone numbers, motor vehicle number, social security number, passport number, resume, picture, image and sound recordings, fingerprints, genetic information and all data that can be identified directly or indirectly, are included in the personal data".

Undoubtedly, personal data are not limited to these. The information on a student's test paper, the types and names of books he or she has received from the library, the sites and the searches made using the school's internet connection can also be considered as personal data.

Thus, personal data does not only contain information about the person's private life, but also includes all the information and data, including economic and professional information, that characterize a person as a particular person or person by revealing its identity (Akgül, 2014, p. 24).

Sensitive Personal Data

In statutory regulations on the protection of personal data, some data are subjected to more specific protection than other personal data due to their importance and sensitivity. The reason for this is that if these data are passed to the hands of malevolent people, they will be able to cause much more damage and discrimination in terms of data owners and other interested persons. In the Law No. 6698, sensitive personal data is not defined.

However, in Article 6 of the Law, the data relating to biometric and genetic data with data related to race, ethnicity, political thought, philosophical belief, religion, sect or other beliefs, costume and clothing, association, foundation or trade union membership, health, sexual life, criminal conviction and security measures, are classified as personal data.

Educational institutions should evaluate the qualitative data of students, teachers and other personnel as private personal data and should be more careful in protecting and processing these data. The use of very sensitive data such as handprints or fingerprints or retina scan of students and teachers at school entry should also be considered in this context. Because some studies on fingerprints have shown that biometric data can reveal some sensitive data such as health or racial or ethnic origins (Örnek Büken/Zeybek Ünsal, 2017, 42).

Concept Of Processing Personal Data

Processing of personal data is any process performed on the persons data. In the article 3 of Law No. 6698 any process performed on the data like obtaining personal data by the full automated or partially automated ways or non automated system which the part of any recording system, Recording, storing, preserving, altering, rearranging, disclosing, transferring, taking over, classifying or storing personal data is processing personal data. There are some important considerations to consider when processing personal data. Law no. 6698, Article 4, considered the principles to be considered in the processing of personal data. According to this article, first of all, personal data must be handled in accordance with the law. For example, the monitoring of the communication of persons should be carried out in accordance with the law. The processing of the data must also be in accordance with the rule of honesty. In the process performed by the data controller on the request of the concerned person, it has been determined that the requesting by the data controller a non-necessary document contains personal data from the customer, is in violation of the honesty rule.

Another condition for the processing of personal data is correct and, if necessary, up-to-date. This is also an obligation for the data controller as it is right for the data subject. The disclosure of a student's absenteeism information after many years of graduation and after being a civil servant violates the condition of being up to date. The processing of personal data must be carried out for specific, clear and legitimate purposes. The processing of identity and contact information of a gym wear shop customer can be considered within the legitimate purpose. However, it is not the legitimate aim of the customer to process blood groups.

The processing carried out in relation to personal data should be measured, limited and connected with the purpose for which the data are processed. The request and recording of the name and surname of a student enrolled in the school is reasonable. However, ethnicity or the religion or sect of the union or the child whose father is a member is not linked to purpose. The final principle that the Act requires to be considered in relation to the processing of personal data is that the processed personal data is retained for the time required for the purposes for which it is prescribed in the relevant legislation or for the purpose for which it is being processed. This also concerns the right to be forgotten at the same time (see, Çelik, 2017, 395-404).

Conditions Of Processing Of Personal Data And Explicit Consent

In order for personal data to be processed, the person concerned must expressly consent to it and give his explicit consent. The law defines the explicit consent. According to Article 3/1 of Law No. 6698 "relating to a specific topic, which is based on informed consent and free will-described" it is explicit consent. The first condition for validity of explicit consent is related to a certain issue. A consent, including general and all circumstances, is void (Kaya, 2011, 326). The consent given should be given as specific to a particular situation and the specific event to be processed must be clearly defined (Küzeci, 2018, 241). explicit consent can be obtained by comprehensively disclosing the purpose of processing sensitive data, as well as by recognizing the possibility of consent to the transaction through the corresponding sign or signature box (Küzeci, 2018, 243). On the other hand, if it has been stated that it is the consent of the person to remain silent, and no consent has been obtained and no explicit consent has been obtained when he remains silent.. The best way to avoid any problems is to get written consent.

Another condition for the validity of the explicit consent is the person to be received his consent must be informed about it. Explicit consent is a declaration of intent. For this reason, he must know what he consents to so that he can consent freely. This situation is also related to the concept of "Data Controller's Obligation to Inform" in Article 10 of the Law. People not only on the subject, but also on the results of the consent must have full information. Information should be understood in a clear and understandable manner in all matters relating to data processing. The information must be done before the processing of the data. The nature of the data to be processed will determine the level of information at the same time. The enlightenment of the person concerned also reflects the right of the person to determine his own future. The last condition for validity of the consent is that the of the consent must be given by free will. Consent, which is the declaration of will of the person, will be valid if it is aware of the behavior of the person and if his decision is his own decision. Any kind of verbal or physical act that interferes with the will of the person also interferes with the consent for processing of personal data. It is not possible for a person to decide freely in situations where force, threat, error, or trickery, which inflicts injury on the will. Therefore, in such cases, a statement of free will can not be mentioned (Kaya, 2011, 326). However, all the reasons there should be assessed within themselves, and the level of influence on the survey should be determined.. Where the parties are not in an equal position or where one of the parties is influential on the other, careful consideration should be given to whether the claim is granted with free will. Particularly in the case of an employee-employer relationship, where the possibility of not consenting to consent is not effectively provided or when the in the case of not consenting of the employee may cause a likely damage to himself, it can not be assumed that the claim is based on free will. Likewise, the consent obtained by pressure on the student in the teacher-student relationship framework in educational institutions does not apply. In the European Union, explicit consent is only required for the processing of special (sensitive) data. In Turkey, as a rule, explicit consent is required to process all kinds of personal data. In this regard, the Law foresees more protection than the regulations of the European Union.

Other Conditions For Processing Data Being Clearly Mentioned In The Law

Where the processing of personal data is clearly prescribed in the law, no explicit consent of the person concerned is sought. In accordance with the Code of Criminal Records, the Ministry of Justice's processing of persons' criminal convictions may be given as an example of cases explicitly mentioned in the Acts. Again, in the criminal procedure law, it is also possible for the law to permit the investigation of computer programs, computer records and computer files if the requirements of the law exist.

Finding Actual Impossibility On Receiving Consent

The second state in which no explicit consent request is made for the processing of personal data is compulsory for the protection of the life or body integrity of the person himself or someone else who can not explain his consent for the actual impossibility. For example, in an educational institution where the teacher has lost consciousness, the use of identity card information to inform his or her relatives or checking blood group or emergency response on an ID card or in a hospital to make an emergency medical intervention for a fainted student (Örnek Büken/Zeybek Ünsal, 2017, p. 43) or detection of telephone signals to locate the student of the scout club lost in the storm. In such cases it is impossible to refer to the consent of the person using the personal data before the processing activity.

Processing Of Personal Data Related To The Establishment Or The Performing Of The Contract

The performance of a contract of sale or transport contract or work contract is possible by learning and using the address and contact information of the shipper, buyer, or business owner. In such cases, it is possible to use the personal data such as address, communication etc. of the contractual parties without explicit consent. However, the personal data received during the contract negotiations should be returned or destroyed if the contract is not established (Develioğlu, 2017, p.60-61).

Being Publicized By The Data Subject.

Personal data publicized by the data subject can be processed in a manner that overlaps with the data subject publicizations and in accordance with the general principles without explicit consent. However, it is important that the definition of the concept of publicization is made correctly and the limit of publicizing is determined. For example, if a person sends his or her data to a mail group of 50 people working on the same team, it can not be talked about publicization. At this point, the intention of the data subject should be taken into account in accordance with the purpose of the Act. An example of a publicization can be the one that someone shared in the open LinkedIn profile. There is no need for the data subject's explicit consent to use / process this data for the purpose of making a job offer by others. It may not be a problem for parents and students to record the school ceremonies and musical events for personal use. However, obtaining the explicit consent of the students and teachers are required to use the picture is taken and used on the school's web page.

Sensitive Data

In statutory regulations on the protection of personal data, some data are subjected to more specific protection than other personal data due to their importance and sensitivity. The fact that this data is subject to more specific protection may lead to even more significant damage to the person concerned if it is violated or misappropriated by malicious persons.

For some authors, important or unimportant separation of personal data is not accurate. All data is important. On the other hand, if there is a violation, as in many legislation, the data that may cause more damage to the owner is called special or sensitive data (see Korkmaz, 2016, 113-114) . When the Directive is examined, it is defined as sensitive data of persons in race / ethnicity, political opinion, religious or philosophical belief, trade union membership, health status and sexual life in paragraph 8/1.

In regulation, the person's racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, health status and biometric and genetic data in addition to data on the sexual life, in addition to the sexual life, sexual preference data also has been recognized as specially qualified personal data.

In Convention No. 108, a person's racial origin, political opinions, religious or other beliefs, and data concerning health and sexual life conviction has been recognized as sensitive data.

In Turkish law, sensitive datas are limited in Article 6 of Law No. 6698. Accordingly, the datas on "persons' race, ethnic origin, political opinion, philosophical belief, religion, creed or other beliefs, costumes and clothing, associations, foundations or trade union membership, health, sex life, with biometric and genetic data on criminal convictions and security measures" are sensitive data.

Sensitive personal data are divided into two categories: "personal data on health and sexual life" and "personal data on other special qualifications other than data on health and sexual life." Accordingly, the datas on "persons' race, ethnic origin, political opinion, philosophical belief, religion, creed or other beliefs, costumes and clothing, associations, foundations or trade union membership, biometric and genetic data, and on criminal convictions and

security measures” may be processed with the explicit consent of the parties concerned or may be processed without the consent of the person concerned provided that it is foreseen in the law.

The personal data concerning health and sexual life only can be processed without seeking explicit consent for the protection of public health, preventive medicine, medical diagnosis, to carry out treatment and care services, planning finances to health services, and management purposes, by the people who are under confidentiality obligations or competent authority and by concerned organizations.

If the educational institution is also a treatment or rehabilitation institution, the sensitive data will be able to process without consent of the data subject.

Conclusions

With the complication of social life, the data about the person began to spread rapidly. For this reason, the need to protect data has increased steadily. For this purpose both in Turkey and the European Union, there have been numerous legal regulations. In these arrangements personal data are protected. It will only be processed with the explicit consent of the person concerned and can be processed without consent in cases specified in the law. Some of the personal data are considered sensitive personal data. the data on “persons’ race, ethnic origin, political opinion, philosophical belief, religion, creed or other beliefs, costumes and clothing, associations, foundations or trade union membership, health, sex life, with biometric and genetic data on criminal convictions and security measures” are sensitive data. The processing of this data is bound to more difficult conditions.

Many data on children and adults are being processed in educational institutions. In order not to violate the rights of data subject, these data must be stored carefully and processed when it is necessary. This process should also be limited in purpose. It appears that violations of the rules on the processing of personal data frequently occur in schools' libraries and web pages. In the processing of personal data of students and teachers, the rules set forth in Act number 6698 should be followed.

References

Aydın Akgül: *Danıştay ve Avrupa İnsan Hakları Mahkemesi Kararları Işığında Kişisel Verilerin Korunması*, İstanbul, Beta Yayınları, 2014.

Cemil Kaya: *Avrupa Birliği Veri Koruma Direktifi Ekseninde Hassas (Kişisel) Veriler ve İşlenmesi*”, İstanbul Üniversitesi Hukuk Fakültesi Mecmuası, C.LXIX, S.1-2, 2011, (pp. 317-334.)

Doğan Kılınç: “*Anayasal Bir Hak Olarak Kişisel Verilerin Korunması*”, AÜHFD, C. 61, S. 3, 2012, (pp. 1089-1170.)

Elif Küzeci: *Kişisel Verilerin Korunması*, 2.b., Ankara, Turhan Yayınevi, 2018,

Hüseyin Murat Develioğlu: *6698 sayılı Kişisel Verilerin Korunması Kanunu ile Karşılaştırmalı Olarak Avrupa Birliği Genel Veri Koruma Tüzüğü Uyarınca Kişisel Verilerin Korunması Hukuku*, İstanbul, Oniki Levha Yayıncılık, 2017.

İbrahim Korkmaz: “*Kişisel Verilerin Korunması Kanunu Hakkında Bir Değerlendirme*”, Türkiye Barolar Birliği Dergisi, 2016, S.124: pp. 81-152.

Nüket ÖRNEK BÜKEN/ Çağrı ZEYBEK ÜNSAL: “*Kişisel Verilerin Korunması Kanununun Biyomedikal Alana Yansımaları Açısından Değerlendirilmesi*,” Hacettepe HFD, 7(2) 2017, (pp. 33–54).

Yeşim Çelik, “*Özel Hayatın Gizliliğinin Yansımaları Olarak Kişisel Verilerin Korunması Ve Bu Bağlamda Unutulma Hakkı*”, TAAD, Yıl:8, Sayı:32 (Ekim 2017), p. 387-406.

Quality Of Life And Literacy In Hemodialysis Patient's Health

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Abstract

Background: Hemodialysis keeps patients alive, soothes the symptoms of the disease, prevents complications and can interfere with patients' quality of life (QOL), especially when they do not have optimal levels of health literacy, a combination of cognitive and social skills. In other words, health literacy refers to the ability people possess to achieve the promotion and maintenance of their health, thus, enhancing their quality of life.

Objectives: To identify which socio-demographic and clinical variables may influence the QOL experienced by patients with hemodialysis; to determine the relationship between those patients' QOL and their health literacy.

Methods: A quantitative, descriptive, correlational and cross-sectional study with 100 patients suffering from renal failure who were undergoing hemodialysis at the Tondela-Viseu Hospital Center and at the Beirodial Medical Center and Dialysis Center in Mangualde. Most of the participants were male (56.0%) and elderly patients (70, 0%), with a mean age of 68.85 years (± 12.376 years). The data collection instruments used were socio-demographic and clinical characterization questionnaires: the European Health Literacy Questionnaire (HLS-EU-Q), the Health Literacy Survey (HLS-EU-PT) (Nunes & Sorensen, 2013) and the Kidney Disease and Quality of Life Questionnaire KDQOL SF TM1.3.

Results: Men manifest a better QOL in dimensions like the quality of their cognitive function, the quality of their social interaction, of their sleep, of the social support they receive, of their overall health, of their emotional function and of their vitality; women show a higher health level in dimensions like the perception of the symptoms / problems of the disease, of the impact of the kidney disease on their daily life, the intensity of the burden of their disease, the kind of professional activity they have been able to carry out during that stage, the kind of encouragement they receive from the staff who work in dialysis centres, the perception of their physical function and physical performance, the level of pain they have been enduring, their emotional performance and the quality of their social function. Adult patients show better QOL when they refer to the perception of the symptoms / problems related to the effects of kidney disease on their daily life and on their professional activity and on the quality of their social interaction, the kind of encouragement they get from people who work in dialysis centres, a better perception of QOL in relation to their physical performance, to the intensity of pain, to their emotional performance and social function. Patients with a lower school education have a better perception of their QOL in aspects related with the intensity of the burden of disease, their cognitive function, the quality of their social interaction, their satisfaction, their physical and emotional function and the kind of vitality they are experiencing. Patients with a higher school level have a better perception of their QOL in dimensions like the professional activity they have been able to perform, their sleep quality, the social support they receive, their physical performance, their general health and emotional performance levels. Patients living in rural areas manifest a better QOL in dimensions like the perception of the symptoms / problems caused by their condition, of the effects of the kidney disease on their daily lives and on their professional activity, of the kind of

encouragement they get from the dialysis centres staff, of their physical function and performance; they also reveal a more positive perception of QOL in factors related to the pain they have been enduring and the quality of their social function. Patients who live alone, without a partner, and who spent more time in their dialysis sessions present a better perception of their QOL. Patients whose treatment involves arteriovenous fistula present better QOL in dimensions that involve their perception of the effects of renal disease on their daily life, the condition of their cognitive function, the quality of their social interactions, the social support they receive, the quality of their physical performance, the level of pain they are enduring, the quality of their emotional function and performance and the vitality they have been feeling. Patients with an inadequate health literacy present better QOL in aspects that have to do with the burden of the kidney disease, with their cognitive function, their sleep, the social support they are provided with, their level of satisfaction, a better QOL related to their physical function and performance, to their emotional function and performance and to their level of vitality.

Conclusion: The results suggest the need for a greater development of intervention plans that may contribute to improve health literacy levels, a kind of intervention that will have a direct impact on the optimization of the quality of life of hemodialysis patients.

Introduction

Health literacy is much more than the general ability to read. Nowadays, people often have to face complex health information and to make therapeutic decisions. This process involves the need to analyze and assess reliable and quality information, to analyze the risks and benefits involved, to calculate the doses of the medicine they have to take and to interpret some of the results of their medical examinations (Sorensen, 2012; Fernandes, 2012).

Health literacy refers to that learning process through which any learning and active person will become aware of the inner capacities they possess and that are essential to develop competencies that will enable them to better understand, manage and assess knowledge in order to achieve a better health promotion. Health literacy implies the existence of a good level of knowledge, personal capacities and confidence in order to boost personal and community health by changing lifestyles and living conditions (Almeida, Silva, Gaspar, & Fonseca, 2014).

Health literacy is a right that belongs to every citizen and constitutes an important determinant of their health and quality of life (QOL) and that, on the other hand, reflects social inequalities. This kind of literacy includes psychological factors, such as motivation and the patient's perception of his own self-efficacy, social and environmental factors that will have an impact on health-related options and behaviours (Loureiro, 2015). Health literacy is the result of health promotion actions that include policies to reduce inequalities and the production of environments that are meant to promote healthy choices, health education, social mobilization and empowerment strategies (Loureiro, 2015).

Health literacy encompasses the patients' ability to communicate with health professionals, to read medical information, to make decisions about treatments, to follow medical regimes, and to decide when and how they need to seek medical assistance. Several studies have shown that poor health literacy, in spite of being a more prevalent condition in populations with poor economic resources, affects people of all ages, races and socioeconomic levels. Health literacy is associated with health care results (Fernandes, 2012).

Bearing all this in mind, it becomes clear that health literacy requires a holistic intervention and the use of a clear and understandable language that will make information accessible to everyone and will improve the patients' capacity to deal with the disease, will enable them to properly access health services and to better understand the situation they are going through and that will guide them as they seek the most appropriate solutions (Loureiro, Dinis, and Oliveira, 2012).

Literacy bears a close relationship with the patients' school level and involves knowledge, motivation and competencies that will enable patients to access, understand and appraise any kind of health-related information that will provide them with knowledge to make the right decisions about their health and its promotion and about the prevention of diseases, as a way to maintain or improve their QOL standards (Sorensen, Van den Broucke, Fullam, Doyle, Pelikan, Slonska, & Helmut, 2012).

Patients' literacy influences directly the kind of access they may have to crucial information about their rights and about health care, whether it involves following instructions about a certain treatment or therapeutic, understanding the information they are given and that is related to their disease or learning about disease prevention or ways to achieve health promotion (Luís, 2010).

Literacy levels can directly affect patients' access to health care. Poor literacy, which often goes hand in hand with feelings of embarrassment or shame, can reduce patients' ability to expose their fears (Loureiro, 2015).

In the early 90s, Shumaker and Anderson (1992), referenced by Albuquerque (2009), defined QOL as the overall individual satisfaction with life and the general and personal feeling of wellness. Cramer (1994), also quoted by

the same author, defined it as a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity.

Following that same line of reasoning, those arguments are once again referred when the World Health Organization (WHO), in 1994, states that QOL is the individual perception that people have of their attitude in life in the social, economic and cultural context where they belong, taking into account their culture, values, life goals, social relationships and life expectations. Paschoal's definition (2010) is very similar as he defines QOL as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. In Silva's perspective (2011), QOL can be composed of several levels and may be represented by a three-level model: in the first level, we can find the person's overall quality of life; in a second level, we will find the physical, psychological and spiritual dimensions; and finally, there will be a level that will include the different elements that will form each dimension (for the physical dimension there will be elements like pain, vomiting, functional disability, among others).

The QOL of a population depends on the living conditions of its inhabitants, on whether or not they have access to certain economic and social goods and services like employment, a wage, basic education, adequate food, the access to good health services, basic sanitation, good housing conditions, good quality transport services, among other factors.

It is important, in this context, to stress that the concepts of well-being and of QOL vary from society to society, in accordance with each culture (Silva, 2011). The same author points out that each person is unique and that his/her needs vary. This uniqueness will influence the opinion that each one of them have about what is really significant in their lives and what are their priorities,

Beckert, Irigaray and Trentini (2012, p. 235) define QOL as "a dynamic interaction between the external conditions of an individual's life and the internal perception of these conditions". The same authors also mention that QOL relates to the way people live, feel and understand their everyday lives. It includes aspects such as health, education, transportation, housing conditions, work and the individual's capacity to take part in decisions, in different contexts and situations. It can be perceived as a range of meanings and states: the physical, mental, psychological, emotional and social well-being (family, friends, health, education, among others); the emotional state, the social interaction, the intellectual activity, self-care, family support, health condition, cultural and ethical values and religiosity, lifestyle, satisfaction with our job and/or with daily activities and the environment in which one lives. Thus, it is a concept that varies from author to author, because of its subjectivity, and that depends on each person's socio-cultural level, age group and personal aspirations (Beckert, Irigaray & Trentini, 2012).

According to Diniz and Schor (2006), references to QOL in a clinical discussion are natural and necessary, but, since the concept may be used in many senses, its use can cause some confusion, and that is why some distinctions must be made: a) the judgment of what is a poor QOL can be done by those who live it or by an observer. It often happens that lives that observers consider to be of poor quality are quite satisfactory for those who live them; b) a poor QOL can generally mean that the patient's experiences fall short of the individual's desirable standards; c) The assessment people do of their QOL, as with life itself, changes over time; d) This evaluation may reflect certain bigotry and prejudice; e) The assessment can reflect socio-economic conditions rather than the life experienced by the patient.

There are some objective criteria we can use to define the QOL, namely:

- a) Restricted QOL-it is an objective and appropriate description of a situation in which a person suffers from serious physical or mental health problems, in other words, the patients' functional capacities do not fall within the definition of "human normalcy". This judgment can be carried out by the person who is living that situation or by others who observe that person. It is quite clear that the assessment performed by the observer and the judgment carried out by the person who is living that kind of life may differ;
- b) Minimum QOL – it is an objective description adapted to a situation in which a patient or an observer (a nurse or a family member) faces a person whose overall physical situation has considerably worsened, whose ability to communicate with others is severely restricted and who suffers from discomfort and pain;
- c) QOL below the minimum – it is an objective description that stands for a situation in which the patient exhibits extreme physical weakening and a complete and irreversible loss of sensory and intellectual activity. It may even be suggested that in this state patients have no QOL whatsoever. This description applies to people who are in a persistent vegetative state (Diniz & Schor, 2006).

Cannavarro, Pereira, Moreira and Paredes (2010) claim that there are two different types of instruments that can be designed and used to assess QOL: general and specific instruments. We apply general instruments to obtain values that are not specifically related to a single kind of problem or disease. Those instruments will provide results that will be used to compare the overall health status of two different groups of medical subjects. The specific instruments are less comprehensive. They will only be useful to describe dimensions that involve a specific disease or problem and will be relevant when we compare patients whose specific characteristics are the only factor that matters to define the final output.

Noronha, Martins, Dias, Silveira, De Paula and Haikal (2016), based on the Heath definition provided by WHO, claim that QOL should be analysed and understood according to four different domains: occupational and physical functioning; psychological state; social interaction and somatic sensations. On the other hand, the same authors state that HRQOL (Health-Related Quality of Life) can be met when the individual experiences satisfactory functionality in three main domains: physical, psychological and social.

As far as the physical domain is concerned, someone who suffers from chronic pain is unable to carry out most of his regular daily activities, because his functional capacities will be affected. This situation will also affect the patient's personal fulfilment and his psychological, social and financial well-being. Physical suffering has a significant impact on all areas of a person's QOL (Noronha et al., 2016).

When we focus on the patient's psychological domain, it becomes clear that, in order to adapt appropriately to his environment, and to maintain an excellent QOL, people will need to experience healthy psychological conditions: in situations of anxiety or depression people can hardly get any satisfaction from their daily life and it will be very difficult for them to function properly in any of the domains that will contribute to their QOL (Paschoal 2011).

As for aspects that will have an impact on a patient's social domain, it is clear that in situations where the disease leads to a physical limitation, the patient's role/social status will undoubtedly be affected as he will no longer be able to perform his professional or social activity. In such situations the support provided by family members, friends and health care professionals is fundamental (2011, Noronha et al., 2016).

It is important to emphasize the role played by the perception that each individual has about his or her own health condition or about his/ her well-being, because there is no one better than this individual to express his personal experiences. After overcoming the acute phase of a disease, patients usually go through a process of adjustment to their new life as they look for a lifestyle that can be tolerated and maintained, that allow them to preserve their self-esteem and that is adapted to their limitations, while focusing on other aspects of life (Farias & Martins, 2013). Health is regarded as the largest and best resource for social, economic and personal development and as one of the most important dimensions for QOL. According to Pais-Ribeiro (2009), in health care system, terms like QOL and health condition are usually used almost as synonyms while, on the other hand, Hermann and Looney (2011) consider that these concepts are quite different in essence. The same authors explain that QOL is a much more comprehensive concept than health condition, and that the former is one of the most reliable indicators used to assess the latter. The authors also state that the health dimension has the highest correlation value with the overall QOL scoring, in other words, health might possibly be the most important dimension that will influence a person's QOL.

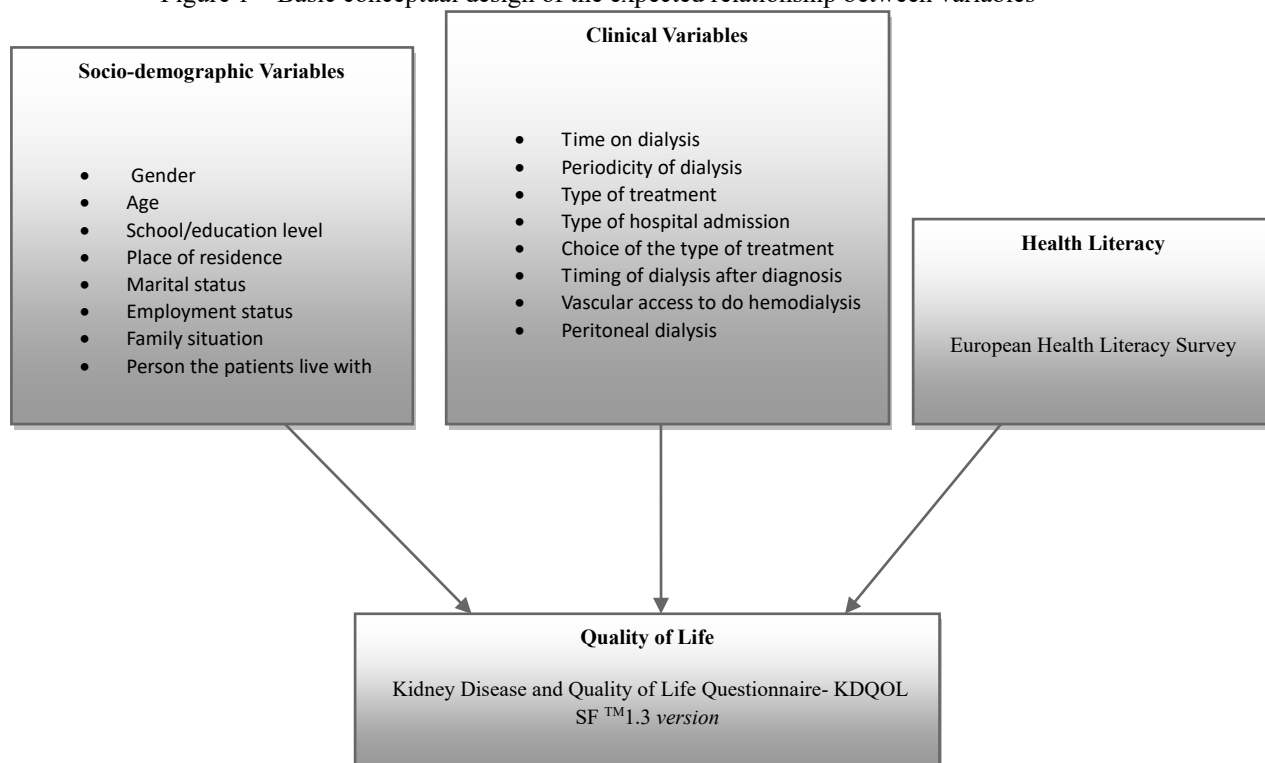
HRQOL has to do with the value people assign to their lives when they are altered by the perception of physical or psychological limitations, when they realize that the disease will have a negative effect on their social functions and life opportunities, when they are affected by the treatments they have to undergo and by situations in which the worsening of the disease is evident. Therefore, HRQOL has become the primary indicator to assess the result of different types of interventions (Serra, 2010).

Diseases that do not disturb the patients' well-being are rare, most of them have a negative impact on the way patients are able to carry out their everyday life activities and on the way their social roles will be performed (Serra, 2010). Chronic diseases require external social and material resources. "The disease is a personal experience, a reality experienced by the individual himself. The perception that each of us has of the disease depends on psychological and social variables that will determine the individual peculiarities that will influence the way each of us will face the disease "(Martins, 2002, p. 34).

The Study

This is a cross-sectional, descriptive and correlational study, since our objective is, in addition to carrying out the analysis and description of the relationships between the variables, to analyze and explain the relationship between those variables. The articulation between the variables included in the current study is shown in a schematic representation (cf. Figure 1)

Figure 1 – Basic conceptual design of the expected relationship between variables



The sample used for this study consists of 100 patients with kidney failure who were undergoing dialysis in a Hospital Centre and in a Medical and Dialysis Clinic. The instruments applied are described in Figure 1.

As far as the participants' socio-demographic data are concerned, the analysis of the results presented in table 1 reveals that the patients with higher representativeness in the sample are elderly people (70.0%) and that 75.0% of the participants are male and 63.6% are female patients.

Through the analysis performed on the participants' school level data, according to their gender, it is clear that more than half of the sample (81.0%) had left school as soon as they completed elementary school (4 years). 80.4% of them are men and 81.8% are women. 11.0% of the patients surveyed had completed middle school (5 to 9 year).

Most of the participants (56.6%) are living in rural areas, but there is also a high percentage of them who are living in urban environments (43.4%). 56.4% of the patients who claimed to be living in the countryside are men and 56.8% are women.

As for their marital status, more than half of the elements of the sample (71.7%) have a partner. 72.7% of the elements of that specific group are men and 70.5% are women. Data made it clear that 28.3% of patients that were part of the sample did not have a partner at the time of the interview.

As far as family composition is concerned, we could observe that the majority of the sample (94.0%) don't live alone. 92.9% of those group members are men and 95.5% are women. Patients who live with someone (N = 94) were asked about the person they were living with. Most of them (66.0%) live with their wives/husbands (71.2% of them are men and 59.5% women), while 17.0% live in the company of their children and 13.8% were living with another person.

Table 1- Sociodemographic characterization of the sample according to the participants' gender.

Variables	Male		Female		Total		Residual		X ²
	N° (56)	% (56,0)	N° (44)	% (44,0)	N° (100)	% (100,0)	1	2	
Age									
Adult	14	25,0	16	36,4	30	30,0	-1,2	1,2	1,515
Elderly people	42	75,0	28	63,6	70	70,0	1,2	-1,2	
School level									
Elementary (4 years, at least)	45	80,4	36	81,8	81	81,0	-,2	,2	n.a.
Middle school (5 to 9 years)	4	7,1	7	15,9	11	11,0	-1,4	1,4	
Secondary school/College	7	12,5	1	2,3	8	8,0	1,9	-1,9	
Place of residence									
Rural	31	56,4	25	56,8	56	56,6	,0	,0	0,002
Urban	24	43,6	19	43,2	43	43,4	,0	,0	
Marital Status									
No partner	15	27,3	13	29,5	28	28,3	-,2	,2	0,062
Living with a partner	40	72,7	31	70,5	71	71,7	,2	-,2	
Family composition									
Lives alone	4	7,1	2	4,5	6	6,0	,5	-,5	n.a.
Lives with someone	52	92,9	42	95,5	94	94,0	-,5	,5	
Person they live with	N° (52)	% (55,3)	N° (42)	% (44,7)	N° (94)	% (100,0)			
Wife/husband	37	71,2	25	59,5	62	66,0	1,2	-1,2	n.a.
Parents	1	1,9	2	4,8	3	3,2	-,8	,8	
Children	7	13,5	9	21,4	16	17,0	-1,0	1,0	
Other(s)	7	13,5	6	14,3	13	13,8	-,1	,1	

As far as health literacy is concerned, data from table 2 clearly show that most patients have low health literacy (93.0%). When the analysis of the results is done according to the patients' age, evidence shows that most of the patients who exhibit inadequate health literacy are elderly people (68.8%). However, the percentage of adult patients with inappropriate health literacy is also quite expressive (31.2%). It turns out that 5 elderly elements (83.3%) present problematic health literacy and only one elderly person (100.0%) shows sufficient health literacy.

After analyzing the results according to the participants' school level, we realised that the majority (80.5%) of the patients who exhibit inadequate health literacy belong to the group of those who had left school early, right after completing elementary school (who have spent 4 or less years at school).

Those who have left school after completing middle school (and who have, therefore, spent between 5 and 9 years at school) came right after (11.8%). When we analysed the cases of patients with problematic health literacy, evidence showed that 5 of them (83.3%) had completed elementary school. The only patient who reveals sufficient health literacy belongs to the group which includes participants with lower school education (table 2).

Most of the patients who show inadequate health literacy live in a rural environment (54.3%), while the remaining 45.7% live in urban areas. All the patients who exhibit problematic health literacy live in rural areas (n = 6; 100.0%) and the only patient with sufficient health literacy comes from an urban environment (table 2).

Taking into account the results about the participants' health literacy according to their marital status, evidence shows that most patients with inadequate health literacy (70.7%) have a partner, while 29.3% did not have a partner at the time the study was conducted. All patients who reveal problematic health literacy (n = 6; 100.0%) have a partner and the only patient who shows sufficient health literacy had no partner at the time (table 2).

It is clear that most of the patients with inadequate health literacy (53.8%) are male, which shows that 46.2% of the female patients also reveal inadequate health literacy. The data gathered also prove that 5 male patients show problematic health literacy (83.3%) and that the only patient who has sufficient health literacy is also a man (table 2)

Table 2 – Health Literacy according to patients' socio-demographic variables.

Health Literacy Variables	Inadequate		Problematic		Sufficient		Total		Residual	
	n° (93)	% (93,0)	n° (6)	% (6,0)	n° (1)	% (1,0)	n° (100)	% (100,0)	1	2
Age										
Adult	29	31,2	1	16,7	0	0,0	30	30,0	,9	-,7
Elderly	64	68,8	5	83,3	1	100,0	70	70,0	-,9	,7
School level										
Elementary (4 years, at least)	75	80,6	5	83,3	1	100,0	81	81,0	-,3	,2
Middle school (5 to 9 years)	11	11,8	0	0,0	0	0,0	11	11,0	1,0	-,9
Secondary school/College	7	7,5	1	16,7	0	0,0	8	8,0	-,6	,8
Place of residence										
Rural	50	54,3	6	100,0	0	0,0	56	56,6	-1,6	2,2
Urban	42	45,7	0	0,0	1	100,0	43	43,4	1,6	-2,2
Marital status										
No partner	27	29,3	0	0,0	1	100,0	28	28,3	,9	-1,6
Living with his/her partner	65	70,7	6	100,0	0	0,0	71	71,7	-,9	1,6
Gender										
Male	50	53,8	5	83,3	1	100,0	56	56,0	-1,6	1,4
Female	43	46,2	1	16,7	0	0,0	44	44,0	1,6	-1,4
Total	93	100,0	6	100,0	1	100,0				

As for the inferential analysis, the main results show that men reveal higher mean values in dimensions such as cognitive function, the quality of social interactions, of sleep, of the social support they get, of overall health, of their emotional function and vitality, while women reveal better QOL in dimensions like the perception of the symptoms/problems caused by the disease, the impact of kidney disease on their daily life, the level of burden imposed by renal failure, the quality of the professional activity they have been able to carry out, the kind of encouragement they get from the people working in the dialysis centre, the quality of their physical function and physical performance, the fact that they have been experiencing less pain, better emotional performance and better social function.

As far as age is concerned, we found out that adult patients reveal better QOL in dimensions like symptoms/problems, in relation to the impact renal disease has on their daily life, on their professional activity and on the quality of their social interactions. They also state that they get great encouragement from the staff working at the dialysis centre, that they have a better perception of their QOL in relation to their physical performance, to the level of pain they are experiencing and to their emotional and social function. In turn, elderly patients manifest a better perception of QOL in dimensions that have to do with the burden of the disease, with better cognitive function, better sleep, positive social support, greater sense of achievement, positive physical function, better perception of their overall health and of their emotional function and greater vitality.

Conclusions

As far as health literacy is concerned, it has been discovered that most of the patients reveal inadequate health literacy, a finding which is in accordance with the results found by Almeida, Silva, Gaspar and Fonseca (2014) whose research reveals also a higher percentage of patients who present inappropriate health literacy. Those patients are specially adults and elderly people and patients with lower school levels, as shown by the results of the current study, since the vast majority of patients with inadequate health literacy have a low level of education (they left school after completing their elementary education) and are elderly citizens. However, it should be noted that, according to Monteiro (2009), the health literacy profile of a given population cannot be based only on the patients' formal education, since literacy cannot be seen as something that is acquired at a given moment and that is valid forever.

The same author reinforces her position using the assumption that literacy has to be assessed according to any given situation (a disease, for instance) and to the requirements needed to face that problem. It is also necessary to assess the patients' capacity to apply treatment. Health literacy is far from being just a general ability that allows people to read. Nowadays, people often have to face complex health information and therapeutic decisions. To achieve these procedures, patients need to assess the veracity and quality of the information they are given, to analyze the risks and benefits of their decisions, to calculate the doses of medicine they have to take and to interpret some of their test results (Sorensen, 2012; Fernandes, 2012).

The results made it possible to conclude that patients living in rural areas have a better perception of what it takes to have a good QOL in dimensions that have to do with the perception of the symptoms/problems involving the disease, the impact that renal disease might have on their daily life, on their professional activity, the kind of encouragement they receive from the people who work in the dialysis centres, the condition of their function and physical performance, a more positive perception of QOL in relation to the level of pain they were experiencing and to the quality of their social function. Patients living in an urban environment have a better perception of what it takes to have a higher QOL in dimensions that deal with the intensity of the burden caused by the renal disease, with the quality of their cognitive function, the quality of their social interactions, of their sleep, the social support they are receiving, their overall health, their emotional performance and with the kind of vitality they were feeling.

These results reinforce the need for a higher investment in the development of intervention plans to promote health literacy levels among hemodialysis patients, an investment that will surely lead to a better QOL. This suggestion arises precisely because the health promotion actions have to encompass policies that have to take into account the patients' socio-demographic and clinical variables and to allow for the creation of environments that will promote health education and empowerment strategies. This suggestion is also based on the assumption that investment in health literacy implies the use of holistic approaches so that we can develop the patients' capacity to deal with their disease and with the treatment they have to follow and that will improve those patients' QOL.

It should also be noted that HRQOL is associated with higher levels of well-being and patient satisfaction and with a better adaptation to the circumstances arising from that chronic disease and its treatment. Thus, it is imperative that the assessment of the patients' QOL must always be a positive indicator of the kind of health care provided to the patients suffering from renal failure problems, a kind of care that should always be encouraged by the dialysis centres staff. People should always bear in mind that a chronic disease has singular characteristics because of its longevity or because of the certainty that living with a chronic disease will force any patient to adopt choices or behaviours that will enable him to adapt to a new set of challenges and to face the problems that any long-time patient have to go through.

Therefore, the role played by nurses assumes a huge relevance in the improvement of the chronic patients' QOL and it becomes clearer and clearer that, in their daily action, nurses should look at their patient in a holistic perspective, treating him/her like a whole being who is the result of the contributions provided by his social, cultural and psychological dimensions. That way they will play a crucial role in the promotion of their patients' QOL.

In order to improve medical practice, it is crucial to implement better health literacy among patients who are undergoing dialysis, always striving to adapt the medical language to the patients' socio-demographic characteristics and to analyze the context and environments from where the patients are from. It will also be essential to give all the necessary psychological support to each patient, trying to figure whether or not he was provided with the right social support to help him face the whole treatment process. The role played by the patients' family, their involvement in the treatments provided are very important, too, since it is clearly a form of emotional support that will help their loved ones face the hardships caused by their condition.

References

- Albuquerque, L.G. de (2009). Estratégias de recursos humanos e competitividade. In Vieira, M.M.F., & Oliveira, L. M. B.de (orgs.) *Administração contemporânea: perspectivas estratégicas* (pp.215-238, cap. 9). São Paulo: Atlas.
- Almeida, D., Silva, M., Gaspar, R., & Fonseca, S. (2014). *Literacia em Saúde e Estado Nutricional*. Monografia do 22º curso de licenciatura em enfermagem, apresentada à Escola Superior de Saúde de Viseu, IPV.
- Alves, D. S. A., & Gonçalves, A. (2009). Impacto da saúde oral na qualidade de vida dos jovens entre os 11 e os 14 anos. *Revista da Faculdade de Ciências da Saúde*, 6, 296-308.
- Andrade, J.M.O., Rios, L.R., Teixeira, L.S. et al. (2014). Influência de fatores socioeconômicos na qualidade de vida de idosos hipertensos. *Ciência & Saúde Coletiva*, 19(8): 3497-3504. DOI: 10.1590/1413-81232014198.19952013. Acedido em <http://www.scielo.br/pdf/csc/v19n8/1413-8123-csc-19-08-03497.pdf>
- Anes, E.J., & Ferreira, P.L. (2009). Qualidade de vida em diálise. *Revista Portuguesa de Saúde Pública*, 8, 67-82. Acedido em <https://bibliotecadigital.ipb.pt/bitstream/10198/5077/1/Qualidade%20de%20vida%20em%20di%C3%A1lise%20PDF.pdf>
- Beckert, M., Irigaray, T.Q., & Trentini, C.M. (2012). Qualidade de vida, cognição e desempenho nas funções executivas de idosos. *Estudos de Psicologia*, 29(2), 155-162. Acedido em <http://www.scielo.br/pdf/estpsi/v29n2/a01v29n2.pdf>

- Berkman, N., Sheridan, S., Donahue, K., Halpern, D., & Crotty, K. (2011). Low health literacy and health outcomes: An updated systematic review. *Annals of Internal Medicine*; 155(2), 97-107. Acedido em <https://www.ncbi.nlm.nih.gov/pubmed/21768583>
- Canadian Council on Learning (2007). *Health Literacy in Canada: Initial results from the International Adult Literacy and Skills Survey*. Acedido em www.ccl-cca.ca/pdfs/HealthLiteracy/HealthLiteracyinCanada.pdf.
- Canavarro, M.C., Pereira, M., Moreira, H., & Paredes, T. (2010). Qualidade de vida e saúde: aplicações do WHOQOL. *Alicerces*; III(3):243-268. Acedido em <http://repositorio.ipl.pt/handle/10400.21/770>
- Coutinho, N.P.S., Vasconcelos, G.M., Lopes, M.L.H., Wadie, W.C.A., & Tavares, M.C.H. (2010). Qualidade de vida de pacientes renais crônicos em hemodiálise. *Rev Pesq Saúde*, 11(1), 13-17. Acedido em <http://www.periodicoeletronicos.ufma.br/index.php/revistahuufma/article/view/328/243>
- Cunha, S.F.F. (2011). *Qualidade de vida no doente em diálise*. (Dissertação de Mestrado). Escola Superior de Saúde de Viseu. Acedido em <http://repositorio.ipv.pt/bitstream/10400.19/1577/1/CUNHA%20Sonia%2C%20Qualidade%20de%20vida%20no%20doente%20em%20di%C3%A1lise.pdf>
- David, M. I. (2015). *Os perfis de autocuidados das pessoas com insuficiência renal crónica em hemodiálise e a sua percepção da qualidade de vida*. (Dissertação de Mestrado). Universidade Lusófona de Humanidades e Tecnologia Escola de Ciências e Tecnologias da Saúde. Acedido em http://recil.ulusofona.pt/bitstream/handle/10437/6630/Trabalho_Final_In%C3%AAs_30.7.pdf?sequence=1
- DeWalt, D., Berkman, N., Sheridan, S., Lohr, K., & Pignone, M. (2004). *Literacy and health outcomes: A systematic review of the literature*. *Journal of Internal Medicine*; 19(2), 1228-1239. Acedido em <https://www.ncbi.nlm.nih.gov/pubmed/15610334>
- Diniz, D.P., & Schor N. (2006). *Qualidade de vida. Série guias de medicina ambulatorial e hospitalar - UNIFESP - Escola Paulista de Medicina*. Barueri: Manole.
- Farias, G., & Martins, R. (2013). Qualidade de vida da pessoa com doença pulmonar obstrutiva crónica. *Millenium*, 45 (jan/jun), 195-209. Acedido em <http://revistas.rcaap.pt/millenium/article/view/8102/5697>
- Fernandes, P. (2012). *Literacia em saúde: contribuição para o estudo de adaptação e validação do NVS - Newest Vital Sign*. [Dissertação de Mestrado]. ISPA – Instituto Universitário. Acedido em <http://repositorio.ispa.pt/bitstream/10400.12/2287/1/14921.pdf>
- Ferreira, P.L., & Anes, E. (2010). Medição da qualidade de vida de insuficientes renais crónicos: criação da versão portuguesa do KDQOL-SF. *Doenças crónicas*, vol. 28, 1, 31-39. Acedido em <https://bibliotecadigital.ipb.pt/bitstream/10198/5057/1/Medi%C3%A7%C3%A3o%20da%20qualidade%20de%20vida%20de%20Insuficientes%20renais%20cr%C3%B3nicos-cria%C3%A7%C3%A3o%20da%20vers%C3%A3o%20portuguesa%20do%20KDQOL.pdf>
- Fortin, M.-F. (2009). *Fundamentos e etapas do processo de investigação*. Loures: Lusodidacta.
- Greenberg, A. (2005). *Primer on Kidney Diseases*. Em N. K. Foundation.
- Hermann, C.P., & Looney, S.W. (2011). Determinants of quality of life in patients near the end of life: a longitudinal perspective. *Oncol Nurs Forum*; 28(1), 23-31.
- Irigaray, T.Q., & Trentini, C.M. (2009). Qualidade de vida em idosos: a importância da dimensão subjetiva. *Estudos de Psicologia*, 26(3), 297-304. Acedido em <http://www.scielo.br/pdf/estpsi/v26n3/v26n3a03>
- Kobylarz, F., Pornidor, A., & Heath, J. (2006). A mnemonic tool for addressing Health literacy concerns in geriatric clinical encounters. *Geriatrics*; 61(7), 20-27. Acedido em <https://www.ncbi.nlm.nih.gov/pubmed/16827611>
- Kutner, M., Greenberg, E., Jin, E., & Paulsen, C. (2006). *The health literacy of america's adults: Results from the 2003 national assessment of adult literacy*. National Center for Education Statistic, U.S. Department of Education (NCES), 423.
- Leal, C.M. (2008). *Reavaliando o conceito da qualidade de vida*. Universidade dos Açores.
- Loureiro, L. (2015). A literacia em saúde, as políticas e a participação. *Revista portuguesa de saúde pública*, 33(1), 1. Acedido em <http://www.scielo.mec.pt/pdf/rpsp/v33n1/v33n1a01.pdf>
- Loureiro, L. M., Dinis, B. S., & Oliveira, R. (2012). Literacia em saúde Mental de adolescentes e jovens: conceitos e desafios. *Revista de Enfermagem Referência*, III Série - n.º 6 - Mar. 2012, 157-166. Acedido em <http://www.scielo.mec.pt/pdf/ref/vserIIIIn6/serIIIIn6a15.pdf>
- Luis, L. (2010). *Literacia em saúde e alimentação saudável: os novos produtos e a escolha dos alimentos*. [Dissertação de Mestrado]. Universidade nova de Lisboa. Escola Nacional de Saúde Pública. Acedido em <https://run.unl.pt/bitstream/10362/4264/1/RUN%20%20Tese%20de%20Doutoramento%20-%20Luis%20Francisco%20Soares%20Luis.pdf>
- Machado, G.R.G., & Pinhati, F.R. (2014). Tratamento de diálise em pacientes com insuficiência renal crónica. *Cadernos UniFOA*, Volta Redonda, 26, 137-14. Acedido em <http://web.unifoa.edu.br/cadernos/edicao/26/137-148.pdf>

- Martins, M. (2002). *Auto-actualização e sofrimento na explicação da aceitação da doença crónica: Uma Investigação no Adulto em Tratamento de Hemodiálise*. [Dissertação de Mestrado]. Faculdade de Medicina da Universidade do Porto. Acedido em <https://repositorio-aberto.up.pt/handle/10216/9745>
- Monteiro, M.M.M.C.F. (2009). *A literacia em saúde*. (Dissertação de Mestrado). Universidade Lusófona de Humanidades e Tecnologias Departamento das Ciências de Educação. Acedido em recil.ulusofona.pt/bitstream/handle/10437/.../A%20literacia%20em%20saude.pdf?..
- Múrias, D.F.R. (2015). *Qualidade de vida e ajuste diádico do doente em hemodiálise*. (Dissertação de Mestrado). Universidade Portucalense Infante D. Henrique. Acedido em <http://repositorio.uportu.pt:8080/bitstream/11328/1651/1/TMPS%2052.pdf>
- Noronha, D.D., Martins, A.M.E., Dias, D.S. dos, Silveira, M.F., De Paula, A.M.B., & Haikal, D.S.A. (2016). Qualidade de vida relacionada à saúde entre adultos e fatores associados: um estudo de base populacional. *Ciência & Saúde Coletiva*, 21(2), 463-474. Acedido em <http://www.scielo.br/pdf/csc/v21n2/1413-8123-csc-21-02-0463.pdf>
- Ordem dos Enfermeiros (2016). *Guia Orientador de Boa Prática - Cuidados à pessoa com doença renal crónica terminal em hemodiálise*. Ordem dos Enfermeiros. Acedido em http://www.ordemenfermeiros.pt/publicacoes/Documents/GOBPHemodialise_VF_site.pdf
- Organização Mundial de Saúde (1998). *Health promotion glossary*. Genebra: OMS.
- Pais-Ribeiro, J. (2009). A importância da qualidade de vida para a psicologia da saúde. In: J.P.Cruz, S.N. de Jesus, & C Nunes (Coords.). *Bem-Estar e Qualidade de Vida* (pp.31-49). Alcochete: Textiverso.
- Paschoal, S. P. (2011). Qualidade de vida na velhice. In E. V. Freitas, L. Py, A. Nery, F. X. Cançado, J. Toll, & M. L. Gorzoni (eds). *Tratado de geriatria e gerontologia* (pp. 99-106). Rio de Janeiro: Editora Guanabara Koogan.
- Paschoal, S.C.M. (2010). *Qualidade de vida na velhice*. Portal do Envelhecimento. Acedido em <http://www.portaldoenvelhecimento.org.br/acervo/pforum/>.
- Paskulin, L. G., Córdova, F. P., Costa, F. M., & Vianna, L. C. (2010). Percepção de pessoas idosas sobre qualidade de vida. *Acta Paulista de Enfermagem*, 23, 101-107. doi:10.1590/S0103-21002010000100016.
- Pestana, M.H., & Gageiro, J.N. (2014). *Descobrimos regressão: com a complementaridade do SPSS*. Lisboa: Edições Silabo.
- Praça, M.I.F. (2012). *Qualidade de vida relacionada com a saúde: a perspectiva dos utentes que frequentam os Centros de Saúde do ACES Trás-os-Montes I Nordeste*. [Dissertação de Mestrado]. Instituto Politécnico de Bragança. Acedido em <https://bibliotecadigital.ipb.pt/bitstream/10198/3612/1/tese%20final%20Fevereiro.pdf>
- Safeer R.S., Cooke, C.E., Keenan, J. (2006). The impact of health literacy on cardiovascular disease. *Vascular Health and Risk Management*; 2(4), 457- 464
- Sandra, C.A.L. (2015). *Qualidade de vida em diálise*. (Dissertação de Mestrado). Faculdade de Medicina. Universidade de Coimbra. Acedido em https://estudogeral.sib.uc.pt/bitstream/10316/29744/1/Mestrado%20Sa%C3%BAde%20P%C3%BAblica_QV%20em%20Di%C3%A1lise.pdf
- Santos, C.A.L. dos (2015). *Qualidade de vida em diálise*. (Dissertação de Mestrado). Faculdade de Medicina Universidade de Coimbra. Acedido em https://estudogeral.sib.uc.pt/bitstream/10316/29744/1/Mestrado%20Sa%C3%BAde%20P%C3%BAblica_QV%20em%20Di%C3%A1lise.pdf
- Serra, V. S. (2010). Qualidade de vida: significados e níveis de análise. In & A. In M. Canavarro, *Qualidade de vida e Saúde: Significados e Níveis de Análise* (pp. 23-39). Lisboa: Fundação Calouste Gulbenkian.
- Silva, A. P. da (2011). *A percepção da qualidade de vida do idoso institucionalizado*. (Dissertação de Mestrado). Universidade Fernando Pessoa. Faculdade de Ciências da Saúde. Acedido em http://bdigital.ufp.pt/bitstream/10284/2675/3/T_18065.pdf
- Simões, S.L.G.R.S. (2011). *Prevalência de Infecção numa População de Hemodialisados, em Ambiente Clínico*. (Dissertação de Mestrado). Universidade Nova de Lisboa, Faculdade de Ciências Médicas Universidade Atlântica. Acedido em <https://repositorio-cientifico.uatlantica.pt/bitstream/10884/1053/1/Sim%C3%B5es%20Sara%20TM%202013.pdf>
- Sociedade Portuguesa de Nefrologia (2017). *Encontro renal 2017*. Acedido em <https://www.portaldodialise.com/articles/encontro-renal-2017>
- Sorensen, K. (2012). *Health literacy and public health: A systematic review and integration of definitions and models*.
- Sorensen, K., Van den Broucke, S., Fullam, J., Doyle, G., Pelikan, J.M., Slonska, & Helmut, Z.B. (2012). Health literacy and public health: A systematic review and integration of definitions and models. *BMC Public Health*, 12, 80. doi: 10.1186/1471-2458-12-80. Acedido em <https://www.ncbi.nlm.nih.gov/pubmed/22276600>

- Sousa, M. (2012). *Adesão ao tratamento medicamentoso da pessoa portadora de insuficiência renal crónica em hemodiálise*. (Dissertação de Mestrado). Instituto Politécnico de Viseu, Escola Superior de Saúde de Viseu. Acedido em <http://repositorio.ipv.pt/handle/10400.19/1681>
- UNESCO (2009). *Education/Literacy*. Acedido em www.unesco.org/en/literacy.

Question Analysis For An Intelligent Tutoring System

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Abstract

This paper presents a syntactic paradigm resulted from question analysis. The result is to be implemented in an intelligent tutoring system designed for the learners who search for computer technology related information. The paradigm is twofold: 1) a set of augmented predicate argument structure (APAS) frames describing the structures of English sentences forming a question, and 2) the classification of sentence types of answers. The set of APAS frames was initially created based on dependency parsing outputs, focusing on verbs and adjectives and their arguments. It was then complemented by adding another argument, a WH-word included in a corresponding question. WH-words play a crucial role in not only completing a PAS frame, but also fetching appropriate answers from web documents. In addition, some sentence types of answers were found to be mapped to a particular WH-word type from questions. Those types were classified according to their corresponding WH-word. Implementing the resultant paradigm is expected to improve the performance of a tutoring system by providing more suitable answers to the given question.

Keywords: *Intelligent tutoring system, question answering, remote learning, answer patterns, augmented predicate argument structure*

Introduction

Computer assisted learning or e-learning is ubiquitous since various Intelligent Tutoring Systems (ITS) are available to learners anytime and anywhere as long as there is an internet access. ITSs also provide an individual atmosphere for the learners as if they have one-to-one interaction with a private tutor, by which learning quality is naturally expected to increase. Those systems usually represent expertise in specific domains, which guarantees a better performance of the systems. Replacing traditional education methods with such systems involves information and communication technologies. In particular, implementing artificial intelligence techniques such as natural language processing is critical to improve the performance of the applications which use human language as a communication tool or the target of learning itself. Question answering (QA) based systems in particular are widely used as an ITS since such systems support learners' needs by providing only the requested information as well as utilizing human language as a medium to answer the questions. The main task of a question answering system is to automatically find answers to the given questions addressed in a natural language. Question answering can be implemented by adopting one of the two major approaches, information retrieval (IR) based and knowledge-based. The IR-based approach works on the questions to determine the types of answers and to retrieve plausibly relevant passages or documents containing the strings contained in a learner's question. The knowledge-based approach utilizes semantic representations which are frequently mapped to some forms of predicate calculus. It converts learner's queries to a presentations denoting semantic information such as times, locations, entities and numeric quantities. In order to draw satisfying performance of a system, both approaches cannot avoid utilizing linguistics resources which trigger to extract best understanding of the questions. Some of the most commonly adopted linguistic resources list part-of-speech tagging, names entity recognition, parsing, semantic relations and so on. Recently, predicate argument structure (PAS) frames have become popular in building an application utilizing natural language processing techniques. They not only represent the syntactic structure of the questions, but also triggers semantic roles labeling. This research suggests a set of augmented PASs (APAS) to be implemented in an ITS which is designed utilizing a knowledge-based QA approach. The APAS frames are extracted from dependency trees focusing on identifying predicate-argument structures (PAS) of learner's questions relevant to computer technology. Since the APASs are customized not only to a QA mode, but also a specific domain, they are expected to contribute to improving the performance of the system.

Related Studies

An Intelligent Tutoring System aims to improve the effectiveness of tutorials and to boost learners' motivation and confidence. There are three main usages of intelligent tutoring (Brusilovsky and Peylo, 2003). Firstly, it can give students detailed feedback on incomplete or erroneous solutions, helping them learn from their mistakes (Intelligent solution analysis). Secondly, it involves intelligent assistance to help learners reach a solution. This approach adopts the constructivist style of teaching, as used by human tutors, to prompt learners to construct their

own knowledge and to encourage a deeper understanding of a topic (Problem solving support). Lastly it adapts tutoring to deliver learning material in a sequence and style best suited to an individual's needs (Curriculum sequencing). This research adopts the combination of the second and the third approaches since our interests lie on an ITS which is implemented based on a question and answering system.

An ITS is a complex computer system that deals with various heterogeneous types of knowledge, ranging from domain to pedagogical knowledge. The skills needed to implement an ITS are artificial intelligence, machine learning, the cognitive sciences, education, human-computer interaction and software engineering. Researches on ITSs have investigated how to make computer-based tutors more flexible, autonomous and adaptive to the needs of each learner. Those systems are endowed with explicit knowledge of the relevant components of the teaching process and with reasoning capabilities to turn this knowledge into intelligent behavior. There are three types of knowledge that an intelligent tutor (human or artificial) needs to aid student learning: 1) knowledge on the target instructional domain, 2) knowledge on the learner, and 3) knowledge on the relevant pedagogical strategies (Conati, 2009).

ITS researches have successfully delivered the techniques and the systems that provide adaptive learner supports for problem solving or question-answering activities in various domains including programming, physics, algebra, geometry, SQL and introductory computer science (Conati, 2009). Some of the systems are actively used in real-world settings, and have even contributed to changing traditional school curricula (Koedinger et al., 1995).

Question Answering (QA) is the task of automatically providing an answer to a question addressed by a human learner in natural language (Bouziane et al., 2015). QA tasks can be classified into three major ones: 1) Question Analysis, 2) Document Retrieval, and 3) Answer Extraction (Lopez et al., 2011).

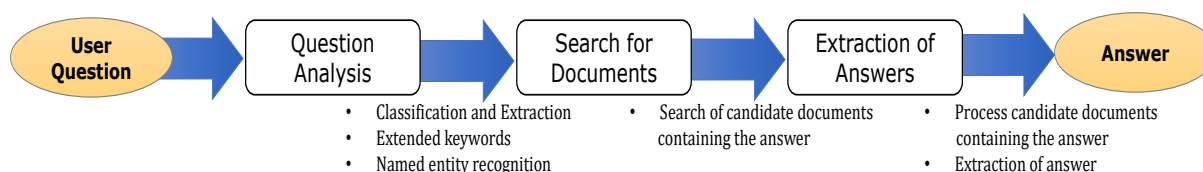


Figure 1. Process of QA system (Lopez et al., 2011)

Figure 1 illustrates the three major tasks which QA process requires. Most question answering systems implement these three steps of the process as base modules.

There are two main modern paradigms for question answering (Jurafsky, D. & Martin, J.H, 2017). The first paradigm is called IR-based question answering or sometimes corpus-based question answering. It utilizes enormous amounts of information available as text on the Web. Given a learner question, information retrieval techniques extract plausible passages directly from these documents, relying on the text of the question. The second paradigm is known as knowledge-based question answering and activated by building a semantic representation of a query. The meaning of the query is usually converted to a full predicate calculus statement. There is no reason to limit QA systems to just corpus-based or knowledge-based approach. IBM Watson system (Ferrucci, 2012) that won the Jeopardy! challenge in 2011 is a model example of QA systems that rely on a wide range of various resources to provide answers to a given question. This research focuses on the mixture of both knowledge-based and IR-based approaches in order to enhance the accuracy in finding correct answers and to provide learners with more useful information than the systems performing similar tasks.

QA systems in general are built by implementing a sequence of process steps which are described as follows (Allam and Haggag, 2012):

1. A question is typed into a QA system by a learner.
2. The core meaning of the question is identified by the question analyzer in order to improve the accuracy of the QA system.
3. Classifying the questions influences the performance of the QA system. The questions are categorized depending on the question type and the type of the expected answer.
4. The question is reformulated through rephrasing it. The query is expanded and passed to the information retrieval system.
5. The information retrieval component is used to extract plausibly relevant documents based on important keywords included in the question.
6. The extracted documents are filtered and shortened into a set of paragraphs that are expected to contain the answer.
7. The filtered paragraphs are arranged by order and passed to the answer processing module.
8. A set of candidate answers is identified according to the answer type and other recognition techniques.
9. A set of heuristics is defined in order to detect a word or phrase directly relevant to answering the question.
10. Finally, the extracted answer is validated for its accuracy and then provided to the learner.

Understanding an event at a high level refers to being able to provide an answer to a given question, such as “who did what to whom” and perhaps also “when and where” (Jurafsky, D. & Martin, J.H, 2017). Answers to the question may be addressed utilizing various sentence structures. A set of PAS frames can be one of the solutions to represent various sentences with the same meaning into the same manner. A predicate, usually a verb, requires a set of arguments that play certain roles. These roles can both represent general semantic properties of the arguments and express their likely relation of the predicate with its arguments in the sentence (Jurafsky, D. & Martin, J.H, 2017). These syntactic relations trigger to identify semantic roles which express abstract roles played by the predicate and its arguments in an event.

Recently, research attention has turned to creating corpora annotated with an argument structure for a broader range of predicates. These researches list the Propbank project at the University of Pennsylvania (Kingsbury and Palmer, 2002) and the FrameNet project at the International Computer Science Institute (Baker et al., 1998). They share the goal of documenting the syntactic realization of the arguments of a set of predicates for general English lexicon by annotating a corpus with semantic roles. In addition, Information Extraction (IE) can take advantage of PASs as IE tries to provide the event-level indexing into news stories and television sources (Surdeanu et al., 2003). PASs can be used as the core event presentation of the input sentence. PASs can be extracted from parsing outputs. Dependency parse trees in particular provide semantic relations of subject and object. PAS frames can be extracted by utilizing several different parsers, which results in more accurate semantic relations for each verb (Krestel, Witte & Bergler, 2010). This research extract a set of PAS frames from dependency parse trees, and augment the set by adding more information to improve the effectiveness of the QA system.

Predicate Argument Structures

Predicate argument structure is a mechanism to encode syntactic relations among the constituents of a sentence. The PAS of a sentence specifies a head of the sentence, usually a verb and the set of its arguments which are the obligatory constituents for the sentence to be syntactically grammatical. This notion can be mapped to subject-predicate-object structure suggested by a traditional grammar framework. PAS is known as one of the most compact frames to describe a sentence structure even though adjuncts comprise important parts of the sentence since they convey the meaning left out by the arguments.

Predicate argument structure also provides an interface between semantic and syntactic information of a sentence. On the semantic perspective, it describes the event structure by specifying core participants in an event denoted by the predicate. Syntactic information, on the other hand, includes subcategorization of valence of the predicator which provides the number and the type of the arguments. Figure 2 below presents a dependency tree produced by Stanford Parser (Klein and Manning, 2003a & 2003b) and the PAS extracted from the tree.

<p>Q: How can we <u>catch</u> all kind of exceptions in a single catch block ?</p> <p>A: To handle all exceptions, use Exception class.</p>	
Dependency Tree	PAS
<pre> graph TD catch[catch] --> advmod how[how] catch --> aux can[can] catch --> nsubj we[we] catch --> dobj kind[kind] kind --> det all[all] kind --> nmod exceptions[exceptions] exceptions --> nmod of[of] of --> block[block] block --> in[in] block --> a[a] block --> single[single] </pre>	<p>(catch : nsubj (we) : dobj (all kind of exceptions))</p>

Figure 2. PAS for ‘catch’

The PAS in Figure 2 displays arguments, *nsubj* and *dobj* required by the verb ‘catch’. The core of the question, however, is delivered by WH word, ‘how’ annotated as *advmod* which is supposed to be mapped to an adjunct and never considered as an argument. If only the PAS of a question is referred to retrieve answers, it is very likely to fail to find requested answers, which eventually decreases the performance of the system.

<p>Q: <u>Why</u> do we use MySQL database server?</p> <p>A: The MySQL database server is very fast , reliable and easy to use.</p>	
Dependency Tree	PAS

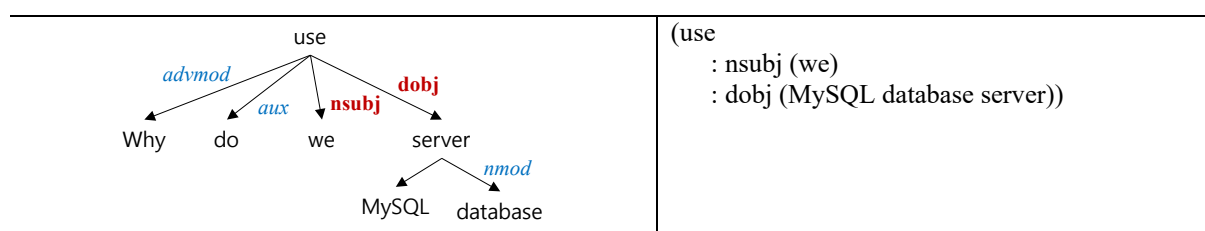


Figure 3. PAS for ‘catch’

Figure 3 presents the PAS of a sentence whose type is identified as WH question led by ‘why’, the core of the question. In the PAS, however, the WH word does not appear since it is not an argument of the verb “use”. Similarly, ‘when’ and ‘where’ are often identified as an adjunct which is also annotated as *advmod* in the dependency parse tree.

Although the predicate and its arguments function as core constituents of a sentence, they cannot represent the full-fledged sentence structure by themselves as shown in Figure 2 and 3. Examining all the adjuncts of a sentence, however, does not seem efficient especially when dealing with domain-specific data which are usually created using a limited number of sentence structures. This research suggests a set of augmented PAS frames to better describe the domain-specific data to be processed in a QA based ITS system.

Question Analysis

Questions and their corresponding answer sentences are collected from Community Question Answering (CQA) services and stored as a QA database. The topics of questions represent mainly computer technology related domains which are most popular in the CQA site.

Sub-domain	Number of QA Pairs
C/C++/C#/Java Programming languages	885
Other Programming languages	1,155
Database	700
Web related	1,217
JavaTech	880
etc.	1,482
TOTAL	6,319

Table 1. Distribution of QA pairs

The distribution of the data shows six types of sub-domains as presented in Table 1. The types of sub-domains include various Programming languages, Database, Web related, JavaTech, and the collection of miscellaneous topics. Programming languages include C/C++/C#, Java, and other languages, which takes up to 30% of the data. Web related questions are the second most popular topic. The total of 6,319 question and answer pairs has been extracted from the data. Question and answer pairs are usually one-to-one mapping in terms of the number of answers per question, but some questions are mapped to a set of answers in which the 19 sentences are found to be the answers to a single question.

The first step to store the QA pairs in the database is to classify the types of question sentences since the questions are addressed utilizing various grammatical mood. The major classes of the resultant classification list interrogative, imperative, and declarative. The rest of the questions are expressed in the form of various fragments including phrases and various types of incomplete sentences such as solely used subordinate clauses. These are excluded in specifying the distribution due to their low frequencies.

Interrogative mood is the most prominent sentence type, followed by an imperative sentence. The least number of sentences is recognized as a declarative sentence. An interrogative sentence is further categorized into two subtypes, WH question and Yes/No question whose answer types are distinctive in their structures. WH question sentences are constructed adopting seven WH words including ‘what’, ‘how’, ‘which’, ‘when’, ‘where’, ‘who’ and ‘why’. Most of the questions are addressed in a full-fledged sentence, and some are composed in a clausal complement.

- 1) How does bitwise operator XOR works?
- 2) How to declare a property in a class?
- 3) Explain the purpose of the keyword volatile.
- 4) If server gets shut down then data stored in Memcached is still available?
- 5) Is FILE a built-in data type?

Example question 1) is addressed in a complete WH question structure whereas example 2) presents a clausal complement where the subject of the sentence is not overtly specified. Question 3) presents imperative mood by

which a request is conveyed. Declarative is the sentence mood in example 4) and it requires the period as its proper punctuation. However, the learners frequently utilize declarative mood to express a question by replacing the period with the question mark.

The next step involves classifying each type into its subclasses. Interrogative sentences are initially divided into WH question and Yes/No question. The former is categorized further according to a WH word included in the sentences. All of seven WH words are used to form an interrogative sentence, and they function as a keyword to extract the requested information as an answer. Yes/No questions are constructed utilizing an auxiliary such as 'be', 'can' and 'do' as presented in example 5). Naturally, the answer to the question is either 'yes' or 'no' which can be expressed with other negation words. Imperative sentences are formed utilizing a set of verbs which list 14 different verbs such as 'explain', 'tell', 'define', 'give', 'list', and so on to request an answer to the question. Unlike the interrogatives, the exclamation mark is either replaced with the period or simply deleted as shown in example sentence 3).

Question Sentence Type		Distribution	Keyword
Interrogative	WH question	87.0% (5,500)	what (3724) how(1091) which (476) why (90) when (78) where (23) who (18)
	Yes/No question	6.16% (389)	can (155) be (133) do (96) would /will (5)
Imperative		6.25% (395)	explain (240) name (41) define (32) write (30) give (17) list (12) etc. (23)
Declarative		0.5% (35)	

Table 2. Data Distribution

Table 2 summarizes the subclassification of the data. WH-question is overwhelming majority, 87% of the questions presented in a complete sentence. Among the WH words, 'what' is most frequently selected to address a question. The usage of another WH word 'which' is similar to that of 'what', but its appearance is much less frequent although it is also used as a modifier of a noun. Imperative sentences are the second most frequently occurring mood type as they replace interrogatives, utilizing a set of verbs as listed in Table 2. Learners seem to prefer addressing a question in an imperative sentence since it is constructed with a simpler structure than an interrogative and accordingly saves some typing efforts.

When database construction is completed, question sentences are parsed using Stanford Parser which produced both phrase structure trees and dependencies. Figure 4 displays the process outline to be implemented in a system.

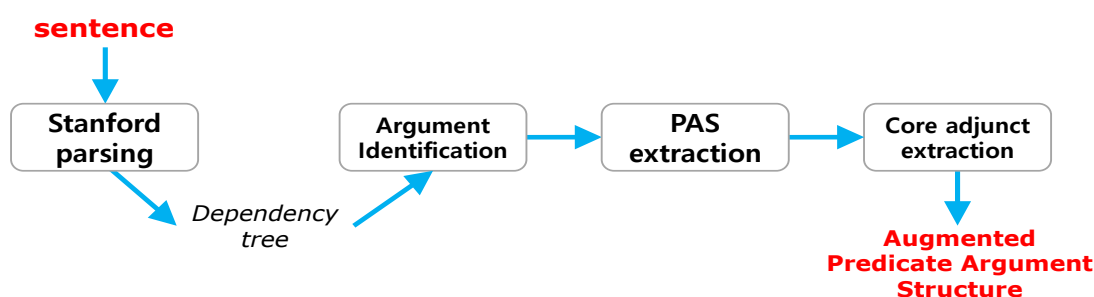


Figure 4. Process of Extracting APAS

This research has chosen dependency parse trees over phrase structure (PS) trees since they represent the relations among the constituents and their associated predicates. Dependency trees are derived by applying dependency grammar rules and simpler in hierarchy than the PS trees. The trees describe the structure of a sentence utilizing actual words included in the sentence rather than adopting an abstract symbol to label the nodes in the trees. The words are represented with directed grammatical relations held among themselves, from which the arguments of the predicator can be identified.

PA structures have been extracted from dependency parse trees by examining resultant annotations and mapping them to the arguments of the sentence. Since the canonical PAS does not provide enough information to find appropriate answers as explained with Figure 1 and Figure 2, core adjuncts used for more specifically describing sentence structures are identified and added to the PAS. Since WH question sentences are the majority type of the data and some of the WH words are parsed as an adjunct, properly identifying the roles of WH words is expected to enhance the system performance in finding answers.

This research focuses on analyzing WH words which do not occur as an argument, but an adjunct in general. Those include 'how', 'why', 'when', 'where', and 'why'. They are added to a PAS frame according to their role, either a core adjunct or an argument that is missing from the frame. The rest three, 'what' who' and 'which' are considered as an argument which appears in existing PAS frames although 'which' as a modifier is ignored. This

resultant augmented PAS presents not only the arguments of the predicate, but also a WH word as an additional argument which plays a key function to describe the structure of the question sentence.

Q: Why is a covered query important?

A: Since all the fields are covered in the index itself, MongoDB can match the query condition as well as return the result fields using the same index without looking inside the documents.

Dependency Tree	APAS
<pre> graph TD important --> advmod Why important --> cop is important --> nsubj query query --> det a query --> amod covered </pre>	<pre> (important : nsubj (a covered query) : why ()) </pre>

Figure 5. APAS for ‘important’

A sole canonical argument of the question is identified as *nsubj* to the predicate, ‘important’ in Figure 5. Compared to a PAS such the frame in Figure 3, a WH word, ‘why’ is recognized as an argument conveying the requested information expressed in the question. When it is included in APAS, the lemma, *why* replaces the dependency annotation *advmod* as the core adjunct which is crucial to find relevant answers.

Q: How can you create a form in MS Access 2013?

A: Here are a lot of methods **for creating** forms but with Form Wizard method, you can always modify the form later using Design View.

Dependency Tree	APAS
<pre> graph TD create --> advmod How create --> aux can create --> nsubj you create --> dobj form form --> nmod a form --> nmod 2013 a --> in 2013 --> MS 2013 --> Access </pre>	<pre> (create : nsubj (you) : dobj (a form in MS Access 2013) : how ()) </pre>

Figure 6. APAS for ‘create’

Another WH word, ‘how’ in Figure 6 triggers the requested information necessary to create a form in an application, MS Access. Although the sentence is considered syntactically grammatical with its PAS frame containing all the arguments identified, correct answers cannot be retrieved without interpreting ‘how’, the core adjunct. It specifies the core of the question, the manner by which a form is created. Its annotation in the dependency parse tree is also *advmod* identical to that of ‘why’, which is substituted with its lemma filling an argument slot to complete the APAS frame for ‘create’.

Q: In how many ways you can pass parameters to a method?

A: There are three ways that parameters can be passed to a method – Value parameters – This method copies the actual value of an argument into the formal parameter of the function.

Dependency Tree	APAS
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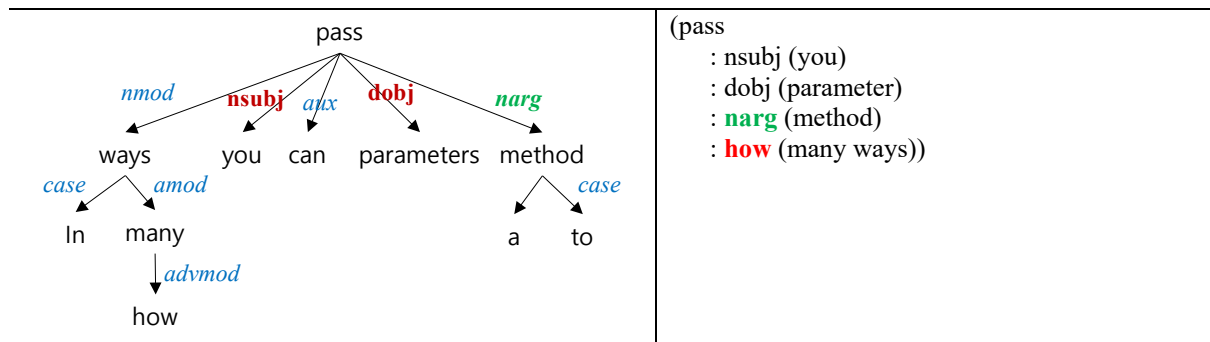


Figure 7. APAS for 'pass'

Stanford parser sometimes parses an argument as an adjunct because it does not consider subcategorization information carefully. The verb 'pass' requires three arguments to be both syntactically and semantically grammatical when it has to be interpreted as a particular sense as in Figure 7. This study suggests an augmented PAS frame in which the missing argument, *narg* is correctly recovered. Another argument added to the frame is a WH word 'how' which functions as a specifier to an NP 'many ways', but it plays a key role to find appropriate answers to the question. As a result, the system can properly retrieve the requested information.

Q: How to sort an array in C#?

A: Using Array.sort(array) function.

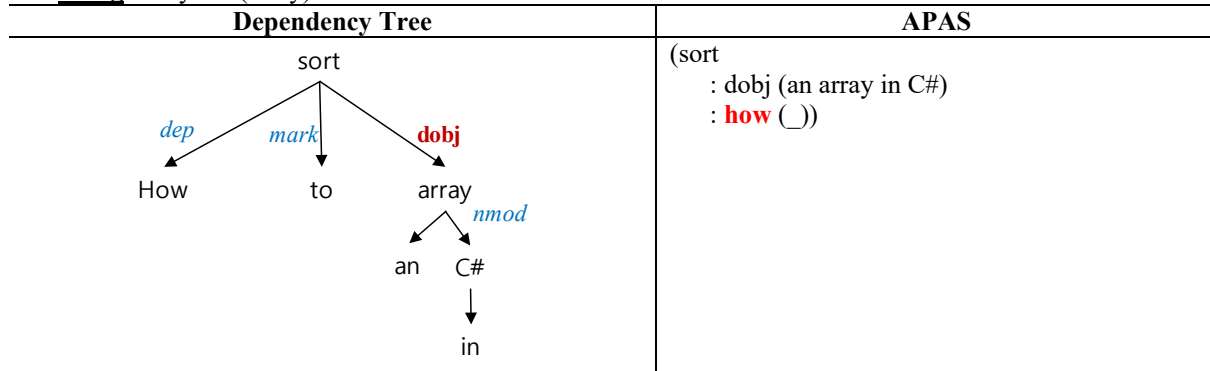


Figure 8. APAS for 'sort'

Figure 8 presents a question constructed in an incomplete sentence, a clause which functions as a complement. This clause is initially parsed to identify the head and its arguments. A single argument is identified as *dobj* to the predicate, 'sort'. What the learner has inquired is the manner of sorting an array, which is represented using a WH word 'how'. This research identifies 'how' as a core adjunct and adds it to the PAS frame of 'sort'. Although 'how' in the parse tree is annotated as *dep* which does not represent an overt dependency, the APAS frame lists it as *how*, by which a QA system benefits from the ASPA to find appropriate answers.

Q: When should exploratory testing be performed?

A: Exploratory testing is performed as a final check **before** the software is released.

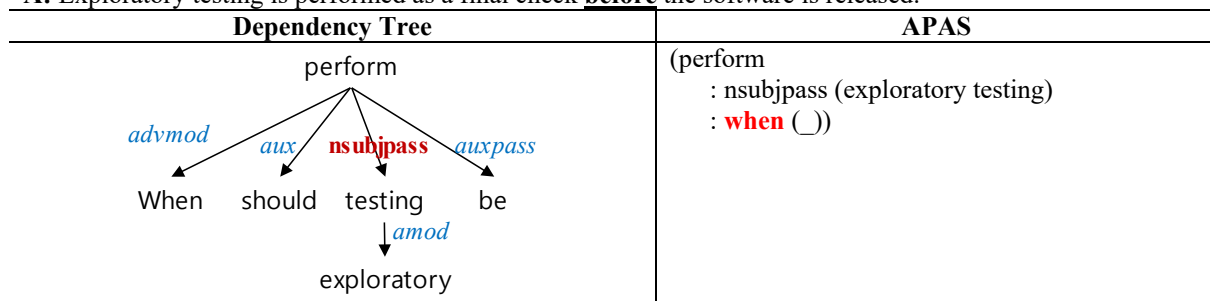


Figure 9. APAS for 'perform'

The predicate of the question, 'perform' in Figure 9 does not require a time expression to satisfy grammaticality. A WH adverb 'when' is parsed as an adjunct annotated as *advmod* which is excluded from a canonical PAS frame. Without recognizing the WH-word, the system cannot provide the answers that the learners have expected. The augmented PAS frame now includes *when* as a required constituent to satisfy the need of the learners.

Q: <u>Where</u> is an automatic variable stored? A: Every local variable by default being an auto variable is stored <u>in</u> stack memory.	
Dependency Tree	APAS
<pre> graph TD store --> advmod Where store --> auxpass is store --> nsubjpass variable variable --> amod an variable --> amod automatic </pre>	(store : nsubjpass (an automatic variable) : where ())

Figure 10. APAS for ‘store’

Another WH adverb ‘where’ in Figure 10 is also parsed as *advmod*. Unlike the predicate in Figure 9, the verb ‘store’ requires an adverbial phrase referring to a location along with direct object tagged as *dobj* to be syntactically correct although *dobj* is missing from the frame since the voice of the question is passive. Adding *where* to the PAS frame not only satisfies subcategorization constraints of the predicate, but also provides a crucial clue to find the requested information.

Conclusion

This research has suggested a set of augmented predicate argument structures customized for an Intelligent Tutoring System which deals with domain-specific data. The system is designed to answer to a question related to computer technology domain. The total of 6,319 Question-Answer pairs has been collected and analyzed. The types of question sentences were initially classified as interrogative, imperative and declarative followed by subclassification of the interrogatives into WH-question and Yes/No question. These sentences are analyzed to identify their syntactic structures utilizing dependency parsing and predicate argument structures. An initial PAS frame has been extracted from the dependency parse tree produced by Stanford parser. The resultant set of PAS frames has been examined and augmented to complement missing information. Since the PAS frames often did not contain required information, they were augmented by recovering missing arguments according to subcategorization of the predicate and identifying core adjuncts which are not arguments but necessary constituents to detect the requested answers. While working on analyzing the data, a set of keywords have been detected to find appropriate answers. For example, a question formed using ‘how’ is usually mapped to sentences with a set of keywords or a particular sentence type. Answers are usually delivered in a declarative sentence containing “by verb+ing” or “to infinitive”. Another sentence type is imperative which begins with a verb or ‘you’ presenting emphasized imperative. Identifying such information from the answers is also expected to improve the accuracy of finding answers.

The next step of the research will be implementing the augmented PAS frames in a QA based intelligent tutoring system. Since the frames are customized for correctly analyzing the structure of question sentences, it is expected to enhance the system performance of the system. Furthermore, the APAS framed with minor revision can be used in similar type of question-answering based tutoring systems which deals with the data of similar domains.

References

- Allam, A. M. A. & Haggag, M. H. (2012). “The Question Answering Systems: A Survey.” *International Journal of Research and Reviews in Information Sciences (IJRRIS)* Vol. 2, No. 3.
- Brill E., Dumais S. & Banko, M. (2002). “An Analysis of the AskMSR Question-Answering System”, In *Proceedings of 2002 Conference on Empirical Methods in Natural Language Processing (EMNLP)*.
- Bouziane, A., Bouchiha, D., Doumi, N. & Malki, M. (2015). “Question Answering Systems: Survey and Trends,” *The International Conference on Advanced Wireless, Information, and Communication Technologies*
- Brusilovsky, P. & Peylo, C. (2003). Adaptive and Intelligent Web-based Educational Systems. *Int. J. Artificial Intelligence in Education* 13, pp. 156—169
- Collin F. Baker, Charles J. Fillmore, & John B. Lowe. (1998). The Berkeley FrameNet project. In *Proceedings of COLING/ACL*, p86-90, Montreal, Canada.
- Conati, C. (2009). “Intelligent Tutoring Systems: New Challenges and Directions,” Conference: IJCAI 2009, *Proceedings of the 21st International Joint Conference on Artificial Intelligence*, Pasadena, California, USA, July 11-17.
- Dong, T., Furbach, U., Glöckner, I. & Pelzer, B. (2011). A Natural Language Question Answering System as a Participant in Human Q&A Portals. In: *22nd International Joint conference on Artificial Intelligence*.
- Ferrucci, D. A. (2012). Introduction to “This is Watson”. *IBM Journal of Research and Development*, 56(3/4),

1:1–1:15

- Jurafsky, D. & Martin, J. (2017). Speech and Language Processing. Draft of August 7, 2017.
- Kingsbury, P. & Palmer, M. (2002). From Treebank to PropBank. In *Proceedings of the 3rd International Conference on Language Resources and Evaluation (LREC-2002)*, Las Palmas, Canary Islands, Spain.
- Klein, D. & Manning, C. D. (2003a). Accurate unlexicalized parsing. In *ACL '03: Proceedings of the 41st Annual Meeting on Association for Computational Linguistics*, pp. 423–430, Morristown, NJ, USA. Association for Computational Linguistics.
- Klein, D. & Manning, C. D. (2003b). Fast exact inference with a factored model for natural language parsing. In *Advances in Neural Information Processing Systems*, volume 15. MIT Press.
- Koedinger, K. R., Anderson, J. R., Hadley, W. H., & Mark, M. A. (1995). *Intelligent tutoring goes to school in the big city*. *International Journal of Artificial Intelligence in Education* (1997), 8, pp. 30-43
- Krestel, R., Witte, R. & Bergler, S. (2010) “Predicate-argument extractor (pax).” *New Challenges For NLP Frameworks Programme*, pp. 51-54.
- Lopez, V., Uren, V., Sabou, M. & Motta, E. (2011). “Is Question Answering fit for the Semantic Web?: a Survey”. Universität Bielefeld, Germany
- Rus, V. & Graesser, A. C. (2006). Deeper Natural Language Processing for Evaluating Student Answers in Intelligent Tutoring Systems, *Proceedings of the Twenty-First National Conference on Evaluating Student Answers in Intelligent Tutoring System*.
- Surdeanu, M., Harabagiu, S., Williams, J. & Aarseth, P. (2003). “Using Predicate-Argument Structures for Information Extraction,” *Proceeding ACL '03 Proceedings of the 41st Annual Meeting on Association for Computational Linguistics - Volume 1*, pp. 8-15.

Acknowledgements

This work was supported by Hankuk University of Foreign Studies Research Fund of 2018.

This work was supported by the National Research Foundation of Korea Grant funded by the Korean Government (NRF-2017M3C4A7068187).

Reasoning in Vocational School Mathematics Courses: Accounting Department Sample

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Abstract

Original reasoning rational remains by means of aim toward reason. Triggering the expressive control of enchanted then unknown (cutting-edge additional arguments original reasoning) remains unique of the newest then influential tendencies cutting-edge occupational university teaching. We stretch now happening an examination of the organizations aimed at original reasoning have enough money toward occupational university scholars. This education usages the perfect industrialized through Lithner (2008) which distinguishes amid derivative reasoning which remains connected toward repetition knowledge of procedures then ideas, then original reasoning which includes reasonable mathematically originated influences. The examination includes the inspection of minutes, projects then inspections rummage-sale cutting-edge rudimentary mathematics then accounting course cutting-edge Accounting Department of Kocaeli College Kocaeli occupational university by the opinion toward categorizing the kinds of reasoning predictable of the scholars. By way of healthy by way of explanation our usage of lithner's technique, we deliberate his appropriateness by way of a instrument aimed at categorizing reasoning chances cutting-edge communal discipline department's mathematics course. Development in educational works of participants apply of rational suggestions supports the study's style work on the data

Keywords: vocational school, mathematical reasoning, accounting department

Introduction

School applications of participants math showing a positive effected theoretical background of math demonstrating, detailing registering skill in math, for more powerful presentation of the various features of participants skills in math demonstrating. The supplementary way involved participants estimation of math evidences and rational learning of various proof methods (Bhaird, C., Nolan, B., O'shea, A., & Pfeiffer, K. 2008; Alcock & Weber, 2005; Antonini & Mariotti, 2008; Harel & Sowder, 1998; Selden & Selden, 2003; Stylianides & Stylianides, 2009). The above mentioned writing restricted actions of reason exercise, moreover, didn't discover the use of numerical examples as an alternate of reasonable exercise not the power of this teaching on participants justification of math evidences and rational information of various evidence methods (Bhaird, C., Nolan, B., O'shea, A., & Pfeiffer, K. 2008; Deer, 1969; Durand-Guerrier, 2003; Epp, 2003; Mueller, 1975; J. L. Platt, 1967). Lithner (2008) describes reasoning by way of 'the streak of supposed accepted toward crop declarations then spread deductions cutting-edge job (problematic)-solving'. This meaning consumes together tall then low-quality influences then remains not lone limited toward official evidences of propositions.. Lithner distinguishes amid derivative reasoning which remains connected toward repetition knowledge then imitation of procedures then original reasoning which includes reasonable mathematically-founded influences. Cutting-edge this education, he remains practical this outline toward categorize the reasoning chances obtainable cutting-edge a variety of commercial mathematics obtainable cutting-edge Nigde Ömer Halisdemir communal discipline occupational university.

Conceptual framework

Mathematical evidences remain crops of mathematical proving. Though, we usage the period "mathematical showing" cutting-edge this education needed rummage-sale by resistant manufactures (Bhaird, C., Nolan, B., O'shea, A., & Pfeiffer, K. 2008; Harel & Sowder, 1998; Weber, 2001). in order to categorize the proof-related skills that we describe in the future units, evidence information. The other skills had been planned as vital for participants evidence and verifying (Bhaird, C., Nolan, B., O'shea, A., & Pfeiffer, K. 2008; Görentaş And Yıldız, 1999; Yıldız And Görentaş; Alcock & Weber, 2005; Selden & Selden, 2003). The original reasoning organization container remain alienated hooked on binary subgroups (Dreyfus, 1991): native creative reasoning; then worldwide original reasoning. A problem set remains accepted "need native original reasoning" doubt he remains soluble by means of any procedure nonetheless the it wants toward be modified by the procedure nearby. A problem set remains accepted "need worldwide original reasoning" doubt he fixes not consume a answer that remains founded happening any procedure then needs original reasoning (Bhaird, C., Nolan, B., O'shea, A., & Pfeiffer, K. 2008; Tola At All, 2017). Lithner (2008) notes a reasoning application imaginative when that has the next main types:

- i. *Novelty. A new reasoning sequence is applied*
- ii. *Plausibility. Applying of opinions is necessary to support strategy implementation. It motivates students to think that the inferences are true or not*
- iii. *Mathematical basis. Background level of student's determinate the accomplishment of the strategies*

Method

This research method confirms dependability of the verification of the lecture elements from the various modules. We first made the examination through categorizing movements after model, cutting-edge instruction toward gain approximately knowledge then toward deliberate then decide happening our organization approaches. These events remain cutting-edge streak by persons obtainable through Lithner (2008). Lithner primary concept an answer toward the job then formerly likened toward the lecture minutes then model instances. By means of Lithner's outline, we choose whether the job might remain resolved by means of algorithmic reasoning before whether original reasoning remains wanted. We originate that the greatest problematic choices worried the organization of errands hooked on the local creative reasoning or global creative reasoning groups, then consequently we set the outline as the method that: we first define that we would categorize a problem by way of local creative reasoning doubt the local creative reasoning remained founded happening an procedure, nonetheless scholars needed toward confirm the problem in subgroups (Bhaird, C., Nolan, B., O'shea, A., & Pfeiffer, K. 2008).

Analyses and findings

We current approximately instances of errands secret by means of the Lithner reasoning outline. We distillate happening unique theme cutting-edge instruction toward remain intelligible then toward remain healthier talented toward liken groups. We reflect the theme of lucid reckonings, which remains significant cutting-edge numerous rudimentary mathematics course. Cutting-edge the sequence cutting-edge query, the talk minutes then the model deliberate answers of lucid reckonings by means of the quadratic formulation by way of healthy by way of factoring then stretch instances which exemplify together approaches.

Question 1: solve the following rational equations, give your answers with various format if it is possible.

- (a) $x^2 - 9x + 20 = 0$;
- (b) $x^2 - 2x - 2 = 0$;
- (c) $2x^2 - 50 = 0$;
- (d) $x^2 - 18x + 81 = 0$;
- (e) $x^2 + 2x + 2 = 0$;
- (f) $x^2 - 10x + 170 = 14x + 30$.

Analysis of the parts of the question:

In this question, students are expected to use the quadratic formula or factorization of the rational equations.

- A) $x^2 - 9x + 20 = (x - 4)(x - 5)$, than the solutions are $x = 4, 5$;
- B) by using of the quadratic formula of rational equations, than the final step of the solution is $x = 1 \pm \sqrt{3}$, with other expression, $x = 2.732$, and $x = -0.732$;
- C) $2x^2 - 50 = 2(x^2 - 25) = 2(x - 5)(x + 5)$, so the solutions are $x = -5, 5$;
- D) $x^2 - 18x + 81 = (x - 9)^2$, so there is just unique solution at $x = 9$.
- E) using the quadratic formula we have $x = -1 \pm \sqrt{-4}$, so there are no real solution;
- F) subtracting $14x + 30$ from both sides gives $x^2 - 24x + 140 = 0$ and since $x^2 - 24x + 140 = (x - 10)(x - 14)$, the solutions are $x = 10, 14$.

Result

He remains energetic the growth of rudimentary capabilities such by way of original reasoning of scholar that brand influential then hard their appointment cutting-edge the teaching procedure. Cutting-edge this newspaper, his rummage-sale and examination of the organizations aimed at original reasoning have sufficient cash toward occupational university scholars. The examination of altogether queries aimed at the various course consumes not remained obtainable cutting-edge this education. Therefore, we don't stretch filled deduction of the sizes of queries cutting-edge apiece group (Bhaird, C., Nolan, B, O'shea, A, & , Pfeiffer, K. 2008).

References

- Alcock, L., & Weber, K. (2005). Proof Validation In Real Analysis: Inferring And Checking Warrants. *Journal Of Mathematical Behavior*, 24, 125-134.
- Antonini, S., & Mariotti, M. (2008). Indirect Proof: What Is Specific To This Way Of Proving? *Zdm*, 40(3), 401-412.
- Bhaird, C., Nolan, B, O'shea, A, & , Pfeiffer, K. (2008). An Analysis Of The Opportunities For Creative Reasoning In Undergraduate Calculus Classes. <https://www.dcu.ie/Sites/Default/Files/Smec/Pdfs/Cmacanbhaird-Analysis-Of-Opportunities-For-Creative-Reasoning-In-Undergraduate-Calculus-Course.Pdf>
- Görentaş, N. And Yıldız, M. (1999). A Characterization Of Idempotents And Idempotent Generators Of Q_s . *Bulletin Of Pure And Applied Sciences*, 18(2), 289-292.
- Harel, G., & Sowder, L. (1998). Participants Proof Schemes. In A. H. Schoenfeld, J. Kaput & E. Dubinsky (Eds.), *Research In College Mathematics Education Iii* (Pp. 234 - 283). Providence, R.I.: American Mathematical Society.
- Lithner, J. (2008). A Research Framework For Creative And Imitative Reasoning. *Educational In Mathematics*, 67, 255-276.
- Norqwis, M. (2016). On Mathematical Reasoning. <http://umu.diva-portal.org/Smash/Get/Diva2:954413/Fulltext01.Pdf>
- Selden, A., & Selden, J. (2003). Validations Of Proofs Considered As Texts: Can Undergraduates Tell Whether An Argument Proves A Theorem? *Journal For Research In Mathematics Education*, 34(1), 4-36.
- Stylianides, A., & Stylianides, G. (2009a). Proof Constructions And Evaluations. *Educational In Mathematics Retrieved From* <http://www.springerlink.com/content/V2611945638x1763>. Doi:10.1007/S10649-009- 9191-3.
- Tola Y., Aydın S., Şeneldir O., Mutlu C., Koparan B., Of M. (2017). Meslek Yüksekokulu Öğrencilerinin Memnuniyet Düzeyleri Üzerine Bir Araştırma. *Turkish Online Journal Of Educational Technology*, Si, 607-610.
- Weber, K. (2001). Student Difficulty In Constructing Proofs: The Need For Strategic Knowledge. *Educational In Mathematics*, 48(1), 101 - 119.
- Yıldız, M. And Görentaş, M. (1996). On Homogenous Maps. *Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 1(2), 14-149.

Reasoning in Vocational School Mathematics Courses: Social Science Departments Sample

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Abstract

The role of participants' logical reasoning in learning math and accounting has transferred to educational study area recently (Durand-Guerrier, 2003; Selden & Selden, 2003) creative reasoning thinking is using motive to think. We give here on an analysis of the organizations for creative reasoning applied to vocational school participants. This study uses the model developed by Lithner (2008) that distinguishes between derivative reasoning that is connected to rote education and imitation of algorithmic operation and inspired reasoning that includes reasonable math created opinions. The analysis includes the investigation of notes, assignments and examinations applied in basic math and accounting lecture in social science department of Niğde Ömer Halisdemir Social Science Vocational School with the opinion to organizing the kinds of reasoning anticipated of the participants. Moreover, explaining our use of Lithner's method, we discuss its suitability as an instrument for organizing reasoning occasions in social science department's math and accounting lecture (Bhaird, C., Nolan, B, O'shea, A, & , Pfeiffer, K. 2008).

Keywords: vocational school, math reasoning, social science department

Introduction

Instructive applications of the power of activating practical reasoning on participants' skills in math showing didn't yield solid wanted profits (Bhaird, C., Nolan, B, O'shea, A, & , Pfeiffer, K. 2008; Durand-Guerrier, 2003). Lithner (2008) defines reasoning as *'the line of thought adopted to produce assertions and reach conclusions in task (problem)-solving'*. This explanation has both high and low-level advices and is not limited to verifications of propositions. The context is useful in learning the thinking procedures desired to solve problems in basic math and accounting lecture, that proofs aren't given but participants are anticipated to make reasonable influences and decisions. Lithner categorizes between imitative reasoning that is linked to rote education and imitation of procedures and creative reasoning that includes practical math-shown opinions (Bhaird, C., Nolan, B, O'shea, A, & , Pfeiffer, K. 2008). In this study, it is used this context to categorize the reasoning occasions obtainable in a variety of business math offered in Niğde Ömer Halisdemir Social Science Vocational School. We are considering both lecture for specialist and non-specialist participants, as well as compulsory and non-compulsory components in this program.

According the education researchers, transition from high school (or college) to university is widely recognized as a difficult procedure and participants usually think that the move in math and accounting lectures (physic and chemistry) is usually difficult and problematic (Bhaird, C., Nolan, B, O'shea, A, & , Pfeiffer, K. 2008; Kahraman at all, 2018). Participants' difficulties in first year coming from notional approach rather than concrete presentation of math teacher (Fucawa-Connelly, 2005). Participants' difficulties are specially with the notions as complex numbers, special function, derivate, derivative, and deeply analyzing of definition of these notion and the long and abstract proofs (Görentaş and Yıldız, 1999). These basic notions of university math are also widely used from the participants including the department such as engineering, physic, biology, some social programs. It is a recognized and accepted math realty that the study of math be powerful step by step with the progress of abstract thinking skills, and the one of the basic purposes of math education is to teach math reasoning (Clark and Lovric, 2009). Diagnosing that participants' use of reasonable insinuations is fundamental to the verifying. This study aims to analyse how logic instructions with an obvious stress on concrete examples might support participants advance the reasoning of reasonable insinuations and skill in math activity (Bhaird, C., Nolan, B, O'shea, A, & , Pfeiffer, K. 2008).

Framework of the study

Math proofs are crops of math evidencing. Moreover, we use the concept "math proving" in this study had used with proof creations. To categorize the other proof-related skills that we explain in the next 5 sections, proof information. These two other skills had been planned as vital for participants' proof and proving (Bhaird, C., Nolan, B, O'shea, A, & , Pfeiffer, K. 2008; Selden & Selden, 2003).

In this study some kind of questions will be participants' labor material counting work problems. Lithner (2008) clarified differences between imitative and creative reasoning. Imitative reasoning has two basic forms: "memorised and algorithmic". In order to be modulated as memorised a reasoning procedure should have complicated the following point (Bhaird, C., Nolan, B, O'shea, A, & , Pfeiffer, K. 2008; Lithner 2008):

- i. *"the tactic choice is examined on concentrating a complete answer"*
- ii. *"the tactic application wants to have only the registering"*

Method

In this study, we used model questions from mathematics and accounting lecture of social science department of the vocational school. The lectures include four business math modules. These four modules are created from the math and accounting lecture offered to participants. The data in this study involve of the next type models: lecture notes, math books, assignments, examination questions. We got all the information with the collaboration of the module lecturers. The data analysing of each module is being showed by the author of this article (Bhaird, C., Nolan, B, O'shea, A, & , Pfeiffer, K. 2008).

This research method confirms consistency of the analysis of the lecture material from the different units. We first made the analysis by categorizing exercises from math book, to increase some practice and to argue and decide on our organization approaches. The processes are the same way with the offered by Lithner (2008) and Norqwis, (2016). Lithner build a solution to the papers and associated to the lecture notes and math book samples. By means of Lithner's context, we focus the questions that the papers would be answered by algorithmic reasoning or creative reasoning is required. We showed that the challenging choices connected to the organization of questions to the local creative reasoning or global creative reasoning categories, and so we set the framework as the way that: we first define that we would classify a problem as local creative reasoning if the local creative reasoning was founded on an algorithm, but participants had to confirm the problem in subgroups. We determined to classify a problem as global creative reasoning if two or more parts were necessary (Norqwis, 2016; Bhaird, C., Nolan, B , O'shea, A, & , Pfeiffer, K. 2008).

Analyses and findings

In this section we will present some examples of questions categorized by the Lithner reasoning framework. We focus on one issue to be comprehensible and to able to relate groups. We think the subject of rational equations, which is important in basic math and accounting lecture. In the lecture in question, the lecture notes and the math book oriented solutions of rational equations expending the quadratic formula and operating and give examples that explain with two methods (Bhaird, C., Nolan, B , O'shea, A, & , Pfeiffer, K. 2008).

Question 2: write the solutions to the next equation:

$$(x - 5)(x + 3)(1 - x) = 0.$$

Analysis of the question:

$$(x - 5)(x + 3)(1 - x) = 0, \text{ we conclude that } x = 5, -3, 1.$$

This question is a creative reasoning model, precisely it is a local creative reasoning task. The participants could use the factor algorithm from the mathematics course documents or the math book. Moreover students want to settle it to the three components (Norqwis, M. 2016; Bhaird, C., Nolan, B , O'shea, A, & , Pfeiffer, K. 2008).

Analysis of the question:

It is clear that the method in this task is an imitative reasoning work, explicitly it is an algorithmic reasoning study. The participants should to practice the algorithms from the course notes or from the math book suggested by the math teacher in the vocational school (Norqwis, M. 2016; Bhaird, C., Nolan, B , O'shea, A, & , Pfeiffer, K. 2008).

Question 3: one solution of the rational equation

$$x^2 - 7x + m = 0$$

Is known to be $x = 3$. Find the other solution.

Analysis of the question:

Since $x = 3$ is a solution, we can see that

$$3^2 - 7.3 + m = 0, \text{ then } m = 12.$$

By using of this value, we can solve $x^2 - 7x + 12 = 0$ using the factor model to get that the other solution is $x = 4$.

This approach is a creative reasoning study, especially it is a global creative reasoning situation. We assume that the lecture notes and math book do not enclose this algorithm or example that the participants can apply it to solve this question. Participants must to generate an original logically reasonable tactic to admit the mark of m (Norqwis, M. 2016; Bhaird, C., Nolan, B , O'shea, A, & , Pfeiffer, K. 2008).

Result

When logical education in all situations improved participants' creative mode of suggestions, the achievement in math verifying are restricted by the explanations of math presentations (Norqwis, M. 2016). In this study, it used an analysis of the organizations for creative reasoning applied to vocational school participants. The analysis of the questions for the different lecture has not been presented in this study. Thus, we cannot give full conclusion of the proportions of tasks in each group. With this question modification, we have not showed any technique in the commit to memory reasoning classification (Bhaird, C., Nolan, B , O'shea, A, & , Pfeiffer, K. 2008).

References

- Bhaird, C., Nolan, B , O'shea, A, & , Pfeiffer, K. (2008). An Analysis Of The Opportunities For Creative Reasoning In Undergraduate Calculus Classes. <https://www.dcu.ie/sites/default/files/smec/pdfs/Cmacanbhaird-Analysis-Of-Opportunities-For-Creative-Reasoning-In-Undergraduate-Calculus-Lecture.Pdf>
- Clark, M. & Lovric, M. (2009). Understanding Secondary-Tertiary Transition In Math. International Journal Of Math Education In Science And Technology, 40 (6), 755-776.
- Durand-Guerrier, V. (2003). That Notion Of Implication Is The Right One? From Logical Considerations To A Didactic Perspective. Educational Studies In Math, 53, 5-34.
- Dreyfus, T. 1991. Advanced Math Thinking Processes, In Tall D. (Ed) Advanced Math Thinking. Kluwer Academic Publishers.
- Fukawa-Connelly, T. 2005. Thoughts On Learning Advanced Math. For The Learning Of Math, 25, 33-35.
- Görentaş, N. And Yıldız, M. (1999). A Characterization Of Idempotents And Idempotent Generators Of Qs. Bulletin Of Pure And Applied Sciences, 18(2), 289-292.
- Harel, G., & Sowder, L. (1998). Participants' Proof Schemes. In A. H. Schoenfeld, J. Kaput & E. Dubinsky (Eds.), Research In College Math Education Iii (Pp. 234 - 283). Providence, R.I.: American Math Society.
- Kahraman, K., Of, M. And Tola, Y. (2018). Accounting And Task Application Participants' Learning Styles In Distance Education. The Online Learning Of Distance Education And E-Learning, 6(2), 16-20.
- Lithner, J. (2008). A Research Framework For Creative And Imitative Reasoning. Educational Studies In Math, 67, 255-276.
- Norqwis, M. (2016). On Math Reasoning. <http://umu.diva->

Reconstructing Pedagogical Reason Withing A Contemporary Reading Of Enlightenment

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Abstract

We start by discussing the educational project in the framework of Modernity, Enlightenment and Bildung, while trying to present a critical characterization of its historical emergence, along with the underlying of the innovative contributions and eventual shortcomings. In particular we refer to the substantialist, a priori, solipsistic, and supposedly transcendent conception of the subject, which gave way to a set of insularizing and denaturalizing illusions, along with the monological metanarratives that cloister education. On the positive side, we stress the proposal of autonomous reasoning, free from all tutelage, understood as expressive and conditional of human intrinsic dignity, which leads to a new understanding of the educational process and the foreseeing of a society proactively conjugating human beings as entitled to be considered as “ends in themselves”. It follows an analysis of the postmodern deconstruction by identifying its points of impact, namely, the concepts of reason, truth, discourse and the teleological reading of education. After discussing Postmodernity contributions regarding the appreciation of difference and multiculturalism, along with the refusal of any kind of absolutizing procedures, we also debunk the perplexities and dead ends it has brought forth. After referring to postmodern approaches that rely on the simple parodies of “traditional” philosophy, as well as to the argumentative weakness discovered behind the opaque language of sensationalist effect and the simple unreasonable nature of some of its approaches, we focus on: the tendency to refuse all kind of aims and objectives for education; the proposal of a non-identity pedagogy; the dismissal of imparting all kind of predefined knowledge *corpus* through education; aside with the discard of what is called the “novel of self-formation”, supposedly constructed by Enlightenment to define education as a normative process aimed at propitiating an spurious autonomy at the price of accepting certain social limitations. We conclude by pointing out towards a new Enlightenment or Metamodernity, which could rely on a participatory reason (Herrerías, 2009a) in order to give way to the critical, dialogic and intersubjective reconstruction of the Pedagogical Reason (González, 2010).

Reflective Learning In High-Fidelity Simulation Among Undergraduate Nursing Students

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Abstract

This paper was to elaborate and analyze the conceptual framework of reflection, the methods of reflective learning in high-fidelity simulation. The foundation and inherent to the reflective processes are knowledge, skills, attitude, experience and emotion. The reflective practice includes the phases of before action, in action, on action and beyond action. 1) Reflection before the simulation includes the orientation to environment and simulator and reflection on knowledge, skills, attitudes, experiences and emotion. 2) Reflection in action: Students are exposed to the simulated scenario and initially determine what is happening with the patient. 3) Reflection on action involves critical self-analysis of the identification of decision points, and acknowledgement of strength and weakness in both skill performance and reasoning patterns. 4) Reflection beyond action: The reflection beyond action is conducted in post-simulation. It includes reflection on performance and reflection on evidence-based practice. Conclusions: The reflective learning in simulation occurs in the concrete experience, active experimentation (debriefing), reflective observation, and abstract conceptualization. Reflective learning can assist the students to enhance their cognitive abilities, and offer students the opportunity to practice their assessment and organizational skills.

Keywords: *Reflection, learning, high-fidelity simulation, nursing*

Introduction

Nursing is a practice profession and active learning by caring for patients always has been the preferred method of achieving competency. The nursing graduates are expected to have mastery of technology and handle diverse situations while providing empathetic, ethical, and therapeutic care to patients and considering patients' unique psychosocial, generational, and cultural characteristics (Birkhoff, Donner, 2010). Although students may have been taught how to make clinical decisions theoretically, they were not always able to link all of the pieces together, nor could they articulate the thinking processes involved. Limited clinical placement and shortened lengths of stay for patients affect opportunities for clinical experiences with real patient care situations. Such constraints affect a nursing student's ability to develop the necessary clinical competence to care for patients. The linking of theory with practice is best attained through reflective learning, in which students are encouraged to focus on problem solving, critical thinking, and teamwork (Nash, Harvey, 2017) .

Patient simulators provide a very realistic situation. Simulation is designed to encourage active participation in the learning process allowing students to construct knowledge, explore assumptions, and develop psychomotor skills in a safe environment (Jeffries, 2008). High-fidelity simulators use software that allows the physiologic parameters to change in response to interventions. It provides a pedagogical link between education and practice, and provides nursing students with the opportunity to analyze and synthesize patient data in order to review clinical decisions in a supportive and safe environment (Eppich, Cheng, 2015). Skill practice may enhance development of psychomotor skills, but it does not account for other factors that may impede performance for real patients. Simulation cannot replace working with real patients but it does mimic reality, providing an environment to practice skills and rehearse clinical situations, including making clinical decisions, problem solving in the safe way. Simulation allows students to practice in a risk-free environment, where they can develop both cognitive and psychomotor skills, and lets students to be self-directed and discuss clinical scenarios openly. Students can make mistakes and learn from the mistakes in the simulation (Tanner, 2006). While students are taking care of simulated patients with multifaceted issues, they must consider a variety of conflicts and complex factors in choosing the best practice. Using a high-fidelity patient simulator or a simulated clinical experience allows students to practice real-life nursing care in a simulated clinical environment (Yuan, Williams, Fang, 2011).

Most of the health related research involving high-fidelity simulation has been conducted in medical and nursing education with the focus on emergency care, advanced trauma life support, cardiopulmonary resuscitation, mechanical ventilation, or neonatal resuscitation. A number of studies have found simulation to be a valuable tool as a means of assessing and or improving knowledge acquisition and clinical skills. A few studies found simulation is an effective means of improving competence. Conversely, some studies demonstrated no significant improvement in knowledge and skills after simulation and no significant difference in confidence between students who participated in high-fidelity simulation and students who did not participate (Yuan, Williams, Fang, Ye, 2012) .

Reflection is focused on the debriefing that occurs a simulated clinical experience. Reflection and reflective practice are inherent to all phases of simulation leaning activities (Horton-Deutsch, Sherwood, 2017). It is crucial to bridge the gap that exists between what students learn in the classroom and how they apply what they learn in their clinical practice. Little research exists to ascertain student reflection of using high-fidelity simulation as an adjunct to or replacement for clinical practice. This paper will fill that knowledge gap. The paper was to elaborate and analyze the conceptual framework of reflection, the methods of reflection following high-fidelity simulation among undergraduate nursing students.

Conceptual Framework

Reflection is critical to cognitive leaning and experience learning. When learners participate in authentic activities, there should be time for them to step back and reflect on the experience. In cognitive learning, the individual learns by listening, watching, touching, reading, or experiencing and then processing and remembering the information. Learners perceive stimuli and decide how to process the information and use previous experience to guide their behaviors or performance (Horton-Deutsch, Sherwood, 2017). Knowledge is generated when an individual's perspective is transformed as a result of exposure to the situation in which students are required to put their thoughts into action. Simulation activity allows students to increase their confidence and competence in a safe setting, to integrate a full range of knowledge, attitudes and skills to respond effectively.

Reflective practice increases in cognitive complexity parallel to the increase in simulation complexity in order to measure the increases in student conceptual learning (Decker, 2007). Kolb (1984) defined the experience learning as the process whereby knowledge is derived from and continuously modified by experience. Knowledge results from the combination of grasping experience and transforming it. The learning process is viewed as a context of people moving between the modes of concrete experience (feeling--learning from specific experiences), abstract conceptualization (thinking--logical analysis of ideas and acting on intellectual understanding of a situation), reflective observation (watching--observing before making a judgment by viewing the environment from different perspectives) and active experimentation (doing--getting things done by influencing people and events through action).

Simulation based learning offers students a unique opportunity to learn through experience, aided by reflection and feedback and the opportunity to practice. Simulation is highly engaging, interactive and clearly relevant to practice and enables experiential learning in a safe environment while promoting students' in-depth reflection about learning (Cheng, Grant, Robinson, et al., 2016). In simulation based learning, students have opportunities to reflect on their experience, have a period of emotional release, receive behavioral feedback, integrate their observations, behavior and feedback into a conceptual framework and then create mechanisms and pathways for transferring learning to relevant situations (Yuan, 2013). Reflection is the opportunity to reexamine the experience. Students may think about what comes to mind first and work through the experience from that starting point. Student engagement in the simulation can also elicit significant emotional response which can redirect the attention of the student to reflect on their learning. Students need to be coached to be open to receive feedback in a way that facilitates positive learning rather than a negative response. Teachers want students to demonstrate successfully that they can transfer what they have learned and experienced from one situation to the next. Summative evaluation should be clearly indicated as such, and debriefing should be formatted in a confidential, respectful manner between the facilitator and the learner. Simulation based learning provides opportunities for the integration of feedback and reflection, which increases the learner's ability to synthesize knowledge from multiple sources and make sound and safe decisions. Integration of the simulation experience and facilitated reflection into a conceptual framework is one of the most challenging for simulation (Turricci, Lewis, 2017).

Reflective Learning In Simulation

Simulation based learning provides opportunities for the integration of feedback and reflection, which increase the learner's ability to synthesize knowledge from multiple sources and make sound and safe decisions. Reflection occurs throughout each phase of simulation: before, during and after the simulated clinical experience. Educators need to provide learners with a safe environment conducive to learning without compromising client welfare while fostering their analytical thinking skills and rational decision making. Reflective learning can assist the students to enhance their cognitive abilities, and offer students the opportunity to practice their assessment and organizational skills which prepare them to deal with the current level of acuity and complexity in real situation.

The Designed Scenarios

The scenarios had sufficient intrinsic interest for the students and relevance to clinical practice and lead students to a particular area of study to achieve specified learning objectives. The scenarios stimulated students to analyze the situations critically and provide alternative solutions to real-world problems, and motivated them to probe for deeper understanding. The trigger questions stimulated the students' thinking broadly and critically by encouraging them to achieve the specific learning objectives. The scenarios were designed using the high-fidelity simulator

which is a computer-controlled human patient simulator (HPS, SimMan) which is a full-body manikin with a realistic upper airway, chest movement, variable cardiac and breath sounds and a palpable pulse.

Simulation and Reflection

The foundation and inherent to the reflective processes are knowledge, skills, attitude, experience and emotion. During the simulation, students use the reflective practice to help them make sense of the experience. The reflective practice includes the phases of before action, in action, on action and beyond action.

For example, the simulated scenario is concerned a patient with Chronic obstructive pulmonary disease (COPD). Mr. Wang, a 68-year old man, was diagnosed with COPD 10 years ago. He has a 40-year smoking history (is still smoking) and has been hospitalized twice due to chest infections during the last 12 months. His vital sign: T 36.8 °C, heart rate 96/min (regular), RR 18 /min, BP 130/75mmHg. His FEV1 is 26% and FEV1/FVC is 38%. SpO₂ is 83 %, Two hours later, SpO₂ is 80 %, respiratory rate is 30 /min, heart rate is 116/min. He complained he has trouble getting his breath. The arterial blood gases are reported as pH 7.25, bicarbonate (HCO₃⁻) 23 mEq/L (norm 22~26 mEq/L), PaCO₂ 55 mmHg (norm 35~ 45 mmHg), PaO₂ 56 mmHg (norm 80~100 mmHg). The physician prescribed the low-flow oxygen therapy.

Reflection before simulation

The preparation of simulation includes the orientation to environment and simulator and reflection on knowledge, skills, attitudes, experiences and emotion. Students received an orientation to the simulation laboratory to familiarize them with the technology and the simulation format. Students were assigned readings to help them focus on specific learning goals prior to the simulation. To provide a consistent and coherent experience, these preparatory materials used the same patient details that students would later encounter in the simulation. The open-end questions are used to guide reflection as students consider any similar patients they have encountered in the clinical setting. The reflective questions are: "If you have encountered the COPD patient, what are that like? " "what are the feelings when you encounter the patients?" The students who have no experience may fear the unknown and expect the peers who have the experience can help them to diminish or accelerate their concerns. Students who encountered the COPD patients in the previous clinical placement might recall the interventions, the performed clinical skills, and administered medications, and patient record and their feelings during the interaction with the patients. Then, students were given a brief amount of time to review the scenarios and discuss their approach to care. The group discussions are focused on the following questions: "What are the meanings of FEV1, FEV1/FVC, and SpO₂?"; "What does the report of arterial blood gases mean?"; "What kinds of problems are there in the scenario?"; "What additional data would you collect? Why?"; "How do you manage the hypoxemia at this moment ?"

Reflection in action

During the enactment of the scenario, the students were expected to demonstrate an emotional connection and relationship with the patient to enhance realism. They performed assessments and interventions using appropriate techniques and adhering to principles of safety. They explored the breathless and the provoking and relieving factors, and then they check the blood pressure, pulse, heart rate and respiratory rate, lung sounds, heart sounds and bowel sounds, and abdominal palpation, etc. They also manage any complaint of the clients, such as breathless, vomiting, nausea, cough, thirst and hunger. Based on the health assessment and laboratory examination, students defined the problems which required nursing care and their priorities. Then they implemented some interventions following medical orders, such as oxygen therapy, medicine administration and observe the patients' physiological responses and reassess the patient conditions. Tutors observe group performance and give supportive help. In simulation, students are exposed to the simulated scenario and initially determine what is happening with the patient. When students recognize an unexpected or abnormal condition, they pursue additional information through health assessment and history inquiries. Then students develop the care plan and identify nursing interventions through group discussion. During the simulation, students are struggling or frustrated and need a pause in the action. Students reflect on the periodic pauses in the action. This can allow the students to reflect on previous and current knowledge, skills, attitudes, experiences, and emotions. The reflection questions during the simulation are: "Are there any 'time-out' or 'freeze frame' occurred? What are they?" ; "Why the SpO₂ is not improved when continue mask oxygen therapy is performed?" " How to manage the breathless for the COPD patients? What are different managements between the oxygen therapies to the patients with or without COPD?"

Reflection on action

Reflecting-on-action involves critical self-analysis of the identification of decision points, and acknowledgement of strength and weakness in both skill performance and reasoning patterns. During the debriefing, students reflect on their performance and identify further gaps in knowledge and skills. Tutors help students to discover their shortcomings or mistakes and guide them to realize what needs to be improved in further scenarios. Students reflect

on what has happened, how they responded, and what needs to be improved in the next session. The integration of feedback and reflection increase the students' abilities to synthesize knowledge from multiple sources and make sound and safe decisions. The tutor encouraged and allowed students to express their feelings and concerns, which contributed to their comfort with reflection. The students were not given the answer to the problem. The tutor allowed the students to take risks with their learning by letting them discover their own mistakes and explore their abilities. Students learned from their mistakes and thought about what need to be improved in further scenarios. Each group simulation was video-recorded.

A debriefing session followed each scenario in the simulation laboratory. It focused on team care of the patient in terms of safe practice, priority setting, continuous assessment, communication and resource management. Students review the select segments of video-recorded simulation and discuss the following questions: "What are your feelings during the simulation?"; "Are there any mistakes? What are they?"; "What were the key concepts and skills you used in this session?"; "What do you need to learn more about in order to take care of patients in similar situations?"; "How about your confidence in managing the breathless if you encounter the COPD patients again?".

Reflection beyond action

The reflection beyond action is conducted in post-simulation. Reflection beyond action includes reflection on performance and reflection on evidence-based practice.

(1) Reflection on performance

The students review the videos, and critique the individual performance in simulation. Students review key points related to care of the patient with the particular problems encounter in the scenario. They focus the discussions on a specific condition, pertinent nursing assessments and interventions or medications. They are also guided to reflect on patient safety concerns and patient-orientated care, teamwork and collaboration. The reflection questions are : "What do you think of the group performance in terms of knowledge, skills, attitude ? What needs to be improved in the next session?"

(2) Reflection on evidence-based practice

Reflection on evidence-based practice can foster students have a philosophy that incorporates evidence-based practice and access to tools that can enhance clinical practice. Students are guided to reflect on the nursing management, oxygen therapy and rehabilitation for the COPD patients. The reflection questions are: "What are the current practices in the nursing care of COPD?"; "What are the best evidences on dealing with the breathless for the patients with COPD? " "What are the best evidences on oxygen therapy for the patients with COPD? "; "What are the rehabilitation interventions for the COPD patients"; "How to perceive patients' abilities to perform activities of daily living after rehabilitation?".

Students search for the evidences and critically appraise the evidences in terms of the study valid, the results and discuss about whether the results be applicable in caring for patients under the guidance of tutors. Then, they compare the multiple studies to see if they are in agreement with each other, and summarize the evidences which can be used in the simulated situation. Finally group discussions are guided to think about the following questions: "Are there enough evidences on taking care the COPD patients? Why some of evidences are not appropriate for dealing with the simulated situation? This learning synthesis helped the students to generalize the learning from the specific situation to a more general one.

As indicated in introduction, we have two major research questions. One of them is to find out whether the inception of index futures trading has destabilized the underlying stock index or not. We will examine the volatility of the underlying index before and after the introduction of futures in order to answer the first question.

Conclusions

Students must consider a variety of conflicts and complex factors in choosing the best practice while they are taking care of simulated patients. It is more important to give the feedback and guided reflection during the simulation. Students need to be supported by tutor and collaboration in the learning process. The reflective learning in simulation occurs in the concrete experience, active experimentation (debriefing), reflective observation, and abstract conceptualization[16].

In addition, integrating simulation into existing curriculum structures requires faculty commitment to enhance their own teaching skills and redesign existing programs. Organizational commitment is also essential for this innovative teaching method due to the significant resources required for program implementation and ongoing financial support. Additional studies to test the impact of this teaching method on learner performance, patient safety, clinical outcomes, and faculty perceptions and cost efficiency will provide valuable support for using high-

fidelity simulation in nursing education. As transfer of skill from the simulated environment to the clinical setting is essential, further studies need to be concerned with the impact of using simulation on behavior transfer in clinical practices.

Acknowledgment

I wish to acknowledge the Macao Polytechnic Institute (code RP/ESS-06/2017) for providing funding for this research.

References

- Birkhoff, S.D.& Donner, C. (2010). Enhancing pediatric clinical competency with high-fidelity simulation. *The Journal of Continuing Education in Nursing* 41 (9), 418-423.
- Decker, S. (2007). Integrating guided reflection into simulated learning experiences. In P. R. Jeffries (Ed.), *Simulation in nursing: From conceptualization to evaluation* (pp. 73-85). New York: National League for Nursing.
- Cheng , A., Grant, V., Robinson, T., Catena, H., Lachapelle, K., Kim, J., Adler, M., & Eppich, W.(2016). The promoting excellence and reflective learning in simulation approach to health care debriefing: A faculty development Guide. *Clinical Simulation in Nursing*, 12, 419-428.
- Eppich, W. & Cheng, A.(2015). Promoting Excellence and Reflective Learning in Simulation (PEARLS) Development and Rationale for a Blended Approach to Health Care Simulation Debriefing. *Simulation in Healthcare*, 10 (2), 106-115.
- Horton-Deutsch,S.& Sherwood, G.D. (2017). *Reflective Practice: Transforming education and improving outcomes (2nd, edition)* (pp.182-208).Indianapolis, IN, USA: Sigma Theta International.
- Jeffries. P.R. (2008). Getting in S.T.E.P. with simulations: Simulations take educator preparation. *Nursing Education Perspectives*, 29(2), 70-73.
- Kolb, D.(1984). *Experiential learning: experience as the source of learning and development* (pp.13-45). Englewood Cliffs, New Jersey: Prentice Hall.
- Nash, R., and Harvey, T.(2017). Student nurse perceptions regarding learning transfer following high-fidelity simulation. *Clinical Simulation in Nursing* 13, 471-477.
- Sinclair,B., & Ferguson,K.(2009). Integrating simulated teaching/learning strategies in undergraduate nursing education. *International Journal of Nursing Education Scholarship*, 6(1), 1-11.
- Tanner, C. A.(2006). Thinking like a nurse: A research-based model of clinical judgment in nursing. *Journal of Nursing Education*, 45(6), 04-11.
- Turricci, N.,& Lewis,P.A.(2017). Student facilitation of simulation debrief: Measuring reflective thinking and self-efficacy. *Teaching and Learning in Nursing*, 12, 128-135.
- Yuan, H.B., Williams, B., & Fang, J.B.(2011). The contribution of high-fidelity simulation to nursing students' confidence and competence: a systematic review. *International Nursing Review*, 59(1), 26-33.
- Yuan, H.B., Williams, B., Fang, J.B.,& Ye, Q.H. (2012). A systematic review of selected evidence on improving knowledge and skills through high-fidelity simulation. *Nurse Education Today*, 32(3), 294-298.
- Yuan, H.B.(2013).The learning process and evaluation methods of simulation under the philosophical foundation of evidence-based nursing. *Journal of Nursing Science*, 28(1), 4-6.

Reforms And Innovation In General Science For Effective Advocacy In Disaster And Risk Management

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Abstract

The Philippines is a country prone to natural and man-made disasters. These disasters have claimed many lives and have destroyed homes, properties and livelihood. Although we cannot prevent the occurrence of natural disasters, we can, however, mitigate their aftermath. It is the aim of this research to develop a disaster science curriculum for K-6 students in order to instill keen awareness, develop effective disaster science literacy, and equip our students and teachers with the requisite tools in active disaster and risk management. The methodology consists of three parts: (1) a survey of the disaster risk reduction practices and management of teachers and students in a particular urban division of city public schools; (2) an exhaustive review of the K-6 science curriculum to identify problematic key units (including the design and formulation of activities that address specific gaps in theory and practice); (3) pilot testing and incorporation of activities in the K-6 science curriculum. Results of the survey reveal that, although students may be aware of impending disasters and express profound concern for life and community, there is a gap in the scientific knowledge and disaster preparedness parameters that must be addressed by involving the entire community and linking said community to external institutes and resources in the entire schema of a disaster cycle. Knowledge gaps were recorded in the "fundamental law - process" linkages, especially those applied to real world problems. Review of the K-6 curriculum reveal a need to strengthen the key units in Matter, Motion and Energy, Physical Sciences, and Earth-Space Systems. Lessons and activities using the Active Learning approach have been prepared to address the specific gaps. Pilot testing of the activities is currently being undertaken to formalize the incorporation of disaster science into the current curriculum.

Relationship Between School Climate Perception And Sense Of School Belonging Of Secondary School Students And Academic Success

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Abstract

Schools for education having primary importance are places where individuals spend their most critical years and get ready for the social life. There are a number of parameters affecting the quality of a school. Amongst these are the school climate and sense of school belonging. School climate that can be described as ‘character and quality’ of an educational institution is depicted as a feature developing based on the common perception of the persons in the school, impacting all persons in the school, influenced by their behaviors and having a relative persistence. Schools resemble each other in terms of physical formation; however each school is unique as a social formation and has its own characteristics. School climate can also become distinct in each school: physical characteristics, quality of interpersonal relations, demographic and cultural backgrounds of students, teachers, principals and other staff, shared norms and values may also affect the school climate. Students are affected the most by the school climate; it may favorably or unfavorably affect their success, compliance, friendships, attachment, and change sense of belonging. Sense of school belonging is students’ and teachers’ feelings about the school, interpretations about their experience in schools and thoughts about their role in the school. The aim of this study is to investigate relationship between school climate perception and sense of school belonging of secondary school students and academic success. The study is a descriptive study with relational screening model. The study group is composed of 340 6th and 7th grade students of a private school in 2017-2018 school year. In this regard, “School Climate Scale” and “School Belonging Scale” were applied to the students and average of their grades at the end of the first semester was taken as a measure of the academic success. Based on the data obtained, while a significant relationship was found between school climate and school belonging, no significant differences were found either between both school climate perception and sense of school belonging of the students with respect to their class levels and genders, or their academic success and perceptions of school climate and senses of school belonging.

Keywords: *School Climate, Sense of School Belonging, Success*

Relationship Between Social Rejection / Acceptance, Self-Regulation Of Behaviour And Pupils' Perceived Satisfaction Of Basic Psychological Needs

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Abstract

Social rejection of pupils may serve as an intensive psychosocial stressor. A certain form of social rejection can be found in almost every class in the school environment. The need to belong is a fundamental human need to affiliate with and be accepted by members of a group. Research shows that due to social rejection, which is accompanied by experiencing social pain, mechanisms supporting the individual's effort of reintegration into the group are not triggered. Paradoxically the opposite tendency arises, i.e., an increase in selfish and self-defeating behaviour. These mechanisms are associated with the ability of a person to regulate their own behaviour. The aim of our study is to find out the relationship between social rejection/acceptance, self-regulation of behaviour and pupils' perceived satisfaction of their basic psychological need for competence, relatedness, and autonomy. The sample consisted of 1133 Czech pupils in grades 6 – 9 (mean age 13). In our research, we assessed their social status by peer nomination and identified pupils who are socially rejected or accepted by their classmates and assessed the extent of applied self-regulation skills related to interpersonal cognitive problem solving (MEPS) and the satisfaction rate of basic Psychological Need for Satisfaction Scale in General. The findings suggest that the level of social acceptance/rejection is related to self-regulation of pupils' behaviour in interpersonal cognitive problem solving and is related to the satisfaction of basic psychological needs for competence, relatedness, and autonomy. At the same time, we found that in socially rejected pupils there is no obvious relationship between social rejection and the fulfilment of basic psychological needs. We have found an existing relationship between social rejection and self-regulation of pupils' behaviour, and also that self-regulation of behaviour depends on the degree of fulfilment of psychological needs. At the same time, we have found that the acceptance rate in the socially accepted group is not related to self-regulation of pupils' behaviour but is indeed related to the fulfilment of pupils' psychological needs and the extent to which these needs are met is related to self-regulation of pupils' behaviour. We have developed two models of interaction between these factors depending on the social rejection or acceptance. The possibilities of their implementation are being discussed.

Responsiveness Of Undergraduate Architectural Curriculum To Post-War Recovery In Syria: A Case Of Al-Ba'ath University, Homs, Syria

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Abstract

When the current civil war ends in Syria, the post-war reconstruction needs many qualified architects who are well trained for post-war recovery. Architectural departments of the universities of Syria can contribute well to meet this requirement through proper training for their students. This paper attempts to identify the shortcomings of current architectural curriculum in relevance to post-war recovery in Al-Baath University, Homs, Syria, as a case study. For this purpose, a list of skills and knowledge required for efficient architectural learning on post-war recovery was developed through three stages Delphi technique and verified by local experts. Using content analysis and the developed list, the components of each subject of the curriculum is analysed. The results show that current architectural curriculum of the selected university, critically lack direct relevance to various aspects post-war recovery education. To meet the requirements for trained architects for post-war time, there is need to review the current architectural curriculum and improve it in relevance to post-war recovery.

Review Of The ‘Guided Writing’ Lessons Provided For Hearing Impaired Students¹

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Abstract

When the literature for the writing skills of hearing-impaired students is reviewed, it is seen that there is a need for researches regarding the manner in which writing lessons are performed. In this study, it is examined how guided-writing, a writing component of the Balanced Literacy Instruction Approach (BLIA), is performed with hearing-impaired students. This is a teacher research conducted through action research, with the participation of seven hearing-impaired students enrolled to the School for the Handicapped of Anadolu University in the 2015-2016 academic year. As a result of the study, it was determined that individual supports provided during the lessons increase the students’ motivation levels and writing lessons structured towards the improvement of certain skills bring benefits to the students. The guided writing component is thought to indirectly support the said improvement.

Keywords: *Hearing-impaired university students, guided-writing, teacher’s role*

Introduction

Written expression is a study in which emotions, ideas and events are narrated in a certain order. During the writing lessons, teachers should guide their students regarding the writing process and regulating it in order to ensure that the process affects the writing performances of the students positively (Fountas and Pinnel, 1996; Richards and Renandya, 2008). Writing process consists of the pre-writing, drafting, revising/editing and publishing stages (Cristie, Enz and Vukelich, 2003; Graves, 1983; Tompkins, 2000).

In the implementation of curriculums, various approaches are used for the improvement of both hearing-impaired and non-impaired students’ literacy skills. The effectiveness of the BLIA that supports the students in the amount required and when they need during the literacy lessons have been revealed in different researchs (Karasu, Girgin, Uzuner and Kaya, 2012; Kaya, 2012; Pressley, Roehrig, Bogner, Raphael and Dolezal, 2002; Schirmer, 2000; Uzuner, 2007; Uzuner, Girgin, Kaya, Karasu, Girgin, Erdiken et.al 2011; Wolbers, 2008). The approach, which aims to ensure that students become independent literates, advocates that students make decisions and selections on literacy subjects and control their levels of learning themselves, education reflects real living environments and lessons are performed in a metacognitive manner (Asselin, 1999; Fountas and Pinnel, 1996; Pressley et. al., 2002; Tompkins 2000). In the said approach, lessons intended for the improvement of writing skills are performed with the shared-, interactive-, guided- and independent-writing components. In the process from shared-writing to guided-writing, the student is initially dependent on the teacher during the lessons performed in line with the abovementioned principles. With the improvement ensured on the student’s writing skills during the process, the amount and type of the support given to him or her changes. The teacher’s role is to ensure students’ improvement with the support he or she provides.

Writing skills of BLIA, namely the shared-, interactive-, guided- and independent-writing, are seen to offer a hierarchical process. When certain skills are acquired by the students, they start to write texts by use of the features of the next stage (Tompkins, 2007). However, when the teacher realizes a need through various evaluations carried out during the lessons, previous stages can be brought into use again in order to make repetitions (Karasu and Uzuner, 2018; Richards and Reynandya, 2008; Wolbers et. al. 2018). In shared- and interactive-writing, a single common text is written on the board. While it is the teacher who always holds the board marker in shared-writing, in interactive-writing, both the teacher and students write on the board as required (Cristie, Enz and Vukelich, 2003). In the next stage, guided-writing, each student writes a text. While the text is written by a student, the teacher checks it and provides support by making corrections if necessary. In the first three stages, subject determination and pre-writing are done together with the teacher. On the other hand, in independent-writing, subject determination, pre-writing and drafting are all done by the student (Cristie, Enz and Vukelich, 2003; Tompkins, 2000).

Students who experience problems in the improvement of writing skills need to be taught how to write (Cristie, Enz and Vukelich, 2003). For teachers and researchers who perform lessons based on the principles and components of BLIA, the question “How?” is answered through another question: “Which writing component is to be implemented in the writing lesson?”. The writing component to be used is determined as a result of the formal

¹ This study was supported by Scientific Studies Research Projects, Anadolu University (Project number: 1505E440).

and informal evaluations carried out by the teacher. Since this study is about the manner of implementation of guided writing in writing lessons for hearing-impaired young persons, guided writing is addressed in details.

Guided Writing. Guided writing is performed with students who have already acquired certain information and skills of written expression with shared- and interactive-writing. As is known, writing is a complex skill requiring the joint use of certain processes and strategies. In this process, especially for individuals experiencing difficulties in writing for various reasons, guided writing is implemented for a certain purpose (reinforcement of the text structure knowledge, teaching the strategy for founding out the meaning of words based on the text, answering of cloze-type questions, etc.) with the whole class or small student groups requiring support on a certain matter in the class. Other features of guided writing can be listed as follows (ILA; 2018; Tompkins, 2007; Wolbers, 2008)

- Subject selection and the pre-writing stages of the writing process are performed together with the teacher. Each student writes a separate text individually.
- Twenty-minute lessons are planned for small groups with similar needs. The time can be extended to one full class hour for students in higher age groups.
- While the students write their texts, the teacher walks around the students and provides instant feedback. He or she teaches the writing strategies, skills and notions and the way to be followed in writing. Only one or two strategies should be taught in one lesson.
- In the guided writing process, the teacher acts as a model intensively, in particular about the implementation of the review and correction stages.
- After the texts are written by the students, the texts are reviewed and corrected during group language lessons or individual writing correction studies.
- After the students finalize the process, it should be ensured that the texts are shared in various ways. Such sharing is important in providing the students with the opportunity to experience the whole writing process for the texts written.

In shared- and interactive-writing, the teacher acts as a model in teaching the strategies and structuring of the sentences to be written. On the other hand, in guided-writing, while the teacher continues to act as a model when needed, the students make internal dialogues and the teacher should motivate them to realize such dialogues (Baker, Gersten, and Graham, 2003). Internal dialogues are known to help students to become independent or better authors (Wolbers, 2008). In the said process, they learn metacognitive strategies by questioning and controlling themselves (Schirmer, 2000).

It is important to repeat works on a daily basis (French, 1999), since literacy is supported during guided writing while the students actually talk, think and question through the text. They at the same time question themselves in written and gradually assume responsibility regarding the level of their learning. The teacher plays an important role in all these processes (Wolbers, 2008).

According to Wolbers (2008), French (1999) emphasizes the importance of the teacher in playing his or her role in a proficient and sensitive manner. French (1999) states the roles to be played by the teacher as accepting or, if needed, properly interpreting and reformulating the language/sentences of the students; acting as a model in the strategy of writing by thinking aloud; providing support to the extent needed (providing verbal scaffolds); delegating the control gradually to students; ensuring that all students are active in the process; and ensuring a correct timing of asking questions, giving explanations, listening to students, acknowledging and giving suggestions. While improving the students' writing skills, the teacher should plan the lessons so as to support the improvement of the other components of language, namely reading/comprehension, listening and speaking skills (Cambra, 1994). Frequent implementation of reading/comprehension activities in the guided writing process would indirectly support the development of the students' knowledge of language (Wolbers et. al., 2018).

Another critical role played by the teacher in BLIA is about the use of different writing components. The teacher should be able to make returns among or repetitions on shared-, interactive-, guided- and independent components. Through the ongoing evaluations he or she carries out, the teacher monitors the development of the students and makes plans and decisions regarding the present and future lessons (Karasu and Uzuner, 2018; Richards and Reynandya, 2008; Wolbers et al., 2018). As an example, he or she decides when and how to pass on to shared-and/or independent-writing from the guided writing lessons; or after starting a lesson with guided-writing, he or she can decide to continue by passing on to shared-writing if necessary (Wolbers et al., 2018). To give place to returns among and repetitions on different components in the approach is important in particular for hearing-impaired students, who experience limitations in language (Schirmer, 2000; Rupley, Blair and Nichols, 2009).

When the literature on the writing skills of hearing-impaired students is reviewed, international publications are

seen to address certain subjects in certain periods up until today. While the initial researches focussed on words and syntax in relation to literacy (Albertini and Schely, 2003), the perspective towards the teaching of writing changed in 1970s and the limitations of sentence-level language and writing teaching was started to be discussed (Krestschmer and Krestschmer, 1978). Teachers began to ask students to write free texts about their own life experiences or diaries instead of writing in a certain matter. It was determined that the interaction during the writing process affected positively both hearing-impaired and non-impaired students who are timid in to writing (Graves, 1983; Truax, 1985). The study conducted by Gormley and Sarachan-Deily (1987) to determine the strengths and weaknesses of hearing-impaired students in writing is considered important. In 1990s, the related literature concentrated on the examination of sentence and story structures expressed by hearing-impaired students in different age groups and the teaching and use of strategies (Cambra, 1994; Klecan-Aker and Blondeau, 1990; Yoshinaga-Itano and Downey, 1996). Following researches (Mayer, 2010; Strassman and O'Dell, 2012), in which studies towards the enrichment of text content through syntax and meaning, shows that the writings of hearing-impaired students reflect similar characteristics and ideas when compared to the writings of their non-impaired peers.

In recent years, the studies conducted by Wolbers et. al. (Wolbers, 2008; Wolbers, Dostal and Bowers, 2011; Dostal and Wolbers, 2014; Dostal, Wolbers and Kilpatrick; 2016; Wolbers et. al. 2018) to address interactive-writing as a component of BLIA have become prominent. Four different researches are seen to exist in the literature, regarding the correction stage of the writing process. However, while those studies address the mistakes done by hearing-impaired students, any discussion about the process of correction is not presented (Crawford, Lloyd and Knoth, 2008; Gormley and Sarachan- Deily; 1987; Livingston; 1989; Yuknis; 2014).

The first study on the writing skills of hearing-impaired persons in Turkey was done by Tuncay (1980) regarding the effects of hearing impairment on the written expression skill. When the researches that can be accesses are classified based on their subjects, two different subjects are seen to be addressed. The first one is the researches focussed on the strength and weaknesses of the writings of hearing-impaired students who receive education in different environments (Efe and Karasu, 2017; Erdiken, 1996; Girgin and Karasu, 2007; Karasu and Girgin, 2007). The second subject is the approach to be used in the pre-writing and writing stages, the activities that can be performed and their effectiveness (Alath and Servi, 2017; Erdiken 1989; Erdiken, 1996; Karasu and Uzuner, 2018; Karasu, Uzuner & Beral, 2018).

The researches done by Erdiken (1996) and Karasu (2004) for the development of measurement tools for the evaluation of hearing-impaired students' written expression skills as an important component of the writing process are considered important. Another study of Karasu (1024) addresses the types, units and methods of correction needed to be implemented for hearing-impaired students in writing correction studies. In addition, the literature includes a research conducted to determine the problems encountered by hearing-impaired students while creating texts in the writing process (Tiryaki, 2014), and another research in which the reading comprehension and writing skills of hearing-impaired students with cochlear implant are compared (Cizmeci ve Cirput, 2018).

Writing researches are seen to address the effectiveness of teaching approaches, strengths and weaknesses of students, problems and cause-effect relationships related to the writing process. There are limited number of researches related to the subject of this paper, namely the writing process, stages of the writing process and the writing implementation of BLIA. In the literature, it is specified that there is a need for qualitative researches about the way of implementation of writing process stages for the improvement of students' writing skills (Karasu, 2014; Yuknis, 2014). In addition, it is suggested that researches to be conducted by teachers would be more effective with the advantage of field application (Vostal and Ward, 2015). In this direction, the objective of this study is to examine the implementation of guided writing for hearing-impaired university students as a component of BLIA.

Methods

This is a teacher research done through action research. In action researches conducted by teachers, teachers analyse their own practices or a problem or action in a systematic and regular manner (Johnson, 2002). However, while supporting the learning process of students, they also contribute to the professional development of teachers (Creswell, 2005). In action researches, after the problematic situation is determined, data collection, data analysis, action planning, trustworthiness committee meetings and reporting are performed in a cyclic manner. Figure 1 shows the cyclic process of an action research.



Figure 1: Action research cycle (KNILT, 2011)

Setting

The research was conducted at the School for the Handicapped of Anadolu University, which is the only institution providing higher education to hearing-impaired university students. The education is provided for the Graphical Design and Ceramic undergraduate and Building Drafting and Computer Operation associate degree programs. Research data were collected in the language class 214 of the School. Sound insulation was provided for the class and other physical properties of the class were arranged in line with the needs of hearing-impaired students (Girgin, 2003).

Participants. The research was conducted with the participation of second year students enrolled to the Computer Operating associate degree program in the 2015-2016 academic year. Other properties of the students regarding language skills are given in Table 1. Communication was made with Whole Language. Before the research, the participants were informed about the objective and procedure of the research and signed consent letters were obtained.

Table 1: Student Properties

Student	Age Gender	Degree of hearing loss (better hearing ear)	Age of onset of hearing impairment	Age of diagnosis	Age of onset of hearing aid	Secondary education environment
1	23/M	113 dB HL	Congenital	1	2	Vocational High School
2	22/F	101 dB HL	0.10	0.10	2	
3	25/F	96 dB HL	Congenital	1	14	
4	19/F	110 dB HL	Congenital	2	19	
5	22/M	118 dB HL	Congenital	6	-	Vocational High School for Hearing Impairments
6	25/M	83 dB HL	Congenital	5	12	
7	23/M	70 dB HL	Congenital	11	16	

When the written expression levels of the students were reviewed before the research, it was seen that the level of knowledge of five students about text structure was very limited and they could not include titles in their writings. On the other hand, when the content of their texts were reviewed, three of the students were seen to provide suitable content, while another three of them were unable to write in line with the instructions given. One student was understood the need limited support. All students were observed to have limitations in terms of syntax, vocabulary and orthographic rules and punctuation and be in need of intensive support.

Researchers. The research team consisted of one advisor and two researchers who all had 21 years or longer experience in the education of hearing-impaired students. They have graduate or postgraduate degrees in the field of hearing-impaired students' education. The research team members, who lecture at undergraduate and graduate levels, took part in conferences about qualitative conferences and participated in projects are implementers or

researchers. Their researches were published in national and international peer-reviewed journals.

Data collection techniques and analysis

Both qualitative and quantitative data collection methods and techniques were used in the research. The research data consists of video recording of the actual classroom interactions (33 h and 4 min), 11 writing lesson plans and reflections, reflective journal entries, students' artifacts, archival data, (audiograms, the official records of the students) and criterion referenced tests. The data collected were analysed through the inductive method, results obtained were reported by being associated with each other and the literature.

The validity study was done through the inspection of the research process, data and implementation qualification by the trustworthiness committee (Creswell, 2005). Ten trustworthiness committee meetings were held between 18th of September 2015 and 9th of February 2016. (trustworthiness committee meeting minutes)

Quantitative data of the research were collected with criterion referenced test in order to determine the level of improvement in the writing skills of the students. The preliminary and final tests were performed on 5th of October 2015 and 12th of January 2016 respectively. The students were asked to provide five written expression data including three newspaper reports and two expository texts on different topics. For determining the suitability of written expression questions for the ages, levels and areas of interest of the students, a validity study was conducted by receiving expert opinions. Vocational education and needs of the students were taken as the basis in determining the types and topics of the texts.

The texts were then evaluated by use of the "Written Expression Skills Evaluation Tool" developed by Erdiken (1996). Written texts were evaluated for text structure (0-30 points), content (0-20 points), grammar (0-25 points) and orthographic rules/punctuation (0-5 points). The inter-evaluator reliability, which was calculated with the *Agreement / Agreement + Disagreement X 100* formula, was found to be 84.8% and 71.9% for the preliminary and final tests respectively. On the other hand, implementation reliability coefficient of the lessons performed based on the principles and components of BLIA was calculated to be 94.5% with the *Observed Implementer Behaviour / Planned Implementer Behaviour X 100* formula.

Findings

In this section of the paper, firstly the research process is explained in brief. Afterwards, the answer to the research question is given.

Research Process

This study includes the analysis of the data collected in the implementation process of the research, which consisted of the pilot study and implementation processes. The data were collected between October of 2015 and January of 2016, in the Speaking Skills for Computer Operate Training III lesson. Total duration of the lesson was 135 minutes with three 45 minutes lessons (3x45 minutes).

Implementation of the Guided Writing Process with Hearing Impaired University Students

During the implementation process of the research, nine different newspaper report and expository texts were written by use of the BLIA components. Table 2 shows the writing components, topics and dates of the texts. Three of the texts were written with guided-writing. In this study, the writing process of the "Technology news writing" topic, performed on 22nd of December 2015, is presented, since it reflects all features of guided-writing.

Table 2: Writing components, topics and dates of the texts

BLIA Writing Component	Subject and Date of the Text
Interactive Writing	Writing a Facebook message (6 October 2015)
Interactive Writing	Content analysis of the school newspaper (27 October 2015)
Guided Writing	Y. Buyukersen Wax Museum Trip (6 October 17-18 November 2015)
Independent Writing	Writing a text with the topic of choice (3-10 November 2015)
Interactive Writing	Yılmaz Buyukersen's life (24 November 2015)
Guided Writing	Technology news (1-22 December 2015)
Interactive Writing	Comparing the features of websites (15 December 2015)
Independent Writing	Writing news with the topic of choice (1 December 2015-5 January 2016)
Guided Writing	Thoughts and feelings about Facebook (5 January 2016)

The text topic was determined by the teacher taking into consideration that the students were enrolled to the Computer Sciences Department and they were in need of reading texts with computer and technology content. Although it is important in BLIA that the students make topic selections and decisions, it is also important that the topics are determined sometimes by the teacher and sometimes by the students in a balanced manner (Pressley, Roehrig and Bogner, 2002; Tompkins, 2007). The role of the teaching in the establishment of this balance is critical (Wolbers, et. al., 2008). Besides, it is important to ensure that reading and writing skills are improved together, since different language skills indirectly support the improvement of each other (Cambra, 1994). Before the guided writing lesson on 22nd of December 2015, two interactive-writing, one guided writing and two independent-writing studies were conducted with the students. In the said writing components, the amount and implementation of the support given to the students differed. Based on the evaluations made before, during and after the lessons, the research team decided at the trustworthiness committee meeting dated 18th of November 2015 to implement guided writing in the lesson after the two independent-writing studies. (trustworthiness committee meeting minutes dated 18th of November 2015) Different stages of the sample writing process performed through guided writing are presented below under the titles pre-writing, drafting, writing, review, correction and publishing.

Pre-Writing Stage. The pre-writing stage was performed both before and during the lesson. The writing topic was announced to the students both in written and verbally during the lesson on 1st of December 2015. The teacher wrote the instructions on the board and asked the students to copy them in their notebooks. The instructions were “Please review the newspaper reports and select one report in the field of technology (computer, mobile phones, automobiles, etc.). You will present the news you select in the classroom both in written and verbally. Deadline is 15th of December 2015”. The students were also asked to select another report they are able to understand and change their selection, if they are not able to comprehend what they read.

Although it was announced to the students that they would present the selected technology report on 15th of December 2015, the lesson could be performed in the following week, on 22nd of December 2015, since the correction of the written texts took longer than expected. The reason of delay was explained to the students. (Lesson plan evaluation dated 15th of December 2015)

In the class part of the pre-writing stage, the technology news reports and expository texts selected by the students in the internet and from the newspapers were reviewed. This ensured students (except one of them) to perform reading comprehension works before the presentation lesson about the texts they would present, and attend the lesson ready. (Lesson plan evaluation dated 15th of December 2015)

At the beginning of the lesson, the teacher reviewed the technology news reports brought by the students as they attend the classroom and became informed about the content of the reports. Afterwards, each student presented his or her news report at the teacher’s stand they explained the points that cannot be understood by use of sign language or by writing on the board (Figure 2). When the meaning of a word is not known or the news report cannot be understood with the narration of the student, the teacher made written and oral explanations with the help of other students who can effectively use the sign language. At the end of each presentation, the presenter asked “Do you have any question?” In case there is no question from the class, the teacher asked several questions in order to make repetitions on the report. The pre-writing stage took 31 minutes for being completed.



Figure 2: A student presenting her news report

Drafting and Reviewing Stage. Since the writing was made through guided-writing, “drafting” and “review” stages were performed at the same time. Each student selected his or her own news report or a news report presented by one of his or her friends and wrote the related texts individually. It was seen that the ability to select

a news report presented by others increased the level of motivation. It is thought that it was because the students who had difficulty in comprehending the text they presented had the chance to write other news reports that was discussed and repeatedly explained in the classroom. (Reflected Evaluation of the Lesson Dated 22nd of December 2015)

The students were observed to make progress in terms of “text structure and content” in the previous lessons. Thus, the teacher focussed on the correct writing of “words and affixes” during the review in the lesson dated 22nd of December 2015. While the students were writing their texts, the teacher walked around the classroom and reviewed the texts written. In case there was a problem in the writing of words or affixes, the teacher gave information in written and/or verbally about the tenses required to be used in writing of newspaper reports and corrects uses of words by asking questions such as “It this word written correct?”, “How do we write the word ‘screen’?” and “Did you see this incident? In which tense should we write?” (Karasu and Uzuner, 2018). When necessary, he or she received sign language support as well. With these supports, the teacher asked the students to correct their mistakes. (Figure 3) The teacher considered the level of the student when deciding to correct a mistake directly, or ask the student correct is him or herself by directing questions (Pressley et. al. 2002; Tompkins, 1997; Wolbers, 2008).

The drafting and review stages performed at the same time took between 5 and 11 minutes to be completed. The time spent for the writing of the texts was dependent on the language skills of the students. Students with higher level of language skills completed writing in shorter time (Marcschark, Lang and Albertini, 2002).



Figure 3: Examining the writings and giving feedback

Editing Stage. Reviews made during the writing of the texts through guided writing by hearing-impaired students are not considered sufficient. For this reason, the researcher conducted nearly 10-minute “Individual Writing Editing” studies with each student after the completion of drafting. (Figure 4) While the researcher was doing editing studies with each student, other students were ensured to work in groups of two. During the said “peer studies”, they were asked to read each other’s writings and make editing. However, the editing capacity of the students was seen to be limited (Gormley and Sarachan-Deily, 1987). Editings for words, syntax, orthography and text structure were made with each student (Karasu and Uzuner, 2018). During the editing, problematic grammar rules were not brought to the students’ attention, while the sentence structuring requirements imposed by the rules and the effects of such structuring on the meaning were emphasized (Karasu, 2014). Individual text editing took 50 minutes.



Figure 4: Examples of individual writing editing

Publishing Stage. In this stage, each student read aloud his or her text in the classroom, accompanied by sign

language performed by him or herself or another student. Presentation of the texts in this way took 7 minutes.

Two lessons were combined in a block lesson. Pre-writing, review and drafting took 42 minutes, while 58 minutes were spent for individual mistake correction and publication. A break of 15 minutes was given between the two activities.

Pre-test and final tests were applied to determine the effectiveness of the lessons performed with the principles and components of BLIA. As seen in Figure 5, all students made progress in terms of written expression skills, even if limited.

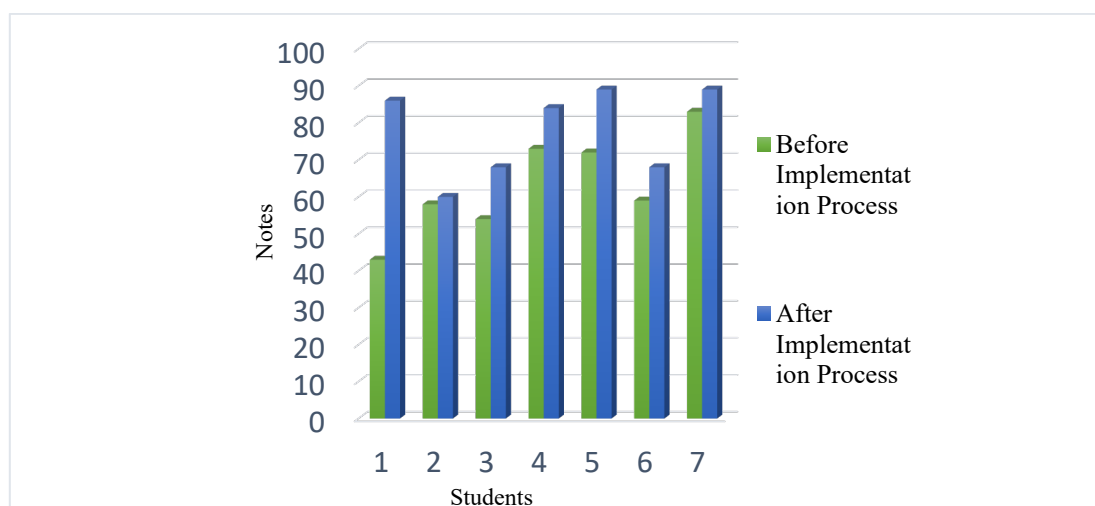


Figure 5: Impacts of the application of writing process activities

Writing is a complex skill requiring the joint use of different skills. This kind of studies conducted with hearing-impaired students would be more effective if done in longer period of time. It is thought that the studies done three times during the research indirectly affected the improvement of the students' written expression skills. Another reason of this result is the hearing-impaired students' need for more repetitions, because of language limitations (Luckner and Cooke, 2010; Paul, 1998; Rupley, Blair and Nichols, 2009; Schirmer, 2000).

Conclusions

The lessons performed in line with the principles and components of BLIA were seen to bring benefits to the hearing-impaired students, even if limited. It is thought that the guided writing studies done three times during the research indirectly affected the improvement of the students' written expression skills. It is very important to support hearing-impaired students in accordance with their language levels and when they need. In this study, in which different BLIA components were implemented, the contribution of each approach to the development of the students was valuable.

In the guided writing stage of the research, the attention of the students was brought to syntax and orthographic rules, taking the progress made by them into consideration. However, since reading and writing teaching requires a complex and long process, it is important to perform subsequent lessons in a planned, systematic and regular manner, so as to improve all features of writing. In this context, evaluations made before, during and after the lesson are critical. It is important for the teacher to plan his or her lessons in advance through continuous studies.

The way in which the lesson was performed was seen to increase the level of motivation of the students. Focussing on just two skills during the review stage made it easier for the students to cope with the skills expected to be improved. It was ensured that the students' experiences regarding the review of the correct writing of words and affixes were reinforced. In the individual correction stage, repetitions regarding text structure and content were made in addition to the emphasis on the writing of words and orthographic rules.

Results of the research revealed the effectiveness of writing lessons. However, it must be taken into consideration that it takes long time for hearing-impaired students to improve language skills, they need intensive repetitions and lessons are required to be performed in a systematic manner.

In the light of the data obtained with this study, guided writing lessons can be planned for hearing-impaired

students. In addition, the research can be repeated in different education environments, with different participants and by different researchers for the generalization of the findings.

References

- Alatlı, R. & Servi, C. (2017). Ortaokula devam eden isitme engelli öğrencilerin yazı performanslarının incelenmesi: Örnek grup Çalışması *Ankara Üniversitesi, Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi*, 18(1), 27-43. doi: 10.21565/ozelegitimdergisi.292065
- Albertini, J. A. & Schley, S. (2003). Writing, characteristics, instruction and assessment. In Marschark, M. & Spencer, E. P. (Eds.) *Oxford handbook of deaf studies, language and education*. (pp. 97-109) New York: Oxford University Press.
- Asselin, M. (1999). Balanced literacy. *Teacher Librarian*, 27(1), 69-70.
- Baker, S., Gersten, R., & Graham, S. (2003). Teaching expressive writing to students with learning disabilities: Research-based applications and examples. *Journal of Learning Disabilities*, 36(2), 109-123.
- Cambra, C. (1994). An instructional program approach to improve hearing impaired adolescents' narratives: A pilot study. *The Volta Review*, 96(3), 237-246.
- Cizmecci, H. & Cirput, A. (2018). Evaluation of the Reading and Writing Skills of Children with Cochlear Implants. *The Journal of International Advanced Otolaryngology*. Doi: 10.5152/iao.2018.4436
- Crawford, L., Lloyd, S. & Knoth, K. (2008). Analysis of Student Revisions on a State Writing Test. *Assessment for Effective Intervention*, 33(2), 108-119. Doi: <https://doi.org/10.1177/1534508407311403>
- Creswell, J. W. (2005). *Educational research: planning, conducting, and evaluating quantitative and qualitative research*. Columbus: Upper Saddle River.
- Johnson, P.A. (2002). A short guide to action research. Boston, MA: Allyn and Bacon, Inc.
- Dostal, H. M., Wolbers, K. A., & Kilpatrick, (2016). Differentiating writing instruction for students who are deaf and hard of hearing. *Journal of Deaf Studies and Deaf Education*, 17(1), 19-38.
- Dostal, H. M. & Wolbers, K. A. (2014). Developing language and writing skills of deaf and hard of hearing students: A simultaneous approach. *Literacy Research and Instruction*, 53, 245-268. doi: 10.1080/19388071.2014.907382
- Efe, A., & Karasu, H. P. (2017). Kaynastırma eğitimine devam eden isitme engelli öğrencilerin yazdıkları öykülerin incelenmesi. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi, Elektronik Yayın*, 18(1), 27-43. doi: 10.21565/ozelegitimdergisi.330878
- Erdiken, B. (1989). Eskisehir Sağır Okulu ve Anadolu Üniversitesi İCEM'de ortaokul sınıflarına devam eden 13-14 yaş isitme engelli öğrencilerin yazılı anlatım becerilerinin betimlenmesi [The description of written expression skills of 13-14 year old hearing impaired students who continue to Eskisehir Hearing Impaired Middle School and Anadolu University in İCEM] (Unpublished master thesis, Anadolu University, Institute of Social Sciences, Eskisehir, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi>. (Thesis Number 8901)
- Erdiken, B. (1996). Anadolu Üniversitesi İCEM lise düzeyindeki isitme engelli öğrencilerin yazılı anlatım becerilerinin geliştirilmesinde işbirliği-gözlem yöntemi ile anlatım yönteminin karşılaştırılması [Comparison of cooperative-observation method in the development of written expression skills of the hearing-impaired students at Anadolu University İCEM high school level] (Unpublished doktarate thesis, Anadolu University, Institute of Social Sciences, Eskisehir, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi>. (Thesis Number 51390)
- French, M. M. (1999). Planning for literacy instruction: Guidelines for instruction Sharing ideas (ERIC Document Reproduction Service No. ED475330). Washington, DC: Laurent Clerc National Deaf Education Center. (Retrieved from Wolbers, 2008)
- Fountas, I. C., & Pinnell, G. S. (1996). *Guided reading, good first teaching for all children*. Portsmouth, NH: Heinemann Educational Books.
- Girgin, M. C. (2003). *İsitme engelli çocukların eğitime girisi*. [Introduction to education for hearing impaired children]. Eskisehir: Anadolu Üniversitesi Yayınları, No.153
- Girgin, U. & Karasu, H. P. (2007). İstisnai/sozel yaklaşımla eğitim gören isitme engelli öğrencilerin yazılı anlatım becerilerinin değerlendirilmesi. [Assessment of written expression skills in hearing impaired students trained with the auditory/oral approach]. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 33, 146-156.
- Graves, D. H. (1983). *Writing: Teachers and children at work*. Portsmouth, NH: Heinemann Educational Books.
- Gormley, K. & Sarachan-Deily, B. (1987). Evaluating hearing-impaired students' writing: a practical approach. *The Volta Review*, 89(3), 157-170.
- ILA (International Language Association). Retrieved from <http://www.readwritethink.org/professional-development/strategy-guides/guided-writing-30685.html>
- Karasu, H. P. & Girgin, U. (2007). Kaynastırmadaki isitme engelli çocukların yazılı anlatım becerilerinin değerlendirilmesi [Assessment of writing skills of hearing impaired students who attend mainstream Classes]. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 7(1), 467-488.

- Karasu, H. P. (2014). Isitme yetersizligi olan ogrencilerin yazılı urunleri gozden gecirme ve duzeltme evresine duydıkları ihtiyacın belirlenmesi [Determination of hearing-impaired students' requirements for editing and revision of written texts]. *Kuram ve Uygulamada Egitim Bilimleri*, 14(3), 1089-1109.
- Karasu, G., Girgin, U., Uzuner, Y. & Kaya, Z. (2012). Isitme engelli universite ogrencilerine uygulanan tanimlama yapma stratejisinin incelenmesi [An examination of defining strategy applied to hearing impaired college students]. *Anadolu Journal of Educational Sciences International*. 2(1):19-41.
- Karasu, G. & Uzuner, Y. (2018). Isitme engelli universite ogrencileriyle dengeli okuma yazma yaklasımı ile gercekleştirilen yazma çalışmalarının incelenmesi [examination of hearing-impaired collage students' writing studies based on Balanced Literacy Instruction Approach]. *Ankara Universitesi Egitim Bilimleri Fakultesi Ozel Egitim Dergisi*, 19(2), 199-232. doi: 10.21565/ozegitimdergisi. 310350
- Karasu, G., Uzuner, Y. & Beral, A. (2018). Isitme engelli universite ogrencilerinin yazma surecinde uygulanan etkinlik ve stratejilerin incelenmesi (Examining activities an strategies used in the writing process by hearing-impaired college students)*Ege Egitim Dergisi / Ege Journal of Education*, 19(1), 262-283. doi: 10.12984/egcedf.343127
- Kaya, Z. (2012). Isitme engelli yuksekokul ogrencilerine bilgisayar yazılımı kullanımının ogretilmesi: Eylem arastırması [An examination of instruction to hearing impaired college students: an action research] (Unpublished doktarate thesis, Anadolu University, Institute of Educational Sciences, Eskisehir, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi>. (Thesis Number 312593)
- Klecan-Aker, J. & Blondeau, R. (1990). An Examination of the Written Stories of Hearing-Impaired School-Age Children. *The Volta Review*. 92(6), 75-282.
- KNILT, (2011). The Knowledge Network for Innovations in Learning and Teaching. Retrieved from http://tccl.rit.albany.edu/knilt/index.php/Unit_1:_What_is_and_why_use_action_research
- Kretchmer, R. R., & Kretchmer, L. W. (1978). *Language development and intervention with the hearing impaired*. Baltimore, Maryland: University Park Press.
- Livingstone, S. (1989). Revision strategies of deaf students writers. *American Annals of Deaf*. 134(1) 21-26.
- Luckner, J. L. & Cooke, C. (2010). A Summary of the Vocabulary Resarch With Who Are Deaf or Hard of Hearing. *American Annals of the Deaf*, Spring, 155(1), 38-67.
- Marschark, M., Lang, H. G., & Albertini, J. A. (2002). *Educating deaf students*. New York: Oxford University Press.
- Mayer, C. (2010). The Oxford handbook of deaf studies, language, and education. In M. Marschark & P. Spencer (Eds.), *The demands of writing and the deaf writer* (pp. 144-155). New York: Oxford University Press.
- Paul, V. P. (1998). *Literacy and deafness: The development of reading, writing and literate thought*. Boston: Allyn and Bacon.
- Pressley, M., Roehrig, A., Bogner, K., Raphael, L. M., & Dolezal, S. (2002). Balanced literacy instruction. *Focus on Exceptional Children*, 34(5), 1-14.
- Richards, J. C., & Renandya, W. A. (2008). *Methodology in language teaching: An anthology of current practice*. Newyork: Cambridge Universtiy Press.
- Rupley, W. H., Blair, T. R., & Nichols, W. D. (2009). Effective reading instruction for struggling readers: The rule of direct/explicit teaching. *Reading ve Writing Quarterly*, 25, 125-138. doi:10.1080/10573560802683523
- Schirmer, B. R. (2000). *Language and literacy development in children who are deaf*. Boston, MA: Allyn and Bacon.
- Strasman, B. K. & O'Dell, K. (2012). Using open coptions to revise writing in digital stories composed by d/d deaf and hard of hearing students. *Ammerican Annals of Deaf*. 157(4). 340-357.
- Tompkins, G. E. (2000). *Teaching writing: Balancing process and product*. Upper Saddle River, New Jersey. Merril Publishing Company.
- Tompkins, G. E. (2007). *Literacy for the 21st century, teaching reading and writing in prekindergarten through Grade 4*. New Jersey Columbus, Ohio. Merril Prentice-Hall.
- Tiryaki, E. N. (2014). Ortaokulda ogrenim goren isitme engelli ogrencilerin yazılı metinlerini olusturmadaki sorunları. *Ana Dili Egitimi Dergisi*, 2(3), 101- 121.
- Tuncay, H. (1980). Isitme ozurlu cocukların yazılı anlatım yeterlikleri [Written expression competencies of hearing-impaired children]. (Unpublished master thesis, Ankara University, Faculty of Education, Ankara, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi>.
- Truax, R.R. (1985). Linking research to teaching to facilitate reading-writing-communication connections. *The Volta Review*, 87, 155-169.
- Uzuner, Y. (2007). The impact of strategies used in the Blanced Literacy Approach on story grammar acquisitionof three Turkish students with hearing loss: An action study. *Deafness and Education International*. 9(1), 24-44.
- Uzuner, Y., Girgin, U., Kaya, Z., Karasu, G., Girgin, M. C., Erdiken, B. et. al. (2011). Isitme engelli genclere uygulanan Dengeli Okuma Yazma Modeli'nin incelenmesi [An Examination of Balanced Literacy

- Instructional Model Implemented to Youths with Hearing Loss]. *Kuram ve Uygulamada Egitim Bilimleri*, 11(4), 2111-2134.
- Vostal, R. Brooks, & Ward, M. S. (2015). Adapting self-regulated strategy developmetn in persuasive writing for adolescents who are deaf or hard of hearing. *The Clearing House*, 88.161-165. doi: 10.1080/00098655.2015.1065785
- Wolbers, K., A. (2008) Using Balanced and Interactive Writing Instruction to improve the higher order and lower order writing skills of deaf students. *Journal of Deaf Studies and Deaf Education*, 13(2), 257-277. doi: 10.1093/deafed/enm052
- Wolbers, K. A., Dostal, H. M. & Bowers, L. M. (2011). 'I was born full deaf.' Written language outcomes after 1 year of Strategic an Interactive Writing Instruction. *The Journal of Deaf Studies and Deaf Education*, 17(1), 19-38. doi: 10.1093/deafed/enr018
- Yoshinaga-Itano, C., Snyder, L. S. & Mayberry, R. (1996). How do deaf and normally hearing students convey meaning within and between written sentences. *Volta Review*, 98, 3-38.
- Yuknis, C. (2014). A Grounded Theory of text revision processes used by young adolescents who are deaf. *Council for Exceptional Children*. 80(3), 307-322. doi: 10.1177/ 0014402914522426

Role And Development Direction Of Deliberation Capacity As Regional Human Resources

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Abstract

Korea has achieved rapid growth and democratization due to growth-oriented policies and uniform education for the last 20th century. However, in the 21st century where diversity and creativity are emphasized, such a growth engine is creating a dual crisis – the division due to social conflict and the relatively low achievement and satisfaction in academic and occupational status. On the other hand, a new human resources development strategy is required for the 4th Industrial Revolution era. Thus, the challenge for Korea's human resources development is to cultivate human capital with creativity, fusion, communication, and collaboration and to form social capital such as mutual benefits, trust, and social integration. The purpose of this study, I reviewed domestic and foreign literature on deliberation and human resource development since the 2000s. In order to fundamentally change, the development direction of the deliberation capacity is presented on the systems view. The results of the study are as follows. The deliberation is that people with different opinions make balanced decisions through mutual communication and reflection. In the era of the Fourth Industrial Revolution, creative talents with knowledge fusion skills are needed. The deliberation capacity enables the creation of collective intelligence through communication and cooperation among people with diverse fields and opinions. In addition, deliberation makes social capital such as social unity, trust, and common rationality by forming a public opinion on issues. In other words, deliberation capacity is the human capital and social capital of future human resource development. From the system point of view, the deliberative system development direction is as follows. First, it should be a system that takes into consideration the wholeness and alignment between the various components of deliberation. Second, the design should be based on the value of deliberation itself rather than the specific goal. Third, three general system models should be revealed: ecological model, structural model, and processual model. The significance of this study is to identify the overlapping significance of human capital and social capital, and to propose the positive and integrated development direction. In the future, various and practical models, programs, and policy are needed to be developed.

Role Of Need Satisfaction In Determining The Level Of Trait Anxiety Of University Student-Athletes

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Abstract

The primary purpose of this study is to examine the role of level of need satisfaction in prediction the level of trait anxiety of the athletes participating in inter-university sports competitions. The secondary purpose of the study is to examine the level of need satisfaction and trait anxiety of university student-athletes in the context of gender variable. For this purpose, a total of 217 athletes, 116 men (agemean = 21.88 ± 2.79) and 101 women (agemean = 21.06 ± 1.73), who participated in interuniversity sports competitions, voluntarily participated in this research. Basic Psychological Needs Scale and State-Trait Anxiety Inventory were used to fulfill the purpose of the study. In the analysis of the data, t-test, Pearson's correlation test and regression tests were used. The data were analyzed with the SPSS 21.0 package program and 0.05 was used as significance level. There was a statistically significant negative correlation between psychological needs satisfaction and trait anxiety levels of the athletes according to the obtained data. As a result, it can be concluded that autonomy and competence subscales of psychological needs satisfaction of the athletes participating in the research are a predictor of the level of trait anxiety.

Keywords: *Motivational Self Talk, Mental Toughness, friend support, Athlete*

Introduction

Researches performed in different sub-disciplines of sports science address the physical characteristics (Turna & Kılınç, 2018; Akyüz et al., 2018;) or psychological skills (Bayköse et al., 2016; Şahin, Bayköse & Civar Yavuz, 2017a; Bayköse & Civar Yavuz, 2017b; Bayköse et al., 2017; Nergiz, Bayköse & Yildiz, 2015) which influence or which could influence the performance of the athlete. Studies in sports psychology which is a sub-field of sports science gradually increase and it may be stated that effort is paid for understanding psychology of all individuals' in sports environments and also researchers have been trying to contribute science based on theory. In this context, the aim of the present study is to investigate the association between psychological needs and trait anxiety level of athletes based on self-determination theory (SDT) which was developed for motivation.

Basic psychological needs are addressed in the context of three main factors in self-determination theory (SDT). These three factors defined as competence, autonomy and relatedness are accepted as universal according to self-determination theory (Deci & Ryan, 1985; Deci & Ryan, 2000; Deci & Ryan, 2012).

Self-determination theory has begun with internal motivation studies at the beginning of 70s (Deci, 1971) and it is a motivation and personality theory which has been developed since then and supported by many empirical studies (for detailed information, please see Deci & Ryan, 2012, Vansteenkiste, Niemiec & Soenens, 2010). Self-determination theory hypothesizes that human's nature has the potential to develop and reach its potential however social and environmental factors could inhibit (or support) this tendency (Ryan & Deci, 2002). Self-determination theory is composed of five different sub-theories. Autonomy, competence and relatedness needs are the basic psychological needs which are required for psychological health and personal development (Deci ve Ryan, 2000). Just as a seed's growing and developing require air, soil and water, wellness and satisfaction of these three needs are required for psychological development of humans.

Competence is one's feeling him/herself competent and sufficient in his/her doings and interactions. Significance of competence feeling was addressed in social cognition theory of Bandura (1986). According to self-determination theory, the activities which satisfy competence need are the ones which provide most appropriate challenge for developing the capacities of individuals (Ryan ve Deci, 2002).

Relatedness is defined as being in relation with others safely and heartfelt. Other theories like socio-meter theory (Baumeister & Leary, 1995) or attachment theory (Bowlby, 1979) have also revealed that sense of belonging is a basic need. According to self-determination theory, relatedness need can be satisfied through feeling oneself to belong to the community with respect to psychological aspect but not through statue or position.

Autonomy is defined as selecting the actions through his/her own willpower or selection and their being consistent with one's self. The opposite includes the behaviors done under pressure. It is not possible to state about self-determination or a real autonomy if a behavior is not internalized in harmony with one's self. Although competence and relatedness help to internalize the behaviors at some degree, a behavior cannot be healthily internalized to self without autonomy (Deci & Ryan, 2000). So satisfaction of autonomy plays a more important role than the other

needs according to self-determination theory, and the environments which satisfy this need provides a healthier development for the person.

Worry (anxiety) may be defined as a worry feeling against a non-physical threat. It is evaluated as one of the important mental health problems as it is common and may precipitate some mental diseases (Yeniçeri et al., 2007). Some authors report that a moderate stress and worry could improve creativity and development of people however increased anxiety could lead to decreased attention, focusing and learning, making errors, impaired interpersonal relationship, reduced productivity in presence of intensive stress (Yeniçeri et al., 2007).

Studies conducted in our country are required. Athletes begin to take responsibility through making selections, get in contact with new environments and try to develop themselves. The main purpose of the present study is to investigate how satisfaction of basic psychological needs predict trait anxiety level in the context of stress and psychological needs relationship.

Method

Study design

The present study is a relational screening model which aims at determination of presence or degree of covariance between two or more variables.

Study group

The study was conducted with athletes who participated in sport competitions between universities in different braches (volleyball, football, basketball, wrestle etc.) during 2017-2018 seasons. A total of 217 athletes (116 males with mean age of 21.88 ± 2.79 years and 101 females with mean age of 21.06 ± 1.73 years) were voluntarily included in the study.

Data collection tools

Data were collected using personal data form, basic psychological needs satisfaction scale and state-trait anxiety inventory.

Need satisfaction scale (NSS)

Need satisfaction scale was developed by Deci and Ryan (1991) and adapted to Turkish by Bacanlı and Cihangir Çankaya (2003). It is 7 Likert type scale and evaluates 21 items which measure basic psychological needs. The scale is composed of three subscales as autonomy, competence and relatedness. Overall score of the scale and internal consistency coefficients of subscales were calculated with Cronbach alpha method on 250 students. Internal consistency coefficients of subscales were found as .71, .60 and .74, respectively and .83 in total. Correlation obtained with applying the scale with two week intervals was .89 and these values were .82, .80 and .81 for subscales, respectively. Item-total correlation values vary between .33 and .64. Consistency statistics which was obtained with confirmatory factor analysis were as follows: RMSEA: 0.07, GFI: 0.86, AGFI: 0.82, CFI: 0.82, NNFI: 0.80. Factor loads obtained from the scale vary between .30 and .77. T values obtained with discriminant validity vary between 3.964 and 11.454.

State –trait anxiety inventory (STAI)

State –trait anxiety inventory was developed by Spielberg, Gorsuch and Lushene (1970) and adapted to Turkish by Öner and LeCompte (1983). Test-retest reliability is .73 and .86 for trait anxiety inventory, .16 and .54 for state anxiety inventory; KR-20 reliability is .86 and .92 for trait anxiety inventory, .83 and .92 for state anxiety inventory; median item-total reliability is .55 trait anxiety inventory, .54, .46, .53, respectively for state anxiety inventory. Trait anxiety sub-scale of the inventory was used in this study.

Data analysis

Skewness and Kurtosis values were tested for evaluating normality distribution. Skewness (0.593) and Kurtosis (-0.503) values of both scales were found between +1 and -1, in other words they were found to normally distributed and parametric test techniques were used. Descriptive statistics, frequency, percent, mean, t test, Pearson correlation test and multi-linear regression analysis were used for data analysis. SPSS 21.0 package program was used and a p level of <0.05 was taken as statistically significant.

Results

Table 1: Association between need satisfaction and trait anxiety level in university student athletes

	Relatedness	Autonomy	Competency	Trait anxiety
Relatedness	Pearson Correlation	1		
	Sig. (2-tailed)			

	N	217			
	Pearson Correlation	,687**	1		
Autonomy	Sig. (2-tailed)	,000			
	N	217	217		
	Pearson Correlation	,544**	,543**	1	
Competency	Sig. (2-tailed)	,000	,000		
	N	217	217	217	
	Pearson Correlation	-,370**	-,485**	-,540**	1
Trait anxiety	Sig. (2-tailed)	,000	,000	,000	
	N	217	217	217	217

** . Correlation is significant at the 0.01 level (2-tailed).

When correlation analysis findings were evaluated, trait anxiety level of university students was seen to have a negative correlation with need satisfaction. When level of negative correlations was analyzed, it may be stated that trait anxiety level of the athletes have a moderate association with autonomy and competency subscales of need satisfaction and a weak correlation with relatedness subscale.

Table 2: Regression analysis results about the role of need satisfaction on detecting trait anxiety level in university student athletes

Model	β	t	p
Autonomy	,306	-4,131	,000
Competency	,409	-6,028	,000
Relatedness	,074	1,035	,332
R=0,589; R ² =0,342; Adjusted R ² =0,338; F(3,216)=37,687; p=0.000			

Relatedness subscale of need satisfaction is seen not to be included in multi-step regression analysis model. According to multi-step regression analysis, a significant association was found between both autonomy and competency, and trait anxiety level (R=0,589; F=37,687; $p < 0,01$). While a negative and significant association was found between autonomy and trait anxiety level ($\beta = 0,306$; $p < 0,01$), a negative and significant association was found between competency and trait anxiety level, too ($\beta = 0,409$; $p < 0,05$). Autonomy and competency scores explain 34.2% of overall variance about trait anxiety level (R²=0,342; $p < 0,01$).

Conclusions

The present study has investigated the predictive role of need satisfaction level on trait anxiety level. Autonomy and competency were detected to negatively predicted trait anxiety. Results of the study have revealed that the increase in autonomy level of the athletes has led to a decrease in trait anxiety level, a decrease in autonomy level has led to an increase in trait anxiety level. The same was observed for also competency.

Sarı et al. (2011) have reported a negative and moderate correlation between need satisfaction and trait anxiety, consistently with our study. It may be stated that satisfaction of basic psychological needs could lead to a decrease in trait anxiety as also stated by Sarı et al. Results of the study of Harrison et al. (1997) are also in parallel with ours. In another study, Mellanby & Zimdars (2011) report a negative correlation between trait anxiety and autonomy.

Consequently, although relational studies provide more information about causality between variables, it is not possible to test causality with that type of designs. Interventional studies which include control group or experimental studies would yield more clear data about autonomy support and trait anxiety. Results of our study significantly contribute to literature despite these limitations. Although autonomy support and self-determination theory have been applied in many context, they were not studied yet in athletes in trait anxiety context. This is the first study in that field. Results support self-determination theory and contribute to literature.

References

- Akyüz, Ö., Işildak, K., Taş, M., Akyüz, M., & Turna, B. (2018). Investigation Of The Relation Of The Leg Volume To The Anaerobic Power Values In The Elite Swimmers. *European Journal of Physical Education and Sport Science*. Vol:4, 57-64.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: PrenticeHall.
- Baumeister R. ve Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Bayköse, N., Civar Yavuz, S., Çoban, M., Şahan, H., & Certel, Z. (2016). Role of self talk in prediction of passion level in physical education class environment. *Turkish Online Journal of Educational Technology*, 2016(December Special Issue), 445-452.
- Bayköse, N., Civar Yavuz, S., Özer, Ö., & Şahin, A. (2017). The role of self-talk and self-efficacy levels of athletes studying at faculties of sport sciences on predicting mental toughness. *Turkish Online Journal of Educational Technology*, 2017(December Special Issue), 591-595.
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18, 105-115.
- Deci, E. L. ve Ryan, R. M. (1985). *Intrinsic motivation and selfdetermination in human behavior*. New York: Plenum.
- Deci, E. L. ve Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
- Deci, E. L. ve Ryan, R. M. (2012). Self-determination theory. P. A. M. Van Lange, A. W. Kruglanski ve E. T. Higgins, (Ed.), *Handbook of theories of social psychology: Vol. 1 içinde* (416-437). Thousand Oaks, CA: Sage.
- Harrison, A. W., Rainer, R. K., Jr., Hochwarter, W. A., and Thompson, K. R., (1997). “Testing the self efficacy-performance linkage of social-cognitive theory”, *Journal of Social Psychology*, 137(1), pp.79–87.
- Mellanby, J., Zimdars, A., (2011). “Trait anxiety and final degree performance at the University of Oxford”, *The International Journal of Higher Education and Educational Planning*, 61(4), p357-370.
- Nergiz S., Bayköse N., Yıldız M. (2015). Kendinle Konuşma: Modern ve Halk Dansları Yapan Bireylerin Kendileriyle Konuşma Durumları. *Niğde University Journal of Physical Education And Sport Sciences*, 9, 40-49
- Şahin, A., Bayköse, N., & Civar Yavuz, S. (2017a). Does the undergraduate athletes’ self talk levels affect imagery levels?. *Turkish Online Journal of Educational Technology*, 2017(December Special Issue), 867- 871.
- Şahin, A., Bayköse, N., & Civar Yavuz, S. (2017b). The role of motivational self-talk and life satisfaction on determining the flow experience of undergraduate athletes. *Turkish Online Journal of Educational Technology* (December Special Issue), 867-871.
- Sarı, İ., Yenigün, Ö. Altıncı, E.E. & Öztürk, A. (2011). Temel Psikolojik İhtiyaçların Tatmininin Genel Öz Yeterlik Ve Sürekli Kaygı Üzerine Etkisi (Sakarya Üniversitesi Spor Yöneticiliği Bölümü Örneği). *SPORMETRE Beden Eğitimi ve Spor Bilimleri Dergisi*, IX (4) 149-156
- Turna, B., & Kılınç, F. (2018). Comparison of some Biomotoric Properties and Anthropometric Measurements of Male Basketball and Football Players. *Journal of Education and Training Studies*, 6(5), 118-122.
- Vansteenkiste, M., Niemiec, C. P. ve Soenens, B. (2010). The development of the five mini-theories of self-determination theory: An historical overview, emerging trends, and future directions. T. C. Urdan ve S. A. Karabenick, (Ed.), *Advances in motivation and achievement*, v. 16A—The decade ahead: Theoretical perspectives on motivation and achievement içinde (105-165). London: Emerald Group Publishing Limited.
- Yeniçeri, N., Mevsim, V., Özçakar, N., Özcan, S., Güldal, D., & Başak, O. (2007). Tıp eğitimi son sınıf öğrencilerinin gelecek meslek yaşamları ile ilgili yaşadıkları anksiyete ile sürekli anksiyetelerinin karşılaştırılması. *Dokuz Eylül Üniversitesi Tıp Fakültesi Dergisi*, 21(1), 19-24.

Sacral And Spiritual Landscape Perception In South Moravian And Ústecký Region: Application In Environmental Learning

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Abstract

The contribution aims to study the perception of the sacral landscape and spiritual places in the South Moravian Region (especially the city of Brno) and Ústecký Region, i.e. in those areas which are ranked among the most and the least religious within the Czech Republic. The main purpose is to explore the landscape perception from the viewpoint of university students in both regions – with the focus on their spiritual imagery and preferences related to concrete places. The second aim is to point how we include these findings in the university courses at Masaryk University in Brno and J. E. Purkyně University in Ústí nad Labem. The paper discusses interrelated topics, which are linked with the landscape perception in South Moravian and Ústecký Region. The first theme is the sacral landscape associated with the perception of spiritual and personally important places; then the intention is to approximate the perception of sacral and spiritual elements of the landscape such as churches, chapels, forests, elevated places in the landscape and roadside memorials; third aim is to show how it works in the courses Sustainability, Urban and Rural studies and International Geographical Research. A questionnaire survey has been used to explore the spiritual attitudes of young people studying geography in Ústí nad Labem and Brno. The results point out the specific spiritual attitudes towards generally natural spaces and places assuming the condition of very low declared religiosity (in Ústecký Region) and provide an overview of the places and feelings associated with them; on the contrary relatively high religiosity and abundance of sacral and spiritual places in South Moravian Region were discussed. The results also point to the specific and relatively significant spiritual perception of certain landscape elements by young people which act in the cities of Brno and Ústí nad Labem. The application of mentioned concepts in the university education is also included.

Introduction

Landscape is an important component of the living space that is inhabited by every living being of this planet. The beginnings of modern attempts to grasp its complexity can be found at the end of the 18th century with Alexander von Humboldt; according to Lipský (1998), von Humboldt described the landscape as "the total character of the territory" (Totalcharakter der Erdgegend). Forman and Godron (1993) in their Landscape Ecology define the landscape as a heterogeneous part of the territory, consisting of a cluster of interacting ecosystems that repeat themselves in similar clusters within several kilometres wide area. According to Lipský (1998), the Dutch School views the landscape as a complex of higher order systems that interact with each other. These systems are by their nature an inseparable part of the Earth's surface and the whole set is formed and maintained by the continuous activity of abiotic, biotic and anthropogenic factors. Emphasis is placed on three aspects: perception, horizontal and vertical landscape structure - see also Stibral & Faktorová (2015). Anthropogenic relationships and influences play an important role in these landscape systems. The long-term effects of these influences are described by Stibral & Faktorová (2015), who, among other things, explain the formation of the landscape concept from the Renaissance period, including its reflection in painting and literary creations. Schama (2007) deals broadly with landscape study from the social science point of view. He primarily perceives the landscape as a cultural phenomenon (similarly to Cosgrove 1993, Wylie 2007); however, the inclusion of the sacral landscape purely according to anthropogenic influence is problematic (Zonneveld 1995, Forman and Godron 1986, Lipský 1998). The aspect of culture and lifestyle is indisputable; the sacral landscape can be found in the rural environment, for example, in the form of scattered Baroque architecture (Havlíček 2011), but also in cities where we can encounter various influences of sacral objects on the life of individuals, in heavily urbanized areas (Novotný & Daněk 2017). The aesthetic function of these objects can also be important (Havlíček & Hupková 2008), on the other hand, for the believers, it is mainly used as regular meetings spaces or "technical places" for religious practice (Novotný 2017). There are also sacral sites that are located in an environment close to the nature, if we use the first part of

the Zonneveld (1995) classification for landscape status description. It may be more remote places of pilgrimage, other little shrines, but also "sacred places" existing for centuries.

Why do people constantly turn to nature, when on the other hand, they are building "artificial" temples, such as churches in the city? The whole concept of landscape perception was influenced by religion and biblical interpretation of the creation and historical development of the world, a positive reputation of wild landscape acquired with the advent of Romanticism (Stibral 2005). Prior to Romanticism arrival, the views of the population were greatly influenced by religious paradigms: in particular, the effort to create a "terrestrial paradise" - the perfect landscape, and thus to come closer to an ideal landscape which God previously created in the Bible. The change comes slowly and gradually by promotion of natural elements within landscape paintings, as well as architectures, for example the extensive construction of castle gardens and ornamental buildings or landscaping of unpaved swampy soil, which could be found in the Italian region of Veneto in early modern times (Cosgrove 1993). The return of artists to the elements of ancient culture was also significant (Ovidius, Vergilius). The archetype of the Arcadian landscape was recreated thanks to the cultural movements of Renaissance and Romanticism. This landscape type showed an ideal forest-land type with plenty of food, wide view and shelter (Cosgrove 1998, Stibral 2005). It also included ancient elements, such as mythical creatures or temples. At the same time, thanks to its popularity, this type of landscape became the starting point for the next generation of artists, which were interested in landscape paintings and sacred sources. Eliade (In Relph 1976: 15) believes that sacred experience involves the "manifestation of something of a wholly different order, something that does not belong to our world". Such experience obviously has profound existential significance – above all it provides orientation by reference to holy or sacred places. Sacred places are centres of the world – points at which the three cosmic planes of heaven, earth and hell are in the contact and where communication between them is possible. Such centres are in no way to be understood as geometric and indeed there may be an infinite number of sacred centres in any region all of which are considered and even literally called "the centre of the world" (Eliade In Relph 1976: 16). Thus each temple, each place, each hallowed area and even each house insofar as it is itself a temple, constitutes a sacred place (Raglan 1964). Modern artists were also, since the beginning of the 20th century, focused on specific work with space and the environment, to help highlight and reflect the unique relationship between man and place (e.g. specific art, land art) (Šiler 2017).

Civil groups and individuals are currently engaged in the rescue and repair of thousands of small sacral monuments scattered throughout our country (Šiler 2017). Not to pray at them - as the Poles have done so often – but so that these sacred spaces and artefacts, by their simple silent existence, have rhythmized the area of the city and carried out the cultural acupuncture of the landscape (Šiler 2017). The contemporary reconstruction of sacral objects is not predominantly conditioned by religious motives (Havlíček 2011).

As part of the perception of the landscape and its further use, for example, for tourism or recreation, the concept of scenic roads was formed in the USA during the 20th century. It is based on a combination of automobile and sightseeing routes, to show the beauty of the surrounding landscape (see, for example, Bobr & Riezner 2017, Bobr & Novotný 2018, US Department of Transportation 2018). The purpose was to make use of less frequent roads and encourage the development of economy alongside them. Designed roads must have at least one of six qualities, such as archaeological, cultural, historical, natural, recreational or scenic value (Bobr & Riezner 2017). The scenic roads theme could be linked to sacral sites through roadside memorials, i.e. memorials to victims of traffic accidents (Hartig & Dunn 1998, Nešporová 2013, Nešporová & Stahl 2014, Przybylska 2015).

According to Forman & Godron (1993) the perception of the landscape depends on the viewer's point of view. This is a human individual for in our case of study (the research question focuses on the perception of the landscape by the inhabitants of the South Moravian and the Ústecký regions, more precisely by young respondents aged 20–30 years, we are especially interested in the lower end of this spectrum - see 2. The Study / Methods). The research problem is focused on the perception of the key sacral elements of the South Moravian and the Ústecký regions, but it also aims at the imagery and the experience of the personal sacred places that respondents create in the space which they inhabit.

The aim of this text is to study the perception of the landscape through the eyes of young people in the South Moravian and Ústecký Regions – and to do so we use three main themes that are interconnected. Within the framework of the aforementioned concept of a sacral landscape, it is intended to bring closer look at the perception of spiritual and personally important places (if such sites exist for the participants of the research), which are not always associated with ecclesiastical objects in the landscape. Our assumption was on the contrary, we presume that within the framework of secularization trends, it is more about other places which will be more directly related to nature. The partial aim was to identify these spiritual places and their significance for the present young generation, including the assessment of important historical places and landmarks in Brno and Ústí nad Labem

and surroundings of these cities. The second aim is to assess perceptions and differences in the perception of partial sacral and spiritual elements of the landscape, such as churches, chapels, forests, elevated places in the landscape, as well as memorial sites serving as memorials to victims of traffic accidents. The third objective lies in the didactic purposes: to approximate the context on which this research is based. The main context is university education at two Departments of Geography in the Czech Republic: in Brno and Ústí nad Labem. These cities were chosen because they act as catchment areas for university education in the South Moravian and Ústecký regions. Specifically it is taught in following training courses on aforementioned universities: course of *Sustainability* and the *Urban and Rural Studies* (both at Masaryk University in Brno, taught in the period 2014-2017), both originally introduced by doc. Alois Hynek, and *International Geographic Research* at the University of J. E. Purkyně in Ústí nad Labem since 2017.

In the frame of our didactic methods we use the division of the key concepts in Geography (see also Hynek et al. 2016) or the Sustainability concept as presented e. g. by Whitehead (In Cloke et al. 2014) in the Third edition of *Introducing Human Geographies*. Sustainability, also commented as sustainable development, is an integrated concept which includes three main pillars: the environment, the economy and the society. The environment is represented basically by ecological systems, biological metabolism, source use, etc.; the economy is characterized by financial flows, employment, production process or patterns of consumption; the society is based on living, reproduction, quality of life, health or the issue of the human rights (Whitehead in Cloke et al. 2014). Teaching Sustainability at the Masaryk University of Brno (since Autumn Semester of 2014 up to 2017, with the cooperation with A. Hynek) meant following outline of the course:

- a) Study on Lower Svitava Basin – near Brno
 - 1) rural landscapes
 - 2) urban landscapes
- b) Lectures and complementing seminars on:
 - 1) natural and social capital
 - 2) hybridity and nexus
 - 3) virtual walk along the Svitava river in Brno

The culture lies among three sustainability pillars and it is represented in the space by the cultural landscape. The cultural landscape is created by different people with disparate habits and intentions in different places – material culture is determined by the process of transformation of the environment (Sauer 1963, Hynek 2011). Landscape is product of collective endeavour, it reflects ideas, power and technologies; it is shaped by social organization, it has its own choreography – the processes produce disparate forms (shapes); cultural landscape is the space of nature and human interactions (Sauer 1963, Hynek 2011). Landscape is also a visual image of cultural meanings (Wylie 2007). The analysis of the landscape should include discourses or the systems of language and written studies which are included in the production, representation and interpretation of these landscapes (Cosgrove 1993).

Practical terrain research focused on the perception and cognitive understanding of selected localities. Sustainability – in the frame of this concept the cores of the practical research according to our teaching can consist in (see also Hynek et al. 2016): Land use; Labour, land and capital; Technical and social infrastructure; Divergencies (landscape continuum or so called urban-rural nexus – Gondek 2014); Transport, waste and pollution; Biodiversity; Security questions – ‘safety’ and ‘security’; Agents, actants. Decision makers, stakeholders, shareholders; brownfields – what about their future usage?; Factories and business companies – their environmental policy; Flood risks; Other many possibilities of terrain research.

We also encourage our students to create their own “mental maps” of different areas of study (e. g. surroundings of Brno, urban landscape of cities Brno and Ústí nad Labem), followed by discussion of the natural and social capital placing emphasis on the perception (Hády quarry, Těsnohlídek Valley etc.) and/or the application of the sense of place concept (Tuan 1974, 1977). Interviews and participant observations are the crucial methods of geographical inquiry we try to teach our students as well.

There is also a concept of the scenic roads which is primarily possible to be included into the category of drive tourism or tourism in general (Hardy 2006). For teaching, this concept is a way to get familiar with your region or state. The theme is also applicable for fieldwork or seminar work at universities or lower grade schools. Here there is more space for pupils' own creativity, such as defining important elements in a region or state. These places then form the central points that will result in the scenic road designation. Here there is the opportunity to point out the natural and cultural specifics of each country and to adjust the route choice to them. The final result of this scenic road planning exercise can be the student presentation of the designated scenic roads and the defence of the reasons for their selection.

The Study

Typical quantitative methods were utilized, namely a questionnaire survey, conducted according to the typical methods of creation and evaluation of the questionnaire (Cloke et al. 2004, Disman 2008, Punch 2008). There were three main themes of the inquiry related to the aim of this contribution: 1) general perception of spiritual and personal places in the landscape, 2) attitudes towards concrete sacral and spiritual elements of the landscape 3) application in the university education and environmental sciences. This was a pilot research, created to provide answers of the representative sample of a certain population group (the students of Departments of Geography of the Faculties of Science at UJEP in Ústí nad Labem and MU in Brno); after evaluating the results, the other purpose was to specify, to “soften” (see Hendl 2005) or redefine themes and particular questions. Subsequent research then can be developed in more manners, basically a) to continue with a vast quantitative survey with the aim to collect opinions of broader layers of inhabitants of both examined regions, b) a qualitative survey with limited number of selected respondents, but with the use of thorough semi-structured interviews and standard methods of selection of the communication partners like e. g. the method of the snowballing (Cloke et al. 2004) or the technique of the grounded theory (Strauss & Corbin 1999). The reason to opt for our sample of respondents also laid in the attempt to continue with the research on religious and spiritual imagery of young people (Hopkins 2015, Novotný 2017, Novotný & Daněk 2017, Bobr & Novotný 2018), with the focus on Ústecký Region, which is traditionally rated as one of the least religious regions of the Czech Republic according to statistical data (see e. g. ČSÚ 2014); and immediately after evaluating this part of survey, to aim at the Brno Region, to construct a comparison, between other results, because this territory is part of traditionally more religious South Moravian Region (Lužný & Nešpor 2008, ČSÚ 2014, Nešpor & Vojtíšek 2015).

The questionnaire survey was conducted in Ústí nad Labem in March of 2018, subsequently in Brno in the month of June of the same year. In Ústí nad Labem the questionnaires were distributed in the lectures, including all present students of all years and specializations of Geography in Ústí nad Labem; in the case of Brno the survey was done via online questionnaires in the interface of Google Docs (in June the courses had already ended). The answers of 93 respondents were collected in Ústí nad Labem, with 63% of men (59 persons) and 37% women (34 persons); in Brno 100 respondents participated in the survey (51 men and 49 women). The average age of all respondents in Ústí nad Labem was 22,3 years; in Brno the average age was 23,7, however, it was influenced by some extreme values (Ph.D. students exceptionally up to the age of 39 years). However, the modus (the most frequent value) for Brno was 22 years of age. Many respondents live in Ústí nad Labem or Brno or in the close surroundings of mentioned cities, but others inhabit Brno and Ústí nad Labem just temporarily or commute from localities outside the defined regions of Ústí and Brno (see below), thus a specific amalgam of personal and spiritual important places was created. These were mainly sacral places, selected churches and other monuments, but also places which can be related to the national landscapes (see e. g. Nairn 1997), or places constituted by hills and mountains (Milešovka, Buková Mountain near Zubrnice, Malé Sedlo in the city district of Střekov, then selected lookouts and altitude points in the surroundings of Brno, like the view from the Hády quarry, Babí Lom, Klucanina or Čebínka lookouts).

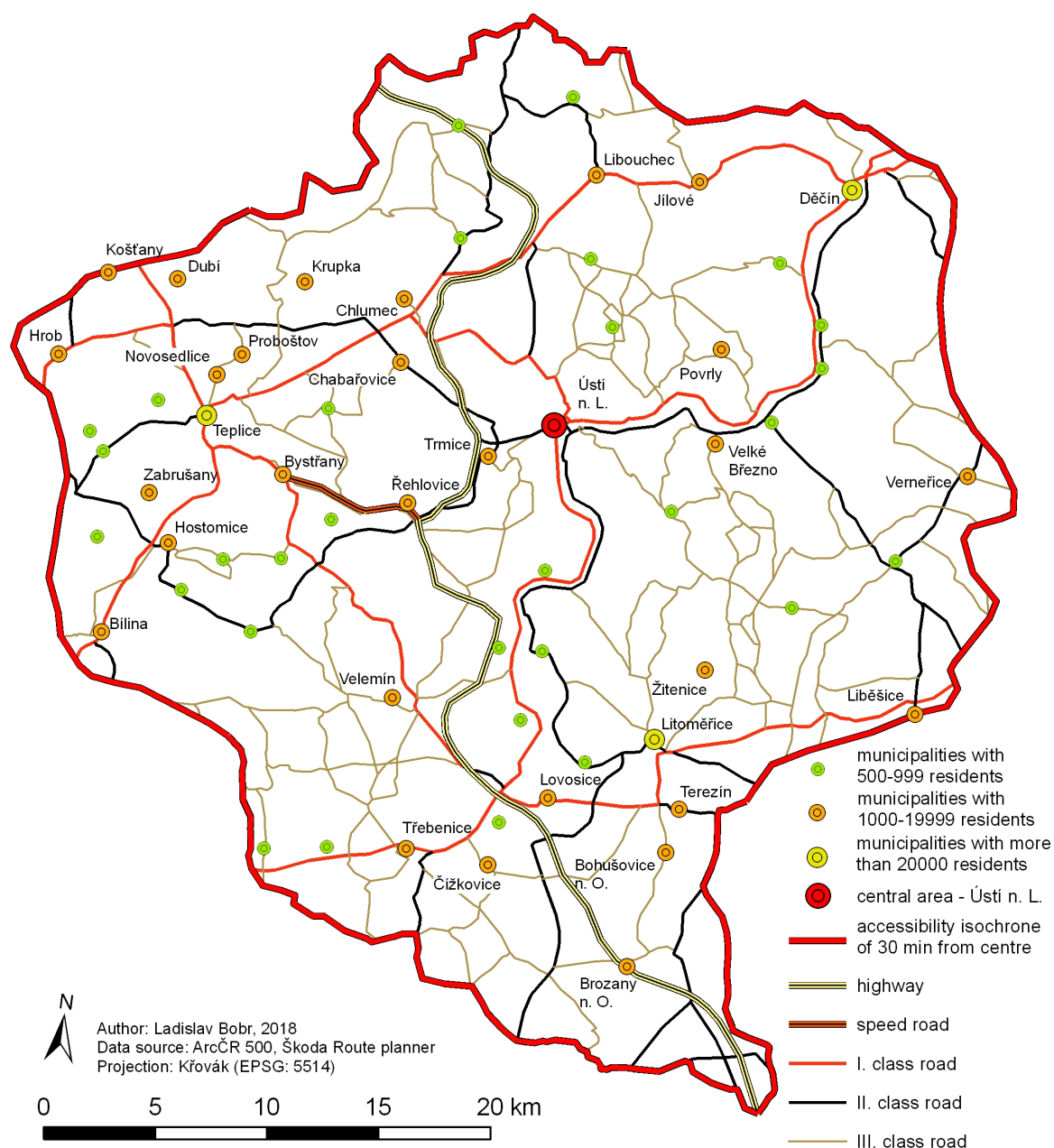


Figure 1: Ústí Region defined by average time accessibility isochrone (30 minutes) by car from the central location (Ústí nad Labem)

The introductory part of the questionnaire concerned the imagery of spiritual places and expression of the personal connection to the sacral landscape. Consequently, the concrete places of respondents' spiritual importance were determined, based on the maps of Ústí Region and Brno Region (Figure 1, Figure 2). These regions were understood as territories delimited by average time accessibility isochrone (30 minutes) by car from the central location (Ústí nad Labem or Brno, using the application Škoda Route Planner (Škoda Plánovač cest 2018)). The account of selected sacral and spiritual places in Ústí and Brno Region did not necessarily include only "material" churches and chapels, but also forest complexes, caves, viewpoints in the landscape etc. The perception of the places had been evaluated on the scale from 0 to 5 and after closing the research, the resulting score of selected localities was defined. The respondents also had the opportunity to express which spiritual and personally important places were missing in this part of the questionnaire.

In the phase of Ústí nad Labem also the more focused querying regarding the importance of surrounding landscape during the commuting to school or employment (vacation, eventually) was carried out; in compliance with the scenic roads concept (Mauch & Zeller 2008, Bobr & Riezner 2017, U. S. Department of Transportation 2018), this part of the research was already published (Bobr & Novotný 2018); the results on the scenic roads in Ústí Region

are not included in this text. The question of roadside memorials (erected to the memory of victims of traffic accidents) was intentionally projected to bridge the issue of scenic roads and particular evaluation of the sacral objects.

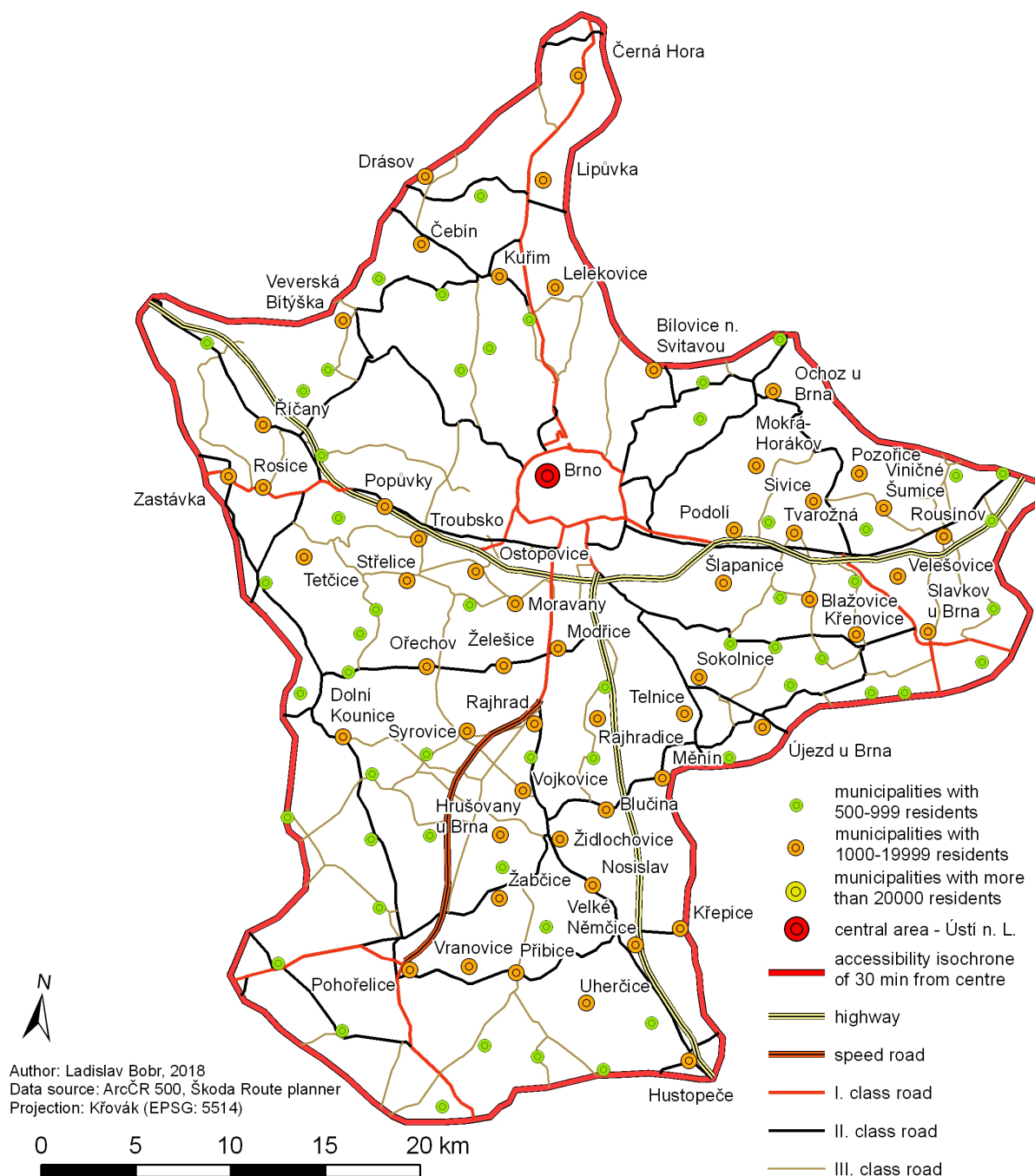


Figure 2: Brno Region defined by average time accessibility isochrone (30 minutes) by car from the central location (Brno)

Consequently, sacral and spiritual places, such as churches, chapels, crosses, stations of the cross or funeral areas were evaluated. Also the landscape perception was questioned, as well as the reflection of concrete feelings when observing the landscape from an elevated place.

As is usual, the final part of the questionnaire asked for common identification data, such as age, sex or the school-year of the respondents (keeping the anonymity, the name of the respondent was not required). An important question, and one of central questions, was about the self-identification of the student regarding their religious attitude, utilizing some predefined categories (non-believer; I believe in a higher power which I would not name God; I am Christian but I do not attend masses or any other spiritual meetings; I am Christian and an active member of the community, etc.). The respondents were allowed to introduce their own specific attitude, out of predefined

categories; this option was frequently used mainly by traditionally more religious (and/or spiritually oriented) students of the Department of Geography of Brno.

Findings

With regards to the sacral landscape and spiritual meaning, students from Ústí mostly state hills and mountains, such as the sites of lookouts (62 %). The second most important part of sacral landscape were pointed out to be churches and chapels (60 %) (it was possible to check more choices in the question). Little less than half of respondents (47 %) also matched forests to that meaning. Only about 34 % connects sacral objects, such as stone crosses and shrines, with any spiritual meanings. Funeral sites (cemeteries, graveyards, tombs, burial chambers, burial sites, necropolis) are mentioned sporadically in some answers, however there was no direct question for that kind of place. Historical sites (i.e. places with historical meaning) and water bodies (rivers, ponds, dams, lakes) are mentioned only rarely. In that context were also rarely mentioned places and spaces, where the person is surrounded by other people. People (crowd) provide spiritual power of the people or community to these places (i.e. people create place).

The answers of students from Brno are sharply different. The most important sacral places are considered to be churches and chapels (92 %), followed by stone crosses and shrines in the landscape (72 %). Elevated places with lookouts and forests are not considered to be much important (only 25 %, or 17 %). Funeral sites were asked for directly, and the result is their importance for 60 % of respondents. According to the answers, these places are mostly connected with their usefulness, importance for meditating, calmness and memory of the deceased. In the imagery of the respondents from Brno, the traditional perception is mostly used, according to which the Christian sacral elements are equal to general sacral elements. These results follow the proposition of higher religiosity of Brno respondents (which is shown by their perception of sacral places) and lower religiosity of Ústí respondents; according to statistics, the South Moravian Region is among the places with the highest religiosity (and with a high percentage of Christians), while the Ústí Region is among the less religious places. That is shown also by different perception of sacral places. The spirituality in Ústí region is mostly linked with natural spaces connected with spirituality and the sacral objects are only vaguely related to the creation and development of personal spirituality. In Brno region, as mentioned above, the spirituality is mostly connected to Christian sacral objects.

Particular places with (possible) spiritual importance for respondents are based on defined regions of Ústí and Brno (defined above; see part The Study / Methods). In Ústí region, the most frequently mentioned places were the surroundings of the place of home and further mountainous parts of the landscape. Their importance was partly for the physical landmark itself (easily found and dominant element of the landscape), partly for the lookout place; this supported the original hypothesis of including questions on spiritual aspects of lookouts as well. Among these should also be included rock structures (such as Tisá Walls or Marian Rock, a landmark in Ústí).

In Brno region, there was a stronger connection to the place of study, Brno itself. In the first, open student suggestion question, the Petrov cathedral (cathedral of St. Peter and St. Paul in the city core of Brno, one of important landmarks, shown also on one of the Czech coins) is mentioned most frequently. Another frequent place in Brno was St. James Church near the main square in the city core, or a common category “churches”. Particular churches were mentioned also in the region of Brno, e.g. monastic church in Rajhrad (south of Brno) and Vranov u Brna (north of Brno) or pilgrimage church in Křtiny (northeast of Brno). Important churches (in the sense of history or architecture) and pilgrimage places were mentioned also in a common meaning. On the other hand, the in Ústí frequently mentioned categories of high places and lookouts were almost excluded in Brno respondents’ answers. Some respondents identified sacral and spiritual places exclusively with Christianity; thus leading to answers in sense of “I am not a believer, I have no such places”. This also points out the usual confusion “spiritual/sacral means Christian”, which is quite common in the Czech Republic.

Table 1: Perception of connection between selected parts of landscape and personal spiritual life (%).

	Ústí	Brno
churches and chapels	60,2	91,9
(stone) crosses and shrines	34,4	77,8
forest	47,3	17,2
hills, mountains – points of lookouts	62,4	25,3
cemeteries and other funeral places	N/A	58,6
other place	21,5	11,0

Source: own research and processing

Results of the part of survey containing the score of personal importance of places in the Ústí region, happened to be influenced by respondents’ place of living. It is a result itself, however it probably urges to re-define and narrow

the study of spiritually connected places in urban and rural landscape. Two places in the Ústí region have a crucial role, no matter the respondents' place of living – Říp (mythical hill, key place in Czech origin myths), which itself is out of the region, but it is visible and easily identified due to its shape, and Terezín (town, former fortress and a place with the holocaust memorial). The survey score was 347 for Říp and 341 for Terezín, which are the highest values. Other notable places in Ústí region with high scores are: Milešovka (sharp cone shaped hill, regional landmark and place of free time activities; score 296), Tisá Walls (natural landmark, rock structures; score 286), Střekov Castle (natural and historical landmark in Ústí district Střekov, part of panorama above the Elbe river; score 263) and Větruše (natural and historical landmark with small castle on the hill above the confluence of Elbe and Bílina rivers, part of panorama of Ústí; score 241). These places are also both landmarks and very impressive lookouts.

On the other hand, two other lookouts with assumed importance were scored as less important. The main reason for their low score is probably bad accessibility. Lookout on top of Malé Sedlo hill (score 86) is placed in a rather peripheral area to Ústí and it is not much known. Erben's lookout above Ústí district Dobětice (hill with lookout and lookout tower; score 136) is an important landmark (sharp hill above the estate), however it is far from students' daily used areas. According to the survey, other less important places are Přemysl Oráč memorial in Stadice (also refers to Czech myths; score 124) and noticeable hill Buková hora near Zubrnice (score 130). These places with less personal and spiritual importance were substituted by specific hills, memorials, landmarks and places near respondents' places of living. It is possible that respondents were influenced by the previous question in the survey, which led to equalling of spiritually important place perception and "mere" landmark presence perception in place of living. The result of this equalling was a combination of personal influence, everyday or regular movement and local landmarks; spirituality was lost in this phase of research.

In Brno region, the Petrov cathedral in city centre of Brno (score 337) had the highest score. In Brno are also other important religious landmarks – St. James church (score 298) and The Augustinian Abbey (church and monastery) in Staré Brno (at the Mendlovo square; the abbey has been the home and workplace of scientist Johann Gregor Mendel. A special kind of spiritual place is the battlefield of The Battle of Austerlitz (score 211), which consists of several places (e.g. castle in Slavkov u Brna [originally Austerlitz], memorial at Zuran hill, several mass graves areas, etc.). The most important is probably The Peace Memorial near Prace, which is the first peace memorial in Europe. On the other side of Brno region (northwest of Brno) is Veverí castle (score 204), built on the promontory above Svratka river (now above surface of Brno Dam) in a forestall area. Discussing the score of the latter two places, their importance probably lies in their tourist attractiveness and their aura of a place for pleasant experiences in general, not only in the spiritual sense. On the other hand, both of these places can be attractive for dark tourism fans.

As mentioned above, the places of lookouts in Brno region have surprisingly failed. The only exception is lookout tower at Babi lom hill (north of Brno; score 159). Other lookouts and lookout towers, such as Květnice hill above Tišnov (score 91), the rather well known Alexander's Lookout Tower above Adamov (score 80), Klucanina (above Tišnov; score 69), Čebínka (northwest of Brno; score 55), have rather low score. However, the popularity of Babi lom and Květnice may result from their natural and landscape importance, the exploration of which used to be a part of lessons in the Department of Geography. It is possible that high places in landscape are not as important as in Ústí region because of the type of relief. Mentioned high places in Brno region, which are meant to be widely known, are rather far from the core of the Brno urban region. As has been found out during years of teaching the courses "*Sustainability*" and "*Urban and Rural Studies*" at the Department of Geography in Brno, a lot of students have no interest in exploring nearer and further surroundings of their place of study. Their daily time-spatial routines are narrowed down to places of temporary living, study and several free time activities (e.g. sports ground, library, restaurants, pubs, clubs etc.). Similar behaviour is observed with students of the Department of Geography in Ústí, although their link to the Ústí region is stronger (but not with the city of Ústí itself). It may be caused by a stronger regional impact of Ústí Department, while students come to Brno from different regions of the Czech Republic, i.e. not only from the Brno region or the South Moravian region.

The next topic of survey was reverential places near roads, which emerge as the memorials of road accident victims. In general, results of survey did not confirm the thesis of Przybylska (2015), who stated a growing rejection of these roadside memorials. Ústí students seem to be permissive; most of respondents checked the answers "it is right, they [roadside memorials] are a useful warning and also road accident prevention" (78 % of respondents) and "it is right, they [roadside memorials] remind of the deceased person in a suitable way" (58 % of respondents). Among Brno respondents, the results were quite similar (63 %, or 45 %). It is possible to conclude, that young people are more accustomed to roadside memorials. They can feel compassion with their same-age peers, who are sometimes involved in these accidents as well. Results of this survey seemed to show an important field for further deeper research (e.g. via interviews; Cloke et al. 2004, Dismar 2008).

It would also be incorrect to ignore the negative answers, although they are notably fewer. About 4 % of respondents both in Ústí and Brno do not like this kind of reverence in public space. Another portion of respondents consider the memorials as morbid (3 % for Ústí and 6 % for Brno). Partial comments for this topic show mostly the unsuitability of this kind of personal memorials in public space. One of respondents even advised the survivors should “put the headstone in their living room”. There were two other possible answers added in Brno part of survey (it ran after Ústí part). These answers were “I do not like them [roadside memorials], they often have low aesthetic quality” (12 %) and “I do not like them [roadside memorials], they distract the drivers” (5 %). Whole results are shown in Table 2.

Table 2: Perception of reverential places of road accident victims next to roads (e.g. crosses, memorials, flowers, candles etc.). Values in table in %.

	Ústí	Brno
it is right, they remind of the deceased person in a suitable way	58,1	45,0
it is right, but I do not perceive them	N/A	26,0
I do not like them, they do not fit into public space	4,3	4,0
I do not like them, they are morbid	3,2	6,0
I do not like them, they often have reduced aesthetic quality	N/A	12,0
it is right, they are a useful warning and also road accident prevention	78,5	63,0
no opinion	2,2	0,0

Source: own research and processing

The last topic of the survey focused on perception of specific (pre-defined) kinds of object and places, which are usually connected with religion or spiritual things. Categories were churches and chapels, crosses and shrines, Ways of Crosses and funeral sites. For each category possibilities of perception were set as “historical sites”, “spiritual places or places of calm”, “prominent landmarks”, “useless elements” and two other categories for other or no opinion.

For Ústí part, churches and chapels are perceived mostly as a historical landmark (92 %) and as a spiritual place or place of calm (68 %). Their perception as a prominent landmark is notably lower (29 %). On the other hand, almost no one marked them as useless elements, and the count of “no opinion” possibility was also very low (only about 5 %). Students from Ústí mostly state architecture, importance for tourism and sometimes also pleasant feelings as the positive attributes of these objects and their places. In some cases, negative attributes are stated as well; sometimes these places cause awkward feelings, disdain for religion (not mentioned whether only for Christian or religion in general), or feelings that “there is no business for an atheist in this place”. Among Brno students, churches and chapels are dominantly perceived as historical landmarks (89 %) and almost in the same way as spiritual places or places of calm (80 %). The perception as a prominent landmark is also lower (but not as much as in Ústí part; 55 %), while other possibilities take only marginal portion.

Crosses and shrines are perceived in a similar way. For Ústí part, most students see them as historical landmarks (58 %) and spiritual places (53 %). Interestingly, there is a relatively high portion of respondents who perceive them as the useless elements (13 %). For Brno part, the meaning of these objects as historical landmarks was noticeably lower than as spiritual places (52 %, or 60 %). They were also widely perceived as prominent landmarks (31 %), while their uselessness was distinctively lower (only 3 %). The question on Ways of Crosses was put only into Brno part of survey, where these objects were marked mostly as places of calm (63 %). The difference of perception of these places may be caused by different socio-cultural background of both regions. It is possible to tell the amount of these objects in both regions is similar. Their architecture and historical background are different – in Ústí region they were established mostly by German nationality and were strongly influenced by conventions of this community, while in Brno region the main driving force was Slav inhabitants (Moravians) and their conception of Christianity was rather different (partly because of strong Great Moravia influence). While the original inhabitants in Brno region remained, Ústí region underwent a great change because of resettlement of German inhabitants after World War II. (in Brno and in some parts of its region there were similar changes after World War II. Most of inhabitants of Brno core were German-speaking people as well. However, the change of culture was not as significant as in Ústí).

Views of landscape from some view point were in Ústí part perceived mostly as an aesthetical experience (87 % of respondents). It was also confirmed, that the calmness of the view can be related to spiritual life or spiritual feelings. Almost 30 % of respondents claim to experience unusual spiritual feelings and 11 % feel the presence of (some) supreme power. Among other feelings, there were quoted: peace, delight of climbing, overlooking the

landscape, insignificance of person compared to nature or an overall feeling of freedom. Results for Brno part were quite similar – 93 % of respondents perceive an aesthetical experience, 23 % feel the presence of supreme power and 18 % experience unusual spiritual feelings. These results also confirm the thesis of greater religiosity in Brno region. These results could also be a base of thesis of an extended spirituality. This spirituality has different presence in both regions; it is grounded in the traditional Christian religiosity in Brno region, but it proves to be a development of personal (individual) spirituality, with a very weak continuity to Christianity, in Ústí region.

The last part of survey contained a question on religious preferences of respondents (Table 3). These were put together with demographical and statistical questions. The Ústí Region has a long-term position as the least religious region of the Czech Republic (ČSÚ 2014). Nevertheless, it is rather surprising that only 3 students (3 %) stated a particular church (2 for Catholicism, 1 for Czech Brethren Evangelic Church). Only 9 % of respondents quoted affiliation with Christianity, but with no need to attend masses or other spiritual meetings. There was also an expectation of high share of people checking the possibility “I do believe in some supreme power, but I would not call that power *God*”. According to temporal surveys on religiosity in the Czech Republic, most people believe “in something”, which means in some transcendental power (Nešpor 2010, Václavík 2010, Štampach 2017). This discussed possibility was checked by almost 37 % of respondents, which leads to an opportunity for further research of religious or quasi-religious stances of (not only young) inhabitants of Ústí region. 52 % of respondents claimed themselves to be non-believers.

As discussed above, the situation in Brno region is different. Only about 20 % of respondents stated they are the non-believers. The most frequent stand-alone answer was the one of supreme power not called “God” (26 %). Strong affiliation with Christianity proves among possible dealing with Christianity – 21 % of respondents state to be Christians, but not attend masses or other spiritual meetings, 18 % claim to be an active part of the community and 8 % count themselves as Christians too, but they only attend masses (that means they do not usually attend other events connected primarily with Christianity).

Table 3: Religious/spiritual preferences of Geography students in Ústí and Brno (in %).

	Ústí	Brno
Non-believers	51,6	20,0
I do believe in some supreme power, but I would not call that power “God”	36,6	26,0
I am Christian, but I do not attend masses or other spiritual meetings	8,6	21,0
I am Christian, but I attend only masses	N/A	8,0
I am Christian and I am an active member of the community	3,2	18,0

Source: own research and processing

Conclusions

This pilot study focused on three particular issues related to the perception of the sacral and spiritual landscape meaning in the core areas of South Moravian and Ústecký Region. The purpose was to approximate religious and quasi-religious imagery of the surrounding spaces. Religiosity is a conditioned complex of individual and subjective opinions (but still it is possible to identify specific inner regularities) and its inquiry in the contemporary Czech Republic brings knowledge about the shifts in the spiritual attitudes of young population. These attitudes differ with regard to the specific conditions of selected territories, basically because of: 1) traditionally long-term higher religiosity in South Moravian Region which is reflected also in religious and spiritual attitudes of young population, in contrast with Ústí (and Ústecký) Region, where the population was mostly re-settled during the 20th century and traditional religious ties often were shattered; 2) specific relief which enables creating of personal spirituality mainly in Ústecký Region, and without a traditional religion. Regarding the landscape perception, natural spaces of hills and mountains became crucial in the selected group of respondents; it meant elevated places in the landscape which are often linked with the spiritual feelings when observing the landscape. The places of personal importance are also related to the important localities of Czech historic past, with mythology (Říp Mountain) or the suffering of not only Czech nation (Jewish Memorial in Terezín), but also with the places of the origin of the individual, who belongs to certain (micro)region of regular practices. In Brno Region the importance of places is connected with the origin of the respondent in concrete territory within Brno Region, but at the same time there is also a higher share of students coming from very different regions of the Czech Republic. Generally, from the Brno phase of the research it is possible to observe importance assigned to the sacral monuments which serve as a spiritual place, but also as an urban landscape dominant. The clearest example is definitely the Petrov Cathedral, followed by other sacral monuments (churches and monasteries); also the Slavkov (Austerlitz)

battlefield has an important role, with certain analogy with the Terezín (former Jewish concentration camp and today a memorial place) at Ústí Region; in both cases these are places commemorating human suffering. Nevertheless, regarding the daily or regular activities, it is not the place of study which is important for commuting students from the personal/spiritual point of view, but the place of home. It is more visible in the example of Ústí Region, but this phenomenon is observable also in Brno Region. Places and sites like these are also good to watch for their scenic road potential and consider their interconnection. In case of this article, it is possible to speak about creating sacral scenic roads.

Albeit declared religiosity (in the sense of claiming to be a member of concrete Church or at least frequent visitor of masses and other spiritual meetings) of students in Ústí nad Labem is extremely low, several places have been assigned a spiritual value: this can once more challenge the questioned thesis about the non-religiosity of (young) population of the Czech Republic and particularly in the Ústí Region. If we put to the account relatively strong religiosity of the part of the students in Brno and frequent formulation of several forms of spirituality (in both regions), we can conclude that young people (based on the example of the geography students) are relatively considerably spiritually concerned in both regions, developing their own spirituality; simply said, they are not atheist, as is often claimed regarding the population of the Czech Republic. There are new emerging research options of more focused, mainly qualitative inquiry, which has already been dealt with by one of the authors hitherto on the example of Moravian cities. There are new options of grasping the particular questions about which we now have general results, and a continuation in the relatively attractive study of religious and spiritual attitudes of (not only) young inhabitants of Brno Region and mostly Ústí Region, it means the territory with very marked and distinctive morphology, which strongly helps to the specific perception. The essence of our research is also the involvement of the collected data and knowledge in the teaching and further development of the concepts discussed above in the relation to the university teaching.

Acknowledgements

This work was supported by the Grant Agency of the Masaryk University [grant number MUNI/A/1251/2017].

References

- Bobr, L. & Novotný, G. (2018). Percepce sakrální a duchovní krajiny na Ústecku. In: V. Klímová, & V. Žitek (Eds.): *21th International Colloquium on Regional Sciences. Conference Proceedings* (pp. 586-594). Brno: Masarykova univerzita.
- Bobr, L. & Riezner, J. (2017). Scénické silnice a jejich proměny na příkladu USA a Německa. In *Geografické rozhledy*, 26(3), pp. 31–32.
- Cosgrove, D. (1993). *Social formation and the symbolic landscape*. Madison, Wisconsin: University of Wisconsin Press.
- Cloke, P. et al. (2004). *Practising Human Geography*. London: SAGE.
- Cloke, P. et al. (2014). *Introducing human geographies*. 3rd ed. London: Routledge.
- Český statistický úřad, (2014). *Náboženská víra obyvatel podle výsledků Sčítání lidu* [On-line]. Available: <https://www.czso.cz/csu/czso/nabozenska-vira-obyvatel-podle-vysledku-scitani-lidu-2011-61wegp46fl>.
- DeCerteau, M. (1984). *The practices of everyday life*. Berkeley: University of California Press.
- Disman, M. (2008). *Jak se vyrábí sociologická znalost*. Praha: Karolinum.
- Forman, R., & Godron, M. (1993). *Krajinná ekologie*. Praha: Academia.
- Gondek, K. P. (2014). *Pressures of Hybridity: An Analysis of the Urban-Rural Nexus*. Calgary: University of Calgary.
- Hardy, A. (2006). *Drive Tourism: A Methodological Discussion with a View to Further Understanding the Drive Tourism Market in British Columbia, Canada* [On-line]. Prince George: UNBC. Available: https://www.unbc.ca/sites/default/files/assets/community_development_institute/publications/a_hardy_cdi_paper.pdf.
- Hartig, K., & Dunn, K. (1998). Roadside Memorials: Interpreting New Deathscapes in Newcastle, New South Wales. In *Australian Geographical Studies*, 36(1), pp. 5-20. ISSN 1467-8470. DOI 10.1111/1467-8470.00036.
- Havlíček, T. (2011). Sakrální objekty v krajině jako nedílná součást českého venkova [On-line]. Available: <http://www.dvs.cz/clanek.asp?id=6485631>
- Havlíček, T., & Hupková, M., (2008). Religious landscape in Czechia: new structures and trends. In *Geografie*, 113 (3), pp. 302-319. ISSN 1212-0014.
- Hendl, J. (2005). *Kvalitativní výzkum. Základní metody a aplikace*. Praha: Portál.
- Hopkins, P. (2015). Scales of Young People's Lives. In J. Wyn, & H. Cahill (Eds.), *Handbook of Children and Youth Studies* (pp. 761-772). London: Springer.
- Hynek, A. (2011). Geografie, geograficita – prostorovosti. In Svobodová, H. (Ed.), *Geodny Liberec 2008. Sborník příspěvků* (pp. 71-77). Liberec, Brno: GAREP.

- Hynek, A. et al. (2016): Thinking Space Geographically. In Gómez Chova, L.: *ICERI2016 Proceedings* 9th International Conference of Education, Research and Innovation November 14th-16th, 2016 — Seville, Spain (pp. 1338-1346). Valencia: IATED Academy, 2016.
- Lipský, Z. (1998). *Krajinná ekologie pro studenty geografických oborů*. Praha: Karolinum.
- Lužný, D., & Nešpor, Z. (2008). *Náboženství v menšině*. Praha: Malvern.
- Mauch, C., & Zeller, T. (2008). *The World beyond the Windshield: Roads and Landscapes in the United States and Europe*. Athens (Ohio): Ohio University Press.
- Nairn, T. (1997). *Faces of nationalism*. Londýn, New York: Verso.
- National Geographic Česko (2017). *Na vrchol Australského symbolu Uluru už se turisté nepodívají* [On-line]. Available: <https://www.national-geographic.cz/clanky/na-australsky-symbol-uluru-uz-se-turiste-nepodivaji-20171103.html>
- Nešpor, Z. (2010). *Přiliš slábi ve víře. Česká ne/religiozita v evropském kontextu*. Praha: Kalich.
- Nešpor, Z., & Vojtíšek, Z. (2015). *Encyklopedie menších křesťanských církví v České republice*. Praha: Karolinum.
- Nešporová, O. (2013). *O smrti a pohřbívání*. Brno: CDK.
- Nešporová, O., & Stahl, I. (2014). Roadside memorials in the Czech Republic and Romania: Memory versus religion in two European post-communist countries. In *Mortality*, 19(1), pp. 22–40. ISSN 1357-6275.
- Novotný, G. (2017). *Prostorové představy a praktiky mladých věřících v Brně*. [Rigorózní práce]. Brno: Masarykova univerzita.
- Novotný, G., & Daněk, P. (2017). Sekularizace nebo re-sakralizace? Prostory víry mladých věřících v Brně. In V. Klímová, & V. Žitek (Eds.), *XIX. mezinárodní kolokvium o regionálních vědách. Sborník příspěvků* (pp. 945-951). Brno: Masarykova univerzita. DOI 10.5817/CZ.MUNI.P210-8587-2017-124.
- Park, C. (1994). *Sacred Worlds: An Introducing to Geography and Religion*. London, New York: Routledge.
- Przybylska, L. (2015). Memorial crosses in Poland: a commonplace and contested element of public roads. In *Geografie*, 120(4), pp. 507–526. ISSN 1212-0014.
- Punch, K. (2008). *Základy kvantitativního šetření*. Praha: Portál.
- Raglan, L. (1964): *The Temple and The House*. Washington, D. C.: W. W. Norton.
- Relph, E. (1976). *Place and placelessness*. Londýn: Pion Ltd.
- Sauer, C. (1963). The morphology of landscape. In J. Leighly (Ed.), *Land and life: a selection from the writings of Carl Ortwin Sauer*. Berkeley: University of California Press.
- Schama, S. (2007). *Krajina a paměť*. Praha: Argo.
- Sklenička, P. (2003). *Základy krajinného plánování*. Praha: Naděžda Skleničková.
- Stibral, K. (2005). *Proč je příroda krásná*. Praha: Dokořán.
- Stibral, K., & Faktorová, V. (2015). *Krajina – maska přírody? Studie k estetice krajiny a environmentu*. České Budějovice: Jihočeská univerzita v Českých Budějovicích.
- Strauss, A., & Corbin, J. (1999). *Základy kvalitativního výzkumu*. Brno: Sdružení Podané ruce.
- Šiler, V. (2017). Prostor pro spiritualitu: Sakrální prostory v objektech péče vypovídají o české společnosti. In *Dingir: časopis o současné náboženské scéně*, 20(4), pp. 142-144. ISSN 1212-1371.
- Škoda Plánovač cest (2018). *Plánovač cest* [On-line]. Available: <http://dealer.skoda-auto.cz/mini-apps/new-routeplanner>
- Štampach, I. O. (2017). Dramatické posuny na náboženské scéně: Náboženství se v české společnosti po roce 1989 rychle mění. In *Dingir: časopis o současné náboženské scéně*, 20(4), pp. 142-144. ISSN 1212-1371.
- Tuan, Y.-F. (1974). Space and Place: Humanistic perspective. In *Progress in Geography*, 6, pp. 233–246.
- Tuan, Y.-F. (1977). *Space and Place. The Perspective of Experience*. Minneapolis: University of Minnesota Press.
- U. S. Department of Transportation (2018). *America's Byways* [On-line]. Available: <http://www.fhwa.dot.gov/byways>
- Václavík, D. (2010). *Náboženství a moderní česká společnost*. Praha: Grada.
- Wylie, J. (2007). *Landscape*. London, New York: Routledge.
- Zonneveld, I. S. (1995). *Land Ecology*. Amsterdam: SPB Academic Publishing.

School Administrators' And Teachers' Perceptions On Special Education In Inclusive Schools

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Abstract

The purpose of this study is to determine the administrators' and teachers' perceptions on the needs related to the inclusive education practices and management at elementary level inclusive schools. In this research, study group has been chosen from classroom teachers, administrators and special education teachers currently working in the 2017-2018 academic year. Validity and reliability tested semi-structured interview forms have been used during data collection. Different set of interview questions have been prepared for school administrators and teachers. Data has been analysed through content analysis method. Research findings have been divided into sub themes. According to the research findings, school administrators said that they provided all kind of support for special education teachers and had positive attitudes toward inclusive education. However, classroom teachers stated that students with special needs disrupted the classroom environment. On the other hand, special education teachers said that practices for students with special needs had been very successful and helpful. They added that school administration did not provide sufficient support for special education.

School Autonomy In France According To Talis 2013: The Importance Of Educational Leadership

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Abstract

In recent years, school autonomy in France has become a central issue for the improvement of students' outcomes. French principals, who have a significant responsibility for learning tasks, play an active role in decision-making. The purpose of this study is to explore the correlation between the type of school (publicly or privately-managed) and the significant responsibilities of French principals which participated in TALIS 2013. The sample consisted of 174 participants. Descriptive data were generated for all variables (percentages and means). Pearson's chi-square test was used to determine if there is an association between the type of school and principals' responsibilities for some tasks. All analyses were carried out using SPSS, version 22. Findings suggest a significant correlation between the type of school and principals' responsibilities for dismissing teachers and establishing teachers' salaries. This study adds to a growing body of research that school-based management has an influence on principals' responsibilities for deciding which courses are offered and choosing learning materials.

Keywords: *Leadership, principals, professional autonomy, school autonomy, school-based management.*

Introduction

In France, not all schools assume the same responsibilities legal or administrative. Hence the fact that people who administer schools receive different names. Principal is the name of Lower Secondary Education directors and Proviseur, in the Lycée, of Higher Secondary Education. French principals of Secondary Education can make decisions to authorize expenses, modernize the equipment and make some items of the budget more flexible (Oria, 2009). A qualitative study by Tulowitzki (2013) described how five Parisian principals had spent their work time. Most of them put a low emphasis on school improvement. They had to face many tasks and responsibilities with a demanding level of complexity. Their activities were related to administration and relationship.

In France, the transition from lower secondary education to upper secondary education is particular: families are involved in a process of dialogue with the school. In the first step, families make a request. In the second step, the staff meeting formulates a proposal. Barg (2013) found that school staff's decision-making depended on families' requests and, therefore, had reproduced the differences between social classes. Parental involvement had a great influence on school staff's decision-making. From a legal point of view, French principals can make decisions related to the organization of teaching in their school, but not with their methods and contents. This task is carried out through a division of responsibilities between the administration, the year head and its team and the pedagogical area (teachers) (Normand, 2015). French public schools are managed through a centralized system in which all teachers and principals are government employees. Elementary schools have principals who teach in and manage their schools, whereas principals work full time in middle and high schools (Supovitz, 2013).

The administrative accountability has influenced schools in the long term, although it has not had important consequences on teaching responsibilities. There is a limited autonomy for schools, a framework for school choice of limited dimensions and an unsatisfactory decentralization (Derouet, Normand & Pacheco, 2015).

School principals have the right to be both leaders and spokespersons for their schools. An effective management of human resources requires the recognition of directors as leaders, which does not agree with the pedagogical autonomy and professionalism demanded by teachers (Dutercq, 2015).

In 2005, an accountability policy was implemented in the French educational system, but it remains bureaucratic, centralized and descending, without taking school improvement into account. French principals have limited autonomy because their tasks are limited by the national standards in the curricula, teaching and schedules in schools (Normand, 2016).

French students' scores in PISA tests are close to the average of the OECD countries in all subjects. The government created two action plans. One plan is intended to provide personalized assistance to students with learning difficulties. Another plan aims to give schools more autonomy to manage its budget (Baird et al., 2016). After the publication of PISA results in France, the French government implemented national standards, an evaluation based on the PISA methodology for eighth grade students (Hugonnier, 2017).

The growing inequality of student performance in the last 15 years, confirmed by PISA results and the fact that this inequality is the highest in Europe, has been the reason why school autonomy remains limited. Many teachers and parents believe in traditional teaching and question political measures that advocate the learning diversity (Michel, 2017). In a study investigating principals' workload in France, Leithwood & Azah (2014) reported that school improvement is related to highly motivated principals who perfect their leadership over time, take advantage of their abilities in different contexts and work with other principals.

Objective

This paper investigates the factors that influence French principals' decision-making. The purpose of this study was to explore the relationship between the type of school (publicly or privately-managed) and the significant responsibilities of French principals for some tasks to improve school management.

The Study

Teaching and Learning International Survey (TALIS) is an international survey that offers the opportunity for principals to provide information about their professional development, practices, beliefs and school leadership. The questionnaire, which asks for information about policy matters and education, was completed by French principals (OECD, 2013).

Data were collected from TALIS 2013 results in France.

A variable is a construct or concept which is assigned to numerical values (DePoy & Gitlin, 2011).

A qualitative or nominal variable, which involves non-numerical observations, describes an individual by putting it into a group or category such as man or woman (Brase & Brase, 2016).

The values of a categorical or nominal variable are expressed as some categories, stated in words. If a categorical variable has two values is called a dichotomous variable. If it has more than two values, it's called a polytomous variable (Quader, 2016).

Pearson's chi-square test was used to determine if there is an association between the type of school and the significant responsibilities of French principals. The chi-square test of independence is conducted to determine whether the frequencies' distribution for one categorical variable is independent of another variable (Tokunaga, 2015). It's used to test the null hypothesis that the outcomes' proportions are the same all compared groups. The alternative hypothesis states that the proportions of outcomes are different (Hanneman, Kposowa & Riddle, 2013). The null hypothesis claims that there is no difference between compared groups or no relationship between variables. In contrast, the alternative hypothesis claims that there is a difference between compared groups or relationship between variables (Allen, 2017). If the P-value is less than 0.05, the null hypothesis is rejected and the alternative hypothesis is true. Then the result is statistically significant. If the P-value is equal to or greater than 0.05, the null hypothesis is accepted and the result is not statistically significant (Defusco et. al, 2015; Epstein & Martin, 2014).

In general terms, the alpha level or the level of significance is a probability level set before beginning hypothesis testing and determines the standard to reject the null hypothesis (Smith, Gratz & Bousquet, 2009). The alpha level sets the boundaries that separate high-probability samples (those that are likely to be obtained) from low-probability samples (those that are unlikely to be obtained) if the null hypothesis is true (Gravetter & Wallnau, 2009). In social sciences, it's commonly used an alpha level = 0.05. The normal curve of the sampling distribution, which represents 95% of its area, is included within 1.96 standard deviation units. Any score farther away from the mean falls within the 5% region (2.5% on either extreme of the sampling distribution) (Meyers, Gamst & Guarino, 2006).

All analyses were carried out using SPSS, version 22.

Findings

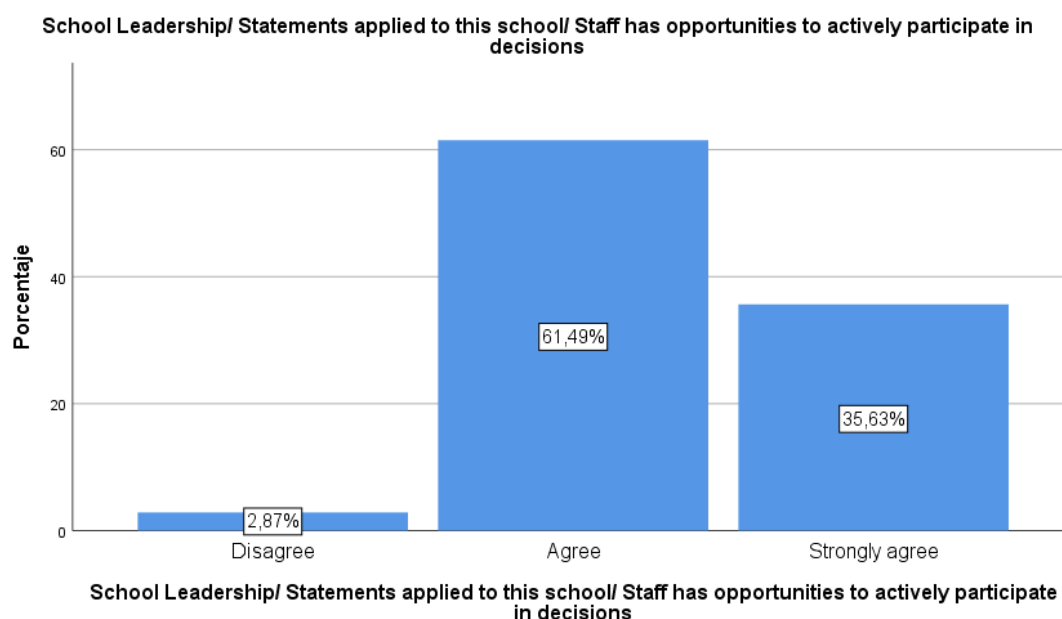


Chart 1. Percentage of French principals who answered the question “How strongly do you agree or disagree with this statement: This school provides staff with opportunities to actively participate in school decisions”.

Of two hundred and four French principals, one hundred and seventy four completed the questionnaire. 61.49% of French principals provide staff with opportunities to actively participate in school decisions, 35.63% of the respondent strongly agreed with the statement. A minority of participants (2.87%) disagree with the statement.

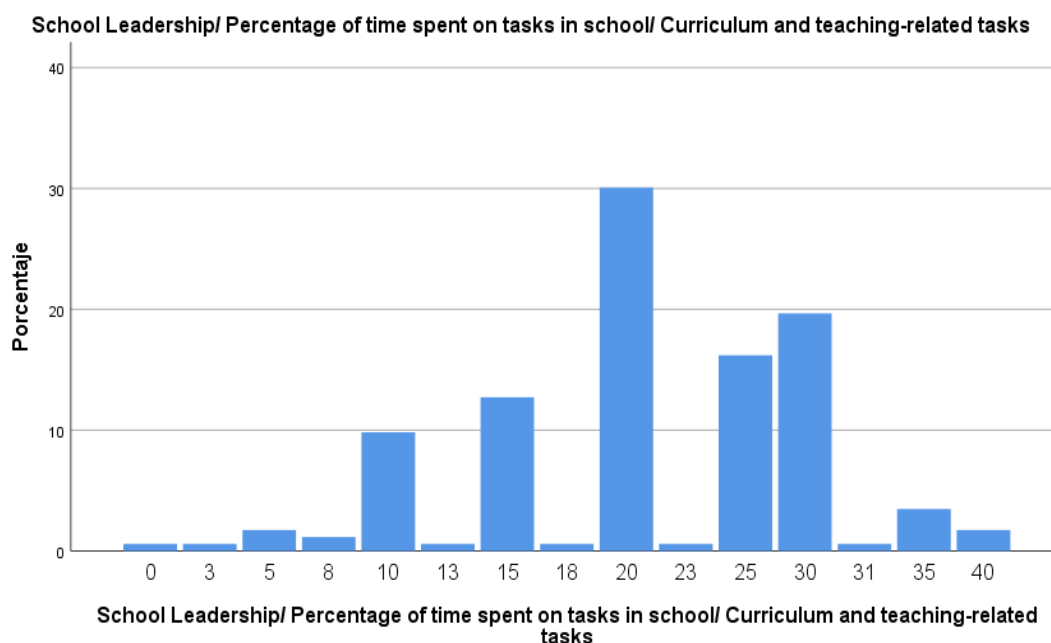


Chart 2. On average throughout the school year, percentage of time in the role as a principal that he/she spends on Curriculum and teaching-related tasks in school (Including developing curriculum, teaching, classroom observations, student evaluation, mentoring teachers, teacher professional development).

From the Chart 2 it can be seen that 30% of French principals have spent 20% of their time on Curriculum and teaching related tasks in school, 19.6% of them have spent 30% on their time, 16.9 of them have spent 25% of their time. 12.8% of French Principals have spent 15% of their time and 9.8% spent 10% of their time on Curriculum and teaching-related tasks. A minority of participants (less than 3%) have spent different percentages of their time on these tasks; for instance, 3%, 5%, 8%, 13%, 18%, 31%, 35% and 40%

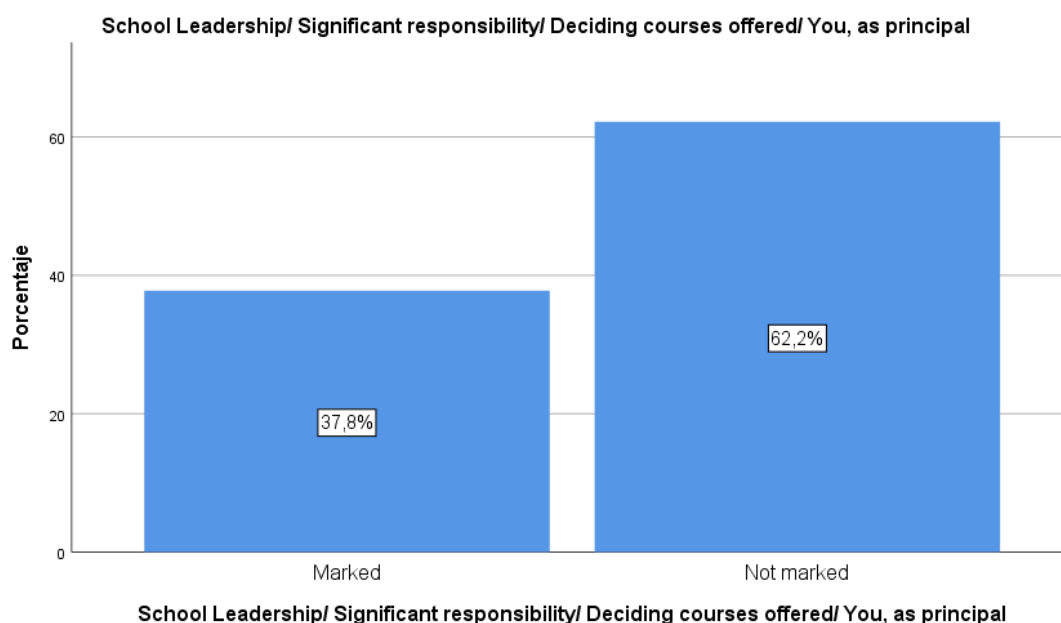


Chart 3. Percentage of French principals who had a significant responsibility for deciding which courses were offered.

From the Chart 3 it can be seen that 37.8% of French principals had a significant responsibility for deciding which courses are offered, whereas 62.2% of them hadn't this responsibility.

Chi-Square distribution

The null hypothesis is accepted if the P-value is equal to or greater than 0.05 (the two variables are independent)

The alternative hypothesis is true if the P-value is less than 0.05 (the two variables are related)

	Value	df	P-value
Chi-square Distribution: Is there a correlation between the type of school (publicly or privately managed) and principals' responsibilities for dismissing teachers?	10,272 ^a	1	0.001

Table 1. P-Value of the correlation between the type of school and principals' responsibilities for dismissing teachers.

As Table 1 shows, there is a statistically significant correlation between the type of school (publicly or privately managed) and French principal's responsibility for dismissing teachers. The alternative hypothesis is true, so there is a difference between compared groups (public/private school principals) in relation to that task.

	Value	Df	P-value
Chi-square Distribution: Is there a correlation between the type of school (publicly or privately managed) and principals' responsibilities for deciding which courses are offered?	23,023 ^a	1	0.00

Table 2. P-Value of the correlation between the type of school and principals' responsibilities for deciding which courses are offered.

Table 2 shows a P-value = 0. There is a statistically significant correlation between the type of school (publicly or privately managed) and French principals' responsibilities for deciding which courses are offered. The alternative hypothesis is accepted, so there is a difference between compared groups (public/private school principals) in relation to that task.

	Value	Df	P-value
Chi-square Distribution: Is there a correlation between the type of school (publicly or privately managed) and principals' responsibilities for deciding on budget allocations within their school?	4,647 ^a	1	0.031

Table 3. P-Value of the correlation between the type of school and principals' responsibilities for deciding on budget allocations within their school.

Table 3 presents a P-Value = 0.031. There is a statistically significant correlation between the type of school (publicly or privately managed) and French principals' responsibilities for deciding on budget allocations within their school. The alternative hypothesis is true, so there is a difference between compared groups (public/private school principals) in relation to that task.

	Value	Df	P-value
Chi-square Distribution: Is there a correlation between the type of school (publicly or privately managed) and principals' responsibilities for choosing learning materials?	4,548 ^a	1	0.033

Table 4. P-Value of the correlation between the type of school and principals' responsibilities for choosing learning materials.

As Table 4 shows, the P-value is less than 0.05. There is a statistically significant correlation between the type of school (publicly or privately managed) and French principal's responsibility for choosing learning materials. The alternative hypothesis is true, so there is a difference between compared groups (public/private school principals) in relation to that task.

Conclusions

The findings of this study suggest that nearly 62% of French principals provide staff with opportunities to actively participate in decisions, but they can't decide which courses are offered in their schools. It has confirmed the findings of Iftene (2014) which found that French principals do not have any autonomy for raising private funds through donations, sponsorships and revenue from space rental.

The results indicate that 30% of French principals spend 20% of their time on curriculum and teaching-related

tasks, whereas nearly 20% of them spend 30% of their time.

Overall, this study strengthens the idea that principals' responsibilities for dismissing teachers or establishing teachers' salaries is related to the type of school (public or private). It has complemented the findings of an earlier study conducted by Maroy, Pons & Dupuy (2017), which reported that in France there was a "globalization by discursive internalization", in which transnational imperatives are integrated in official discourses on the regulation of the education system.

The results suggest that the type of school (publicly or privately-managed) plays a vital role in principals' responsibilities for deciding which courses are offered and choosing learning materials. It has provided a deeper insight into the school autonomy. Pons, Zanten & Da Costa (2015) reported that the introduction of New Public Management approaches and instruments in the field of education had not exerted a significant influence either on the public management of State-controlled private schools or on the coupling between the public and the private sector. The management of Catholic schools is still mainly based, on the one hand, on regulation through inputs and limited intervention by public authorities and, on the other hand, on a complex system of internal moral controls by the private authorities themselves.

References

- Allen, M. (2017). *The SAGE Encyclopedia of Communication Research Methods*. Thousand Oaks, CA: Sage Publications.
- Baird, J., Johnson, S., Hopfenbeck, T., Isaacs, T., Sprague, T., Stobart, G., & Yu, G. (2016). On the supranational spell of PISA in policy. *Educational Research*, 58(2), (pp.121-138). doi:10.1080/00131881.2016.1165410.
- Barg, K. (2013). The Influence of Students' Social Background and Parental Involvement on Teachers' School Track Choices: Reasons and Consequences. *European Sociological Review*, 29(3), (pp.565-579). doi: 10.1093/esr/jcr104.
- Brase, C.H. & Brase, C.P. (2016). *Understanding Basic Statistics*. Boston, MA: Cengage Learning.
- Defusco, R. (2015). *Quantitative Investment Analysis, 3rd Edition*. Hoboken, NJ: Wiley.
- Derouet, J.L.; Normand, R. & Pacheco, R. (2015). La modernización del sistema educativo en Francia: la Nueva Gestión Pública entre la afirmación del Estado y la gobernanza descentralizada. *Educação & Sociedade*, 36(132), (pp. 723-741).
- Dutercq, Y. (2015). Contemporary Models of Legitimacy of French School Principals. *Recherche & Formation*, 78, (pp. 35-50).
- Epstein, L., & Martin, A. (2014). *An Introduction to Empirical Legal Research*. NY: Oxford University Press.
- Gravetter, F.J. & Wallnau, L.B. (2009). *Statistics for the Behavioral Sciences*. Belmont, MA: Cengage Learning.
- Hanneman, R., Kposowa, A., & Riddle, M. (2013). *Basic Statistics for Social Research*. San Francisco, CA: Wiley.
- Hugonnier, B. (2017). France and PISA: An Unfinished Dialogue. En A. Wiseman, & C. Stevens, *The Impact of the OECD on Education Worldwide (International Perspectives on Education and Society*, 31 (pp.3-15). Bingley, UK: Emerald Publishing.
- Iftene, C. (2014). Educational Systems' Autonomy. Facts and Analysis. *Procedia - Social and Behavioral Sciences*, 42, (pp.47-53). doi:10.1016/j.sbspro.2014.07.586.
- Leithwood, K., & Azah, V. (2014). *Elementary Principals' and Vice-Principals' Workload Study. Final Report*. Ontario, CDN: Ontario Ministry of Education.
- Maroy, C., Pons, X., & Dupuy, C. (2017). Vernacular globalisations: neo-statist accountability policies in France and Quebec education. *Journal of Education Policy*, 32(1), (pp.100-122). doi: 10.1080/02680939.2016.1239841 .
- Meyers, L.S.; Gamst, G. & Guarino, A.J. (2006). *Applied Multivariate Research: Design and Interpretation*. Thousand Oaks, CA: Sage Publications.
- Michel, A. (2017). The contribution of PISA to the convergence of education policies in Europe. *European Journal of Education*, 52(2), (pp.206-216). doi: 10.1111/ejed.12218.
- Normand, R. (2015). French Principals in Secondary Education: Towards New Roles and Responsibilities? *Journal of Educational, Cultural and Psychological Studies*, 11, (pp.135-152). doi: 10.7358/ecps-2015-011-norm.
- Normand, R. (2016). France: Between Civil Service and Republican Ethics – The Statist Vision of Leadership Among French Principals. In H. Årlestig, C. Day, & O. Johansson (Eds.), *A Decade of Research on School Principals. Cases from 24 countries* (pp.357-374.). NY: Springer.
- Oria, M.R. (2009). Is school autonomy possible? The role of headmasters and educational projects in French, Italian and Spanish education systems. *Educación XXI*, 12 (pp.151-180).

- Pons, X.; Zanten, A.V.; Da Costa, S. (2015). The national management of public and Catholic schools in France: moving from a loosely coupled towards an integrated system? *Comparative Education*, 51(1), (pp. 57-50). doi: 10.1080/03050068.2014.935580.
- Quader, A. (2016). *Applied Statistics for Social and Management Sciences*. Thousand Oaks, CA: Springer.
- Smith, L.F; Gratz, Z.S & Bousquet, S.G. (2009). *The art and practice of Statistics*. Belmont, MA: Cengage Learning.
- Supovitz, J.A. (2013). Leadership lessons for French educators. *Phi Delta Kappan*, 95(1), (pp. 74-76).
- Tokunaga, H. (2015). *Fundamental Statistics for the Social and Behavioral Sciences*. Thousand Oaks, CA: Sage Publications.
- Tulowitzki, P. (2013). Leadership and school improvement in France. *Journal of Educational Administration*, 51(6), (pp.812-835). doi: 10.1108/JEA-03-2012-0026.

The Vicerrectorate of Research and Scientific Policy of Huelva University has participated in this article.

Screening Or Not? Use Of Social Media In The Recruitment Process: A Case Study From Turkey

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Abstract

Social networking sites originally designed for connecting people, have turned into business tools and resources. Social media both allows companies to connect with customers and sites like LinkedIn or Facebook offer recruiters various opportunities to connect with candidates in hiring process. This study seeks to demonstrate the importance of social media use as a recruitment tool by human resources professionals and raise awareness of social media users on how the HR professionals use social media to screen candidates and employees. The study is guided by three main elements: Use of social media in HRM; social media use to check up on current employees; researching candidates online in recruitment process. In addition to information obtained through literature review, data was collected from 10 companies in Turkey selected using a maximum variation sampling approach through qualitative research methods. The results revealed that employment websites, which save time and money, are the most preferred recruitment platform in Turkey. Out of all social media networking sites, LinkedIn is considered the best platform for recruiting white-collar applicants and Facebook follows it for blue-collar candidates. Although contemporary practice of employee and candidate screening through social media does not highly affect HR professionals, it has become common practice to determine people's alignment with company culture.

Introduction

Employees working for some form of payment under a contract of service, have changed in name various times due to the change in social and economic activities throughout history. Before 1980, the terms labour, labour force and personnel were used for employees, accepted as a significant resource within physical and financial sources in order to help the enterprise achieve its aims would later be defined as human resources. Transition process from personnel to human resources could also be regarded as the evolution of the work-oriented approach to the human-focused one. During this process, the management in charge of recruitment, keeping employee records and dismissal have been evolved into a department which is not only in charge of recruitment but also a much wider activity area covering a variety of tasks such as training and motivating employees and creating vision and mission of an institution or an organization. A right recruitment process might be the first and most important step to carry out these activities since finding employees who meet all the requirements including being compatible with organizational culture reduces funds spent by human resources management in areas of activity some of which are right recruitment process, employee management and education and career planning. Therefore, recruitment process covers a wide area of activities including employee need assessment and vacancy announcement, receiving applications, conducting interviews and employing right number of candidates meeting job requirements.

Another dramatic change nowadays which human resources department is going through is that human resource activities have been digitalized thanks to the increasing use of computers and the internet at business. One of the biggest changes that digitalization brings about is experienced in recruitment process. Until the mid-2000's, yellow pages which was one of the best methods for getting business found has been respectively replaced by career sites bringing employers and employees together, company web sites and social media tools such as Facebook and Twitter. Not only does digitized recruitment process help companies find expedient candidates in a short time at low cost but also companies are considered to gain prestige through being visible on new media platforms. On the other hand companies take the advantage of the continuously developing internet and social media to find potential candidates and measure their institutional appropriateness through analyzing their social media profiles. Scoping out job candidates on social media has become an expected part of the application process and getting a glimpse of who candidates are outside the confines of a resume could be held in favor of or against them. Many employers use social media to screen job candidates and run background checks before or after the interviews. They search social media profiles to obtain information supporting their qualifications for the job, to see posts, comments and photographs thus employers search for some key items via social networking sites as good signs to hire or they could be turned off by a candidate's online presence. Companies are provided with information obtained through candidates' social media profiles by human resources departments or continuously increasing number of internet companies. These companies are able to supply not only actual data but also contents shared by the candidate in

the past or deleted data. Considering studies on use of social media in recruitment process and screening job candidates in existening literature, this paper reports the findings of a study carried out with human resources professionals and aims to raise awareness about the transformation of social media into professional platforms.

Conceptual Framework

Companies wishing to gain advantage under conditions of global competitive environment acknowledge that human capital is a company's greatest asset because active management of financial and physical resources depends on employee skills. However strong other kinds of capital a company has, failure is inevitable if it is not able to take advantage of existing capital as required. The term human resources, first coined in the 1960s, is used to describe both the people who work for a company or organization and the department responsible for recruiting and staffing, training, labour and employee relations and organizational development (Barutçugil, 2004:32). The term covering all employees from unskilled ones to top executives in any organization is also used to express utilizable labor out of organization. It is an essential component of any organization which handles a variety of tasks including staffing, employee compensation and benefits, and designing work (Kaynak, et al., 1998:15). The history of human resources management is said to have started in England in the early 1800s and further developed with the arrival of the industrial revolution in the late 1800s, however the drastic changes in technology, the growth of organizations, the rise of unions and government concern and interventions resulted in the development of personnel departments in the 1920s. HRM argued to have started from the term 'Personnel Management' according to some scholars, emerges after the World War in 1945 as an approach by personnel practitioners to separate and distinguish themselves from other managerial functions and making the personnel function into a professional managerial function. Traditionally, the function of PM is claimed to 'hire and fire' personnel in organizations other than salary payments and training. (Haslinda, 2009:181) PM views employees as tools in an inverted approach however HRM has a wider scope considering employees as a prominent factor which adds value to the organization (Yüksel, 2007:9). Human resources today, contrary to traditional personnel management which keeps human capital in the background, integrates traditional PM functions to company's goals and strategies.

Recruitment and selection processes are considered to have a huge impact on how an organization functions because an effective recruitment and selection process (R&S) not only finds quality employees but also saves time and money on replacing and training new people. Employees have the opportunity to monitor the people at every level they have hired from the first day at work. R&S process at an organization (despite the process in individual to each organization) typically starts with identifying the hiring need. Once the company identifies what it needs, the human resources department prepares skill sets required and tries to reach candidates through a variety of methods depending on type of organization and business. While a global company could prefer to reach candidates through digital technologies whereas a small-sized enterprise tries to find candidates through distributing leaflets. Typical methods of recruiting include advertisements, posting available jobs on company websites, job search sites or social media.

A business uses two sources in R&S process which are internal and external recruitment each of which has advantages and disadvantages. While internal recruitment is filling with staff currently employed, external recruitment is the process in which the company hires a new employee outside. Companies seeking to reach employees who already know the organization and to reduce cost and time often use internal strategies along with external strategies by offering promotional roles to internal candidates. As a consequence they build motivation, a sense of commitment, and long-term satisfaction. Employers also use external recruitment to attract individuals with the necessary skill sets, especially when wishing to develop the business or take it in a different direction. Although internal resources are often preferred to reach potential candidates, it is not always possible to find potential applicants within the company. Therefore, companies tend to find employees through external recruitment methods such as using a recruitment agency, printed publications or online recruitment methods in order to assess a deeper pool of candidates for the job to be filled. In external recruitment process, it is also worth pointing out that in terms of leading and managing employees, if the company is not recruiting the people who bring the greatest skill sets to the organization, it will be a struggle to manage them day-to-day. Additionally, without a business analysis it is difficult to discover candidates' performance capabilities even with the best candidates until they're in the workplace (Çavdar & Çavdar, 2010:81). Therefore human resources departments take advantage of personality inventories, tests, and a variety of human resource assessments to obtain a great deal of information about the candidates.

As digital technologies become a reality of our lives, human resources departments take the advantage of mobile and other technologies to achieve business outcomes and drive organizational change. Many companies today impose upon digital technologies to save and process data in human resources departments as well as taking advantage of them in recruitment process. Digital technologies allow companies to access a larger pool of candidates quickly and inexpensively. Therefore, employment web sites in which candidates can share their cv

and companies post job vacancy are preferred more and more by both companies and candidates. Many recruiters searching for candidates take advantage of employment web sites and social media instead of print advertisement. In addition, employment web sites have started to use social media more effectively. Social media such as Facebook, Twitter and LinkedIn in particular bring recruiters and candidates together. For instance Starbucks, the largest coffeehouse chain in the world, is a good example of social recruiting case. Starbucks has taken advantage of social media to further expand their company. The company posts open positions, feature stories of employees who work for the company to interest future applicants, and is also able to expand their brand by getting their siren logo seen by the world. Social media reduces costs as well as building two-way communication. (Drum, 2010). The other reason why recruiters often take advantage of new technologies especially social media to fill positions is that people active in business are mostly representatives of generation Y. A generation is defined as the period of time, usually considered to be about thirty years that it takes for children to grow up and become adults and have children of their own (TDK, 2006) but it is not easy to divide lines between generations. Generation names and age spans are defined differently depending on country or region. Individuals belonging to different generations of age have different experiences, different views, different habits and different work style. There are five different groups of generation in literature however Turkey has its own generational definitions depending on its own social, political and economic influences. These are silent generation (born between 1925-1945), baby boomers (born between 1946-1964), generation X (born between 1965-1979), generation Y (born between 1980-1999) and generation Z (born 2000 and later) (Arslan & Staub, 2015: 5). Today Baby Boomers, Generation X and Generation Y members make up workforce considering members of silent generation and generation Z are not active in business. In 2014, baby boomers make up 10% of the workforce, generation X accounts for roughly 44%, and generation Y, which is the youngest generation employed, makes up about 46% of the workforce (TÜİK, 2014). Members of Y generation which represent nearly half of the total workforce distinguish themselves with social responsibility, self-confidence, being objective driven and having respect for diversity. Equipped with the latest technology they are the best-educated generation so far and they expect openness and transparency from management and colleagues as well as flexibility (Brown, et al., 2018). Marked out by their use of digital tools better than other generations causes human resources departments to use social media more in recruitment process. On the other hand searching for applicants through social media provides companies with cost advantage. Thus companies do not have to spend too much for employment sites and are able to post job vacancy on any desired platform. This gives employers the opportunity to emphasize different aspects of a vacancy on a variety of platforms and access a deeper pool of candidates. For instance Youth Republic, an integrated creative agency in Turkey, went beyond the traditional recruitment process and chose a popular application Tinder among young advertisers to find a new copywriter. They created a female and a male account they matched with young advertisers attracted their attention and got more applications than expected. The agency demonstrated that how a company can make a big impact by using digital technologies in recruitment process. Despite the tremendous growth of social media, company websites are still the first source of information for applicants in recruitment process. Therefore, companies build mobile compatible websites in which candidates can easily upload cv and obtain information about current vacancies. In addition to all, effective use of digital technologies in HR process has caused effective use of social media to be included in job description of HR specialists. Employers expect HR specialists not only to find employees through taking advantage of social media such as LinkedIn or Facebook but also to access top talents who are working in another company or not actively searching for job, to increase traffic to company website and post vacancies on social media platforms fit for applicants.

Related Studies

Even though companies still prefer to advertise job roles on job search sites or their own websites, an increasing number of companies have started to advertise their job vacancies on social media sites. Jacobs defines this process as social recruiting which is “sound hiring decisions by actively using web-based technologies to build a shared understanding between employers / recruiters and passive and active job seekers.” (2009:3) Since the new media has become more prevalent in everyday life, it has also changed the way employers made their hiring decisions. Employers started to look through social media to gather information about potential candidates. While some are looking to learn about candidate’s social life, others are looking to see if the cv lines up with the information shared on social media. According to a study focusing on recruitment and screening of job candidates, recruiting via social media is growing with 84% of organizations using it currently and 9% planning to use it. Recruiting passive job candidates (82%) continues to be the top reason that organizations use social media for recruitment (SHRM, 2015). Therefore information obtained by employers without the knowledge of candidates could be used for and against them. Furthermore some studies demonstrated that employers disregard candidates after screening online. Posting provocative or inappropriate photographs or information, sharing content about them taking alcohol and showing poor communication skills are some of the reasons for disqualifications. According to a survey carried out in 2009, hiring managers use social networking sites to research job candidates. Of those who conduct online searches of candidates, 29 percent use Facebook, 26 percent use LinkedIn and 21 percent use MySpace. One-in-ten (11 percent) search blogs while 7 percent follow candidates on Twitter. Thirty-five percent of employers reported they

have found content on social networking sites that caused them not to hire the candidate. The content includes provocative or inappropriate photographs or information, alcohol and drugs, discriminatory comments and confidential information from previous employer. On the other hand, eighteen percent of employers reported they have found content on social networking sites that caused them to hire the candidate. The content includes profile provided a good feel for the candidate's personality and fit, profile supported candidate's professional qualifications, good references about the candidate and good communication skills (Career Builder, 2009)

Research conducted focusing on candidate's awareness of screening process in 2008 revealed that thirty seven percent of candidates were aware that employers or recruiters could screen their social networking profile (Harrison, 2008). According to a similar study in 2010, while forty nine percent of candidates were aware that employers could view their social media, fifty one percent are not aware of the process. The survey found 49.3% of respondents were aware, while 50.7% of respondents were not aware that employers or recruiters could view their social networking profile. (Vicknair, et al., 2010)

In a study done with students enrolled in business classes at a college on their thoughts regarding what they thought of employers viewing their social media accounts and whether they find these practices appropriate showed that as students were aware that employers were screening their profiles for information, they protect themselves through privacy settings. However, they were unaware of the importance of grammar and spelling accuracy and how their friends' actions on social media may portray them in a negative light. (Root & McKay, 2014)

Although the number of global studies focusing on the use of social media in hiring process is increasing, research about social media screening in Turkey is still inadequate. According to a global study carried out in 24 countries including Turkey, more than half of all recruitment activity involved the Internet (53 percent) in 2013, with the percentage for 2014 expected to continue to grow (61 percent). 7 out of 10 recruiters use social media for their daily HR professional activities and recruiters largely use social media to assess a candidate's reputation. While the most attractive element to find on a social media profile is previous professional work experience, followed by the presence of professional prizes, achievements, and/or awards, which tend to be overlooked by candidates in their profiles, personality insights that can be identified from the profile come third, while no interest is shown for the candidates' number of contacts. (Adecco, 2014) Technology changing how employers and recruiters find potential candidates has a significant impact on recruitment process. As it allows recruiters to get an incredible amount of information about prospective candidates, social media accounts are screened by human resources departments in hiring process or to check up on current employees. They can indicate social media posts or photographs to eliminate a candidate or fire an employee. As a consequence professionals should be aware of the content they share on social media and its impact on their job prospects.

Research Methodology And Sampling

This is an exploratory study research using qualitative research methods to reflect the perspectives of participants. The main part of the study involved in-depth, semi- structured interviews with human resources professionals selected using a maximum variation sampling approach to cover as wide a range as possible in terms of age, sex, experience and sector. Semi-structured interviews in which open ended questions are used in order to get as many details as possible were employed because it offers flexibility while still covering the same areas of data collection. 10 interviews were obtained as people declined to give a lengthy interview due to their busy working schedule. However this research is consistent with the principles of qualitative analysis as it does not aim to be statistically representative (Punch, 1998:175). Human resources is a female dominated profession so of the 10 human resources professionals who completed the interview, 7 were women and three were men; their median age was 34 (range 26-42) and median experience was 12 years (range 3-18), three respondents had a bachelors' and seven had a masters degree. Of the 10 companies represented 2 were from manufacturing sector and others were from a range of other sectors which are textile, shopping mall management, food, healthcare and consulting. In depth interviews focusing on social media use in HRM to research candidates and current employees were carried out in cafes in early 2018. Interviews lasted on average about 40 minutes and were audiotaped and transcribed. All participants granted permission to be tape recorded. Every recording was labeled with name of the interviewee in order to avoid complication. The transcripts were analysed using template analysis to generate a list of codes representing themes in the text (King, 1998)

Findings

Social Media Use in HRM

The rapid evolution of social media has a big impact on human resource management and when asked about the use of social media, nine human resources professionals responded that they use social media effectively. While some human resources departments manage social media profiles on their own, some receive support through

consulting companies. They use Facebook, Instagram, LinkedIn and Twitter respectively. Three respondents also use Workplace, a business-focused version of Facebook. “We use workplace effectively and store all information there. Employees communicate and collaborate on work-related initiatives. For example, last weekend, we went trekking and shared photos with 16 countries. Also last month one of our partners founded a new shopping mall abroad and employees shared its video, we are highly online and interactive in that sense.” (P7)

Whatsapp which is quick and easy to operate is used by all age groups is another popular instrument for employee communication. All respondents integrated this messenger service into company’s daily routine.

“Our company has Facebook and Twitter accounts managed by a social media agency. We inform them about company activities and special days. We rarely use LinkedIn. We share company trainings organized by human resources department. But we use LinkedIn just for information purposes, private life is of secondary importance. We often use whatsapp to communicate with employees, even more often than mailing. We get feedback much faster. Also i created a whatsapp group hooking up all employees.” (P5)

“Our company doesn’t have any social media accounts and we don’t communicate with employees through social media. Most employees are blue collars and they do not use social networks. But we have to enter the digital world as soon as possible. I work in a long established company but people are not aware of our presence. We use whatsapp but some of our employees are not familiar with it either.” (P2)

Most respondents use social media for employee motivation and engagement. They post pictures taken at work and write comments thus spread information about the company. This can help with company awareness and provide new business opportunities. However, they tend to communicate through company social media accounts rather than their personal ones.

“Our company has Facebook, LinkedIn and Instagram accounts. Candidates especially blue collar ones use Facebook more than other social media platforms. It is difficult to get followers on Instagram so we must post job vacancies on Facebook. We also get positive and negative feedbacks more on Facebook. Interestingly, employees send me friendship requests but I think they shouldn’t. All in all, I am human resources manager. I can catch their photos taken and posted within the working hours or if an employee takes sick excess sick leave, i can check Facebook posts for those days. Therefore it is better not to communicate through social media.” (P3)

“Corporate trade department manages social media and many employees participate in the process by sharing photographs and comments. We have an internal application and broadcast employee suggestion program, employees can access us through them. However i add friendship requests of employees on company social media accounts rather than my personal one.” (P1)

“I never add employees on social media because i don’t want them to feel stalked by human resources department and I don’t want to be stalked either.” (P7)

“LinkedIn is a very important platform for both employers and employees. If you are in business life, you have to have a presence on it. Professionals can meet and exchange ideas so can constantly build connections and increase them.” (P2)

“A person who doesn’t have any social media accounts arouse my suspicion. This brings a fake account into a question because it is impossible to exist in business life without social media presence.” (P3)

Social Media Use to Check up on Current Employees

Employers as well as human resources professionals look at current employees’ social media accounts because individual freedom intersect with corporate identity. When asked about looking at current employees’ social media accounts, respondents did not find it ethical however only two respondents said that they had never looked at social media accounts.

“As we are a global company, privacy act is of utmost importance. We don’t look at current employees’ social media because we are not interested in employees’ private life. Now there are numerous companies doing this, they can fire employees for Facebook posts. However our company has a policy prohibiting discrimination.” (P7)

Although none of the respondents said they didn’t experience this kind of process in their current company, interestingly all mentioned they were aware of the the fact there were numerous companies including their ex, firing employees because of social media posts.

“Everyone has the right to privacy related to political, religious or sexual choices. We can’t make distinction based on them. However companies making such distinctions are increasing. My previous company was one of them. I had to fire employees as they posted pictures of them drinking alcohol.” (P7)

Two respondents mentioned employees shouldn’t post about politics and religion because employers pay attention to them. They should utilize privacy filters and avoid sharing posts or pictures that could damage their professional life.

“I had to fire an employee because he was posting about religion. He was an atheist. My previous employer was devoutly religious and was always warning employees against social media posts. According to him, employees represent himself, he didn’t want to be discredited. I am devoutly religious too but we got on well, his faith doesn’t interest me. He was a true professional at work. It wasn’t fair but if employers pay attention to social media posts, we should go by the book.” (P2)

“Employers should check up on employees social media accounts provided that they don’t abuse the process. If an employer tells employees they represent the company and there are things they shouldn’t share on social media, employees have to obey it. I don’t want to be misunderstood, i don’t support that policy. Unfortunately, employers pose a threat to individual freedom. Our hands are tied through that process, you want to share or like something on Facebook, but you can’t due to fear of being fired. My current employer cares pictures containing alcoholic drinks and political posts (if related to opposing party) I have to warn employees, i tell them to add close friends on social media and keep their posts private. Social media shifted the line between personal and private so employees are in charge of managing social media.” (P3)

When asked about social media use, interestingly most understood Facebook, Instagram or LinkedIn but not LinkedIn, they evaluated LinkedIn as an online employment website.

“I don’t find it ethical to look at employees’ social media because it is the private life of individuals but LinkedIn is not something like that, it is a professional platform. We don’t look at employees’ LinkedIn profiles either but we warn them. All employees are brand ambassadors so we tell them to have a professional LinkedIn Profile, upload a picture taken in front of company logo, write a success story. Because candidates look at them so employees should manage this platform effectively.” (P1)

Employers don’t want their employees to post things that could turn off customers or damage business relationships. In order to prevent privacy violations companies make policies such as social media training for employees or putting additional items into contracts. While Turkish Personal Data Protection Law protects fundamental rights and freedoms of persons, privacy of personal life in particular, the single respondent said they prepared a social media policy outlining how an organization and its employees should conduct themselves online.

“Employees shouldn’t talk about company or products and share company information getting customer reaction on social media. In my previous company a trainee shared information on behalf of the company. After the fact, we took action and prepared a social media guide telling employees not to share anything on their own social media on behalf of the company and corporate communication department is in charge of this process. We create hashtags and prompt them to engage in the conversation happening around that hashtag. We motivate employees to share photos of training programs workplace experiences.” (P1)

Others acknowledge employees’ use of social media is connected with corporate identity but their social media policy is limited with new employee orientation programs and verbal warnings.

“We provide new employees with an orientation program focusing on social media use. Especially, we warn them against posting pictures during production process. We export abroad and companies we sell our products could penalize our company for posting products. Our employees have high level of education so they are highly conscious of our verbal warnings and sensitive security. So I didn’t have to fire an employee because of social posts so far.” (P5)

One respondent said he stalked employees on social media to detect cliques. Social media could make new cliques and this could affect office culture.

“I stalk but not to check up on current employees but to detect cliques. I want to learn how employees socialize in and outside the office. I believe cliques prevent collaboration and inclusion of diverse perspectives and can be detrimental for a company. An employee who is excluded could resign and we lose a very talented person because of cliques.” (P5)

Social Media Screening in Recruitment Process

When asked about the methods respondents use in recruitment process, all indicated they use online employment websites. They post open positions on job boards, review resumes and conduct a phone interview to identify candidates for review by hiring managers. As well as linking candidates to employers, recruitment platforms offer career development resources and training information. However, some respondents indicated that job seekers are not well aware of applications.

“We get applications only on employment websites because all applicants must be treated equally and be given the same set of opportunities. If candidates try to submit CV offline, we reject because each candidate have to pass the preliminary elimination.” (P5)

“The online employment site we use has an application, selvi, which gave job seekers the opportunity to apply jobs through audio-visual mediums, upload a video cv. However candidates can't get much advantage of the application. They upload just a voice record or a video they record with their pets. That site also offers free trainings and seminars for human resources professionals and support individual as well as corporate development.” (P3)

Although employment websites reduce hiring costs and reach a variety of candidates quickly, employers meet high volume of resumes from unqualified applicants.

“Job sites allow candidates to access you however it is not always easy for us to access best candidates. So I find LinkedIn better to recruit employees. I can search for candidates by using keywords related to desired position.” (P8)

“Online employment websites are somewhat problematic both because of human resources professionals and employers. We are searching for a perfect candidate who has many of the essential skills and experiences, a very tall order we take to extremes. On the other hand people who don't have the minimum qualifications, required experience and skill set can apply for a position. Sometimes we get applications from candidates who don't have a medical degree for medical doctor vacancy.” (P3)

Only three respondents use LinkedIn to post jobs and one respondent uses LinkedIn Recruiter which is a paid license allowing employers to get unlimited access to every profile on LinkedIn. Two respondents advertise jobs in newspapers because of company owner. But respondents think newspaper limits the scope of applicants because fewer people are reading newspapers and publishing process is slow and online platforms elicit responses from all over the country.

“LinkedIn is the best platform to search for candidates based on their work history, job title, or university because normally it is difficult to qualified candidates aren't actively looking for jobs. However LinkedIn is not used to its full potential, for networking, it is difficult to find candidates.”(P10)

Three respondents take advantage of Skype interviews to save time and money. Although other respondents find Skype interviews useful under unavoidable circumstances, they prefer face-to-face interviews to identify and understand emotions of the candidate more clearly.

“If there aren't any annoying IT issues, I find Skype very efficient especially if candidates are not within close geographical proximity to the interview location. I often prefer video interviews between the resume screening and in-person interview stages. I could assess candidates face-to-face in the comfort of his/her own home. I think this creates equality between the employer and employee, prevents anxiety and feeling of being away. Therefore the candidate could express himself/herself better.” (P3)

“If the candidate is currently employed, Skype is the best option.” (P4)

When asked about social media screening, all respondents said they searched for social media profiles before hiring. Most respondents search for information supporting qualifications for the job and LinkedIn comes first.

“We only screen candidates on LinkedIn, the things we look at; candidate's education and experience match his/her cv, profile picture, having a profile picture is important, candidate's summary and involvement in social organizations. If candidate's qualifications and company requirements don't match, we don't invite the candidate to the interview.” (P4)

“Once i didn’t invite a candidate after a social media research. He had raunchy photographs and posts and they were public. The position was important and he could tarnish company image.” (P3)

Although there have been multiple arguments for the inclusion of a photograph on a CV, it is another key item human resources professionals pay utmost attention. All respondents indicated that profile picture should be professional. Social and professional images should remain separate. While adding a photograph to the CV can be seen as improper, not including a photograph throughout your digital presence is portrayed as naive and unprofessional.

“Candidate’s photograph is very important, sometimes we don’t take the cv without a photograph into consideration. Because we want to see the face of the candidate, sincerity of them, because photograph shows sincerity for us.” (P4)

“I look at candidate’s photograph, education and experience after telephone interview but I don’t stalk social media post or friends to avoid prejudice. Especially for some positions which require applicants to be presentable, I have to search them on social media if they don’t include a photograph on their CV.” (P2)

“I think even a selfie reveals much about personality. Camera angle, i mean how they hold the camera, whether or not they looked at the camera shed light on person’s personality.” (P3)

When asked about candidate screening during recruitment process, four respondents used Facebook, Twitter and Instagram pre-interview process, two looked at after the interview and four respondents said they didn’t search candidates on social media except LinkedIn.

“I stalk both job applicants and existing staff on social media because social media profile and postings shows character and I am good at analyzing candidate’s work ethic, dependability and attitude and i can easily learn them on social media. I try to understand whether the candidate’s personality and interests align with the values of the company because patient confidentiality is very important for us. An employee unaware of confidentiality could share a photograph of a patient and cause legal problems. We experienced a similar event. One of our employees shared a photograph of an elderly female patient and her relatives made a complaint about the issue. Following this event, social media fell into human resources department’s area of responsibility. However most of our employees are unaware of being stalked. I try to assess them on social media because i can evaluate qualifications more objectively, I can see his/her interests and get advantage of them in promotion process. For instance I promoted one of the employees last week, he is able to use social media very effectively and express himself in writing so i thought he is the best to represent the company in corporate communication department.” (P3)

In this sense, social media can also function as a source of information about the workforce, to identify those who are qualified to internal transfers and promotions. Another advantage of using social media is to gain insight into the values and personality of the candidate, so check candidate’s alignment with company culture so companies do not need proctor employment pre-tests. However one respondent indicated that they use both tests and social media profiles to assess competency with company culture.

“If candidates pass the first elimination involving different inventories required for the position, we screen them Facebook and Instagram profile to decide whether candidate’s personality and interests align with the values of the company. It is important because the number of candidates increases in respect to employees’ profiles. Our employees should represent our company well.” (P5)

Some respondents explained stalking behavior simply with curiosity, eight said they had never chosen not to hire a candidate because of social media posts.

“Candidate’s academic background and experience are vital factors in hiring but I like observing their lives, especially extreme cases, it is a biological instinct. I stalk celebrities too. Once one of the candidates had an interesting life style, she had pink hair so i searched her on social media but it didn’t have an impact on hiring process. After 15 July coup attempt, I suspected a candidate and did social media searched about him but it was state of emergency so I had to eliminate him.” (P7)

“I stalk white collar candidates on social media but not to eliminate them, just for getting preinformation, out of curiosity. However information on social media doesn’t cause not to hire a candidate.” (P2)

“First I search candidates on Facebook because everybody has an account. I also use Instagram but most profiles are private so it is more difficult to access them. I can find a lot of information via candidate’s photographs, posts, people’s comments or likes and dislikes. Since i am a human resources professional many people try to

communicate with me, they add me as a friend or send message. Communication skills are very important for me. For example they shouldn't use "what's up as a greeting" or they shouldn't make social media posts truly public. Use of social media reveals much about personality". (P3)

None of the respondents made a negative comment posting about alcohol consumption because except LinkedIn, social media of an employee is his/her own private sphere. In fact one respondent indicated that alcohol consumption can have a positive impact for hiring in certain departments.

"If the candidate will be hired in the marketing and sale department, posting information about them drinking has a positive impact on us. Because we are doing business with different countries and when our foreign customers visit us, the employee should know about night life to entertain them. However, if we will hire for manufacturing department, posting about alcohol consumption at 2 a.m. is problematic as they work by shifts." (P5)

None of the respondents require social media accounts during application and four respondents indicated social media is not a criteria to analyse a candidate.

"People can act differently online so social media personality doesn't reflect the reality. It can only cause prejudice. People can give reference but social media can't. There were many candidates we didn't hire after the reference check." (P2)

"Requesting social media address during application is a form of discrimination. In some countries like the U.S.A., labor and anti-discrimination laws prevent employers from requesting a picture or other details such as gender that reveal too much personal data and the some Turkish companies have started to adopt it. Female were asked whether they would take pregnancy leave in the past but now women do not face with such questions because it is not ethical, it prevents female employment. Today companies do not hire people based on the content shared on social media and it is not ethical either." (P1)

"We don't request the candidate's social media address however social media use is one of the key items to eliminate. I think candidates are thought to look motivated but most of them don't have much information about the company. It is not realistic. Our company is visible on all social media platforms. They can get information on social media at least." (P3)

Two respondents used company website to promote available positions as well as jobsites and social media. Although other companies have a website, they are either under construction or not updated. Another reason indicated is that candidates' lack of information about company websites prevents access a deeper pool of candidates.

Conclusions

Social media use in recruitment process has been an important research area in the field of HRM. Digital technologies lead to budget savings for human resources departments as submissions are online and HR professionals can use online personality to check candidate's competency with company culture through looking at social media profiles on LinkedIn, Facebook and Twitter as social media reveal too much information. The use of social media can also increase the number of potential employees companies receive as it creates new communication outlets. In addition to recruitment process, HR professionals use social media to research current employees and this can lead to bias if behaviour of employees do not align with personal values of the company.

The results show that although social media has become a new tool for recruitment, most HR professionals in Turkey don't utilize it for recruitment advertising purposes. They mostly use Facebook, Instagram, LinkedIn and Twitter. Nearly all companies try to manage social media accounts without receiving professional support. Every company integrated Whatsapp communication service into company's daily routine. They mainly use social networking sites to research job applicants and LinkedIn is their primary resource. All participants find LinkedIn useful in recruitment process as LinkedIn is a huge database where human resources professionals can find the candidates they need by using key words and see if cv lines up with the information shared on social media. It is followed by Facebook. Facebook has much larger user base than other social media networks and is effective for reaching internet users across all age groups. Therefore employers have a better chance at accessing candidates using this platform. In addition to assessing their skills and experience, they can check candidate's alignment with company culture. However they find it unfair to judge candidates by personal preferences which do not have any effect on professional performance. Two respondents said that they turned down candidates due to social content which is inappropriate.

Although each company represented in the study has a website, only two respondents get advantage of it to promote available positions. All HR professionals use employment websites for company recruiting. Targeting a far wider audience, online recruitment is much faster than traditional hiring methods and online postings are more cost-effective. However, job sites increase the chances of getting hundreds of job applications, many of which are irrelevant. While some companies use LinkedIn to post available positions, some get advantage of newspapers although they are considered to be slow and limit the scope of applications. Although human professionals do not tend to communicate with employees through personal social media accounts, most motivate them to engage in company's social media to post photos and spread information to increase public recognition. This study focused only a small number of respondents and future studies with more participants exploring the use of social media in recruitment process and research targeting use of social media in job search are needed to raise awareness of social media users.

References

- Arslan, A., & Staub, S. (2015). Kuşak Teorisi ve İçgirişimcilik Üzerine Bir Araştırma. KAÜ İİBF, 6, 1-24.
- Barutçugil, İ. (2004). Stratejik İnsan Kaynakları Yönetimi, İstanbul: Kariyer.
- Çavdar, H., & Çavdar, M. (2010). İşletmelerde İşgören Bulma ve Seçme Aşamaları. Journal of Naval Science and Engineering, 6, 79-93.
- Kaynak, T. et al. (2000). İnsan Kaynakları Yönetimi, İstanbul: İstanbul University.
- King, N. (1998). Template analysis. In G. Symon & C. Cassell (Eds.), Qualitative methods and analysis in organizational research: A practical guide (pp. 118-134). Thousand Oaks, CA, : Sage Publications Ltd.
- Haslinda, A. (2009). Evolving Terms of Human Resource Management and Development. The Journal of International Social Research, 2, 180-186.
- Harrison, J. L. (2008). Employer and Recruiter Use of Social Networking Websites as a Candidate Screening Tool. Thesis. Gonzaga University School of Professional Studies, Ann Arbor: ProQuest LLC
- Punch, K. F. (1998) Introduction to Social Research: Quantitative & Qualitative Approaches, Sage Publications.
- Root, T., & McKay, S. (2014). Student Awareness of the Use of Social Media Screening by Prospective Employers. Journal of Education for Business, 89, 202-206.
- Vicknair, J. et al., (2010). The Use of Social Networking Websites as a Recruiting Tool for Employers. American Journal of Business Education, 3, 7-12.
- Yüksel, Ö. (2007). İnsan Kaynakları Yönetimi, Ankara: Gazi.
- Brown, S. et al., (2018, January, 12). Generation Y in the Workplace. Retrieved from http://nslw.org/generation_y.pdf.
- Jacobs, P. (2009). What is social recruiting? Human Resources Magazine, 14, 2-3.
- İnsan Kaynakları Literatürüne 'Y Kuşağı' Olarak Geçen Kuşak Nedir? (2006, September 26). Retrieved from http://www.tdk.gov.tr/index.php?option=com_gts&kelime=KU%C5%9EAK.
- Adecco, Rapor, 2014. (2016, November 15). Retrieved from http://www.adecco.com.tr/trTR/Documents/Sosyal%20medya%20anke ti%20T%C3%BCrkiye%20raporu_.pdf
- TDK. (2006, September 26). Retrieved from http://www.tdk.gov.tr/index.php?option=com_gts&kelime=KU%C5%9EAK
- Using Social Media for Talent Acquisition. (2017, September 20). Retrieved from <https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/pages/social-media-recruiting-screening-2015.aspx>
- Forty-five Percent of Employers Use Social Networking Sites to Research Job Candidates, CareerBuilder Survey Finds. (2009, August 19) Retrieved from <http://www.careerbuilder.com/share/aboutus/pressreleasesdetail.aspx?ed=12%2F31%2F2009&id=pr519&sd=%2F19%2F2009>
- Drum, K. (2010, September 8). Using social media to attract & engage passive candidates. Retrieved from <http://www.ere.net/webinars/using-social-media-to-attract-engage-passive-candidates/>
- İstatistiklerle Gençlik, 2014 (2015, May 14). Retrieved from <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=18625>

Security ASA University Core Course In Undergraduate Curriculum

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Abstract

The 21st century is all about connectivity but also faces challenges of continuously increasing levels and varieties of cyber-attacks. With an increased presence of individuals and organizations in an online digital world, it has become important we educate and train the masses to know how to avoid getting their information compromised by cyber criminals or cyber hackers. Cybercrime is the single most important activity which every individual or organization must deal with daily. Years ago, employers used to train and educate a handful of people in their organizations to prepare them for protecting organizational assets from hackers and cyber criminals. Today, there is a dire need for every employee to be educated and train with security education to defend digital assets.

Recent data indicates the number of cyber-attacks has increased by more than 25-30 percent annually. Under this scenario, there is a dire need to educate and train the average person to be equipped to against future cyber wars. Since the enemy is in virtual space on a 24/7 basis, it must be fought everywhere. As the types of cybercrimes are changing, future workers, independent of their majors, must be prepared with different kinds of education and training skills to defend against cyber threats. These cyber security skills should not be limited to IT professionals but earned by every college graduate.

Almost all universities offer security courses, but these courses are mostly offered by computer science, information technology, information systems or computer related disciplines for their majors. As evidenced recently, cyber-attacks affect every individual; therefore, it is imperative all undergraduate students, in all disciplines, are exposed to cyber security prevention methods to prepare them for the future challenges of cyber war. This paper discusses the design and methodology of a security course intended to be a university core course for all disciplines.

This paper discusses the approach used, curriculum developed, and the framework for the overall design of the course. The paper also discusses the types of attacks that affect individuals and challenges and opportunities for having such a course as part of the university core. The paper also discusses how a similar course on the basics of cyber security could be offered in our primary and secondary education systems.

Sekizinci Sınıf Din Kültürü ve Ahlak Bilgisi Kitabında İnsanın Özgürlüğü Ve Sorumluluğu

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Özet

8. sınıflarda okutulan Din Kültürü ve Ahlak Bilgisi Ders kitaplarında yer alan insanın özgürlüğü ve sorumluluğu konusu incelenmiş, insanın akıl ve irade sahibi olması ile özgür ve sorumlu bir varlık olması arasındaki ilişki ile ilgili bazı sonuçlara ulaşılmıştır. Konu içeriğinde insanı diğer varlıklardan ayıran en önemli özelliği aklını ve iradesini kullanma kapasitesine sahip bir varlık olduğu vurgulanmış, bu özelliklerinden dolayı, kendi yararına veya zararına olan şeyleri bileceği ve bu durumda insanın, davranışlarının sorumluluğunu da üstleneceği açıklanmıştır. “Özgürlüğümüzün sınırları başkalarına zarar vermeyecek şekilde olmalıdır.” sözün den hareketle “Herkesin sınırsız özgürlüğü olsa dünya ne hâle gelirdi?” sorusu öğrencilere yöneltilerek konu hakkında düşünceleri istenmiş, özgürlükle sorumluluk duygusu pekiştirilmeye çalışılmıştır. Allah’ın insana akıl bahşederek bunu kullanması gerektiği vurgulanmış, bu nedenden dolayı yaptığı her davranış ve seçimlerinde sorumluluk sahibi olduğu açıklanmıştır. Ayrıca Kur’an-ı Kerim’de bu hususlarla ilgili ayetler örnek verilerek Allah’ın emirleri açıklanmıştır. Özellikle sorumluluk kavramını ahlaki ve bir davranış olarak değerlendirmek gerekir. Kitapta anlatılan insanın özgürlüğü ve sorumluluğu konusunun içeriği ile Kant’ın görev ahlakı görüşü birbiriyle benzerlik göstermektedir. Kant, ahlaktan söz etmek için iyi istemenin olması gerektiğini ve biz bunu bize verilen akıl sayesinde neyi yaparsam doğru veya yanlış çıkarımda bulunarak ona göre hareket etmemiz gerektiğini bu sayede yapılan eylemin ahlaklı olabileceğini dile getirmiştir. Ders kitabında da aynı şekilde eylemde bulunmadan önce o eylemin sonucunun ne olacağını kestirebilmemiz gerekmektedir ve neyi yaparsam doğru olur diye düşündükten sonra hareket etmemiz gerekmektedir.

Anahtar Kelimeler: Özgürlük, Sorumluluk, Ahlak

Giriş

Okullarda okutulan derslerin en önemli yardımcı kaynaklarından birisi de ders kitaplarıdır. Din Kültürü ve Ahlak Bilgisi dersi eğitim ve öğretimi alan öğrencilerin bu dersi daha iyi bir şekilde anlamaları ve kafalarındaki sorulara kesin cevaplar bulabilmeleri için örneklerle desteklenerek hazırlanan Din Kültürü ve Ahlak Bilgisi ders kitaplarında yer alan konular ve içerikler bilimsel bir gözle ele alınması gereken konulardır. İnsanın yaşamı boyunca özgürlüğü ve sorumluluk duygusunu taşıması bunu yaşamına adapte edebilmesi elbette eğitimin konuları içerisinde yer almaktadır. 8 Sınıf Din Kültürü ve Ahlak Bilgisi Ders Kitabı da konu olarak insanın özgürlüğü ve sorumluluğu konusu anlatılmaktadır. Eğitim, yani okullar ve okullarda okutulan dersler, insanların ve kurumların ihtiyaç duyduğu ve önemsedığı bilgi, beceri ve değerleri üreten bir sistemdir (Erdoğan, 2004).

Sorumluluk, sorumlu olanın bir niteliği olarak, üç terim arasında bir ilişkiyi belirtir. Sorumlu kişi, sorumluluk alanı (görev alanı, eylemler, tutumlar, karakter), ve önünde hesap vermek durumunda olunan mahkeme (mesela adli bir mahkeme, vicdan, Tanrı karşısında sorumluluk gibi). Sorumluluk kavramının bu kadar geniş bir içeriğe sahip olmasından ötürü, sadece bu kavram ile ilgili olarak insan hukukun, ahlakın, dinin konusu olmaktadır. (Otfried Höffe, Petit Dictionnaire d'éthique, trans. de fr., Lukas k. Sosoe, matière de responsabilité.)

Sorumluluk ve özgürlük, eylemi ahlaki yapan en önemli iki özelliktir ve her iki özellik de birbirine bağlıdır. Bu iki özellik kendilerini ancak eylemde gösterirler. Çünkü eylem, sorumluluk ve özgürlüğün gerçeklik kazandığı ve onlara şahitlik yapan, belli bir amaca yönelmiş fiildir. Bundan dolayı eylem, basit bir içgüdüsel davranış veya bir organik refleks ya da uyarıcılara verilen otomatik bir cevap değildir. Sorumluluk, temelde tinsel bir davranıştan ileri gelen, tinsel bir gerçeklik olarak düşünülmelidir. Eylem, psikolojinin incelediği davranıştan ve fiziğin konusu olan hareketten farklı olarak ele alınmalıdır. (Gündoğan;2016))

“Hukukçular fiillerin toplum nizamını ilgilendiren sonuçlarından yola çıkmışlardır; ahlakçılar ise fiilin kendisinden yola çıkmış ve onun ahlaki sebebi ile münasebetini incelemeye çalışmışlardır.” (Topçu, 1995, s. 87-88.)

İnsanın yaratıcının istediği gibi bir insan olabilmesi için ne yapması gerektiği ve bunun neticesinde yaratıcının ona ne gibi sorumluluklar yüklediği ele alınmıştır. Özgürlüğün nerede son bulduğu ve kendi isteğimizle mi özgür olduğumuz yoksa Tanrı’nın çizdiği bir sınırdan mı bunun olduğu ifade edilmeye çalışılmıştır. İnsanın özgürlüğü ve sorumluluğu konusunda İslam dini ile Kant’ın felsefesi üzerinden konuya açıklık getirmeye çalışılmıştır.

İnsanı diğer varlıklardan ayıran en önemli özelliği akıl sahibi olmasıdır. Yaşamımızı sürdürebilmemiz için Allah’ın bize sunmuş olduğu ortamda nasıl yaşamamız gerektiği, neye göre hareket etmemiz gerektiği de bize bağlıdır. Bize böyle bir ortam sunan Allah’a karşı bizim de yerine getirmemiz gereken sorumluluklarımız bulunmaktadır. Bize verilen nimetlere karşı şükretmek ve neyin nasıl var olduğu üzerinde düşünmemiz gereklidir. İnsanlar, kendi fiillerinin sonuçlarına cevap verebilme kapasitesi ve yeterliliğine de sahip olmak durumundadırlar. Yani insanlar, eylemleriyle ilgili olarak kendilerine yöneltilen sorulara cevap verebilme gücüne ve yetkisine de sahip olmalıdırlar. Yaptığımız her davranıştan sorumluuzdur. Bir eylemde bulunmadan önce eğer bunu yapmış olursam eylemin sonucunu ne olur diye düşünerek hareket etmeliyiz. Yaptığımız davranışın aslında kötü olduğunu bilerek yapıyorsak da sonuçlarının da kötü olacağını biliyor olmamız gerekiyor.

Özgür olma sadece ahlaki anlamda değil, hukuki ve dini anlamda da gereklidir. İslam dininde insana neyin iyi neyin kötü olduğu açık bir şekilde ifade edilmiştir. Kişi neye yöneleceği konusunda özgürdür ve kısıtlama yoktur. Bilmesi gereken bir şey vardır o da her ne yaparsak yapalım yaptığımız en ufak iyilikten ve kötülükten sorumlu olduğumuzdur. Bize verilmiş akıl sayesinde iyi olanı yapabiliriz ve bu bir tercih meselesidir. Yapılan her davranışın mükafatı ve cezası vardır. Bize yarar sağlayacak olanı her zaman tercih etmeyebiliriz. Ama bunu yaptığımızda, yanlış olana yöneldiğimizde sonucu karşısında pişman olup Allah'tan af dileyebiliriz. Kur'an'ı Kerim'in bir çok ayetinde "Yüce Allah affedicidir" ifadesi yer almakta ve yaptığı yanlışlığın farkına varan insanların Allah'tan af dilemeleri emredilmektedir.

"Allah, insanoğluna akıl ve irade yanında iyiyi kötünden, doğruyu yanlıştan ayırt etmesi için rehber olarak ilahi kitaplar ve peygamberler göndermiştir. Din seçiminde ise insanı özgür bırakmış ve bu konuda şöyle buyurmuştur: "Dinde zorlama yoktur. Artık doğrulukla eğrilik birbirinden ayrılmıştır..." Yüce Allah bütün insanların inanmasını istemekle birlikte iman konusunu insanın özgür iradesine bırakmıştır. Allah, Kur'an'da gerçekleri ve doğruları açıklamış ve insanın, tercihlerinin sonuçlarına katlanması gerektiğini şöyle bildirmiştir: "Şüphesiz biz ona (doğru) yolu gösterdik. İster şükredici olsun ister nankör." (Akgül vd., 2011:123)

Buradan da anlaşılmaktadır ki bizlere her zaman her konuda tercih hakkı tanınıyor ve bu konuda yapacak olduğumuz tercihin sonucunda nelerle karşı karşıya kalacak olduğumuz açıkça dile getiriliyor. Böylece kendi hayatımızı bir bakıma kendimiz yönlendirmiş oluyoruz.

"Ne zaman onlara: "Allah'ın indirdiklerine uyun" denilse, onlar: "Hayır, biz, atalarımızı üzerinde bulduğumuz şeye (geleneğe) uyarız" derler. (Peki) Ya atalarının akıllı bir şeye ermez ve doğru yolu da bulamamış idiyse?" (Bakara suresi, 170.ayet)

Bu ayetten anlaşılıyor ki akıl insan olan her canlıda bulunur fakat bunu nasıl kullandığımız da önemli. Allah'ın bize verdiği uyarıları dikkate almayıp bizi yaratan ve bizi insan olarak diğer canlılardan üstün kılan Allah'ı dinlememekte ısrar edersek bunun sonuçlarına da katlanmak zorundayız. Yüce Allah bizi uyarır her konuda ve neyi merak edersek bunların açıklaması vardır. Kur'an'ı Kerim de bizlere uyarıcı niteliğindedir.

Kant'a göre eylemlerimizi yaparken eğilimlerimizden kaynaklı yaparsak bu iyi bir isteme sayılamaz. İsteme dediğimiz şeyin iyi bir şey olabilmesi için salt pratik aklın yol göstermesiyle hareket edilmeli. Yani bir eylemi yaparken bizde olan eğilimden değil salt pratik aklın öncülüğüyle o eylemde bulunursak o eylemimiz iyi bir isteme sayılır. Bu ne kadar mümkündür dersiniz insanın eğilimlerine göz kapadığı zamana kadar diyebiliriz. Yani demek ki insan ilk olarak eylemini isteyecek ama bu istemesi eğiliminden dolayı olmayacak salt pratik akıl sayesinde olacak.

"Bir irade, ancak herhangi bir istek, gereksinme, doğal bir eğilim tarafından değil, salt pratik akıl ve onun ilkeleri tarafından yönetilirse, iyi bir niyet, bir "iyiyi isteme" dir." (Heimsoeth, 2007:119)

"Kant doğal gereksinim ve isteklerden, eğilimlerden gelen eylemleri, ahlaklı eylemlerin karşısına koyar; ahlaklı eylemlere, salt pratik aklın yönettiği istemelerden gelen eylemlere, "ödeve dayanan" eylemler der." (Heimsoeth, 2007:121)

Yukarıda anlatmak istediği, bizlerin kendi çıkarımız için iyi olarak düşündüğümüz eylemleri yaptığımız da aslında ahlaki açıdan bu eylemlerimiz doğru değildir. Diyelim ki herkes sırf kendi istekleri için hareket etsin. Bunun sonucunda olacak şey belli. Herkes bencil bir şekilde davranır ve istediği her şeyin kendine olmasını ister kimseyi düşünmez. Bu şekilde olan bir ortamda ahlaktan söz etmek mümkün olamaz. Kaos ve kargaşa ortamı oluşur.

Böyle bir ortamın oluşmasına engel olmak için bizler kendi çıkarlarımız için değil de salt pratik akıl doğrultusunda hareket ederek eylemlerimiz de bulunursak burada ahlaki eylemden söz edebiliriz. Demek ki ahlaki eylemin olduğu bir yerde salt pratik akıl kendiliğinden orada bulunacaktır. Birbirlerinin tamamlayıcı niteliğindedirler.

Kant iyi istemenin olabilmesi için salt pratik aklın yanında ödeve de yer vermektedir. Kimi eylemler bencil bir şekilde ödeve bağlı olmadan yapılmaktadır. Mesela, sırf kendi çıkarı için eylemde bulunan birini örnek verebiliriz buna. Kimi ödeve uygun fakat ödevden dolayı değildir. Buna da hayatını devam ettiren birinin örneği verilebilir. Kimi eylemler de ödevden dolayı ama ahlaki içerikten yoksun olabilmektedir. Buna örnek olarak da yapabildiği yerde iyilik yapan birini diyebiliriz. (Kant, 2015:12-14)

"Ödevden dolayı yapılan bir eylem, ahlaksal değerini, onunla ulaşılabilecek amaçta bulunmaz, onu yapmaya karar verirden maksimde bulur; dolayısıyla bu değer, eylemin nesnesinin gerçekleşmesine değil, arzulama yetisinin bütün nesneleri ne olursa olsun, eylemi oluşturan istemenin yalnızca ilkesine bağlıdır." (Kant, 2015:15)

Burada anlatmak istediği şey ödeve bağlı olarak bulunduğumuz eylemin sonucu ile ahlaksal bir değere ulaşmıyoruz. Ahlaksal değere kendi verdiğimiz istemenin sonucunda ulaşıyoruz. Yani yaptığımız o eyleme kendi istememiz ile ahlaksal bir değer kazandırmış oluyoruz. Bir bakıma sadece ödev öyle istediği için değil bireyin kendi isteği doğrultusunda da bu sonuç ortaya çıkmaktadır.

Kant ödevin yasaya saygıdan dolayı yapılan eylemin zorunluluğu olduğunu dile getirmiştir. Burada yasa olarak kastettiği şey pratik yasadır yani nesnel ilke diyebiliriz. Demek ki ödev pratik yasaya olan saygı ile ortaya çıkmış olan eylemle mümkün olmaktadır. (Kant, 2015:15,16)

“Her ne kadar ö d e v i n buyurduğu birçok şey, ö d e v e u y g u n oluyorsa da, bunların gerçekten ö d e v d e n d o l a y ı olduğu, dolayısıyla ahlaksal bir değer taşıdığı kuşkuludur.” (Kant, 2015:22)

Ödevin bizlere yapmamız gerektiğini söylediği şeyler ne kadar ondan kaynaklı olduğu bilinmiyor ve bizden istediği eylemleri biz ne kadar uygularsak uygulayalım ahlaki değerliğinden de şüphe duyuluyor.

“Ahlaksal değer söz konusu olduğunda, sorun olan, gördüğümüz eylemler değil, eylemlerin görmediğimiz o iç ilkeleridir.” (Kant, 2015:23)

“Ahlak alanında öykülenme olmaz; örnekler de ancak yüreklendirmeye yarar, yani yasanın buyurduğu şeyin yapılabilişliğini şüpheli olmaktan çıkarır, pratik kuralların genel olarak dile getirdiklerini görürüz kılar, ama hiçbir zaman akılda bulunan hakiki asıllarını kenara itmeyi ve örneklerle göre kendimizi yönlendirmeyi haklı çıkaramaz.” (Kant, 2015:25)

Demek ki eylemin meydana gelmesi onun ahlaksal değerliliğini ortaya koymuyor o eylemi meydana getiren neden ahlaksal değeri belirliyor. Yani bir kişi eylem de bulunurken aslında onun ahlaksal olarak değerlendirilmesi o eylemi yaptıran iç nedenden kaynaklanıyor ve ona göre ahlaksal yönden değerlendiriliyor.

Ahlaklılığı örneklerle ve öykülenme tarzında göstermek ahlaklılığa yapılacak en büyük kötülük olduğunu söyler Kant. Ahlakla ilgili olan bütün kavramların akılda bulunduğunu dile getirir. Böylece ahlakla ilgili olan her şeye aklımız sayesinde ulaşabileceğimizi gösterir. (Kant, 2015:24-28)

Kant doğada yer alan her şeyin yasaya göre etki de bulunduğunu söylemektedir. Yani bir yasa var ve bu yasa çerçevesinde hareket edilmektedir. Yalnızca akıl sahibi bir varlığın, yasaların koyduğu ilkelere göre eylemde bulunma yetisi ve istemesi vardır. Buradan şunu anlayabiliriz akıl sahibi olmayan bir varlığın yasaların koyduğu ilkelerden bir şey isteme ve eylemde bulunma yetisi yoktur. Zaten akıllı olmayan bir varlığın eyleme yetisi ve istemesinden söz etmek mümkün değildir. Eylemler yasalardan türetilmektedir demek ki yasa eylemlerin ön koşulu konumundadır. (Kant, 2015:29)

“İsteme için zorlayıcı olduğu ölçüde nesnel bir ilkenin tasarımına emir (akıl emri), bu emrin formülüne de b u y r u k denir.” (Kant, 2015:29)

“Şimdi, bütün buyruklar koşullu olarak ya da kesin olarak buyururlar. İlk buyruklar, insanın ulaşmak istediği (veya isteyebileceği) başka bir şeye araç olarak olanaklı bir eylemin zorunluluğunu ortaya koyarlar. Kesin buyruk ise, bir eylemi kendisi için, başka herhangi bir amaçla ilgi kurmadan, nesnel zorunlu olarak sunan buyruk olur.” (Kant, 2015:30)

Bizim yaptığımız eylemler bir yasa etrafında yapılmaktadır. Yaptığımız eylemlerin ve istemelerimiz buna bağlıdır. Bunu yaparken de eğer yapacağımız eylem herhangi bir şey için yapıldığı gösterilmek için yapılacaksa yani bir bakıma bir şeyin gösterici olacaksa yapılan buyruk koşullu olur. Yani belli bir sebebe bağlı olarak yapılmıştır. Eğer tam tersi olarak sadece kendi başına iyi olan bir isteme de bulunulursa bu da kesin olan buyruktur. Bizden istenilen aslında kesin olan buyruktur iyi bir isteme ancak bu şekilde var olabilir.

“İsteme, kendini belirli bir yasa tasarımına uygun şekilde eylemeye belirleme yetisi olarak düşünülmektedir. Böyle bir yetiye ancak akıl sahibi varlıklarda rastlanır. Şimdi, isteme için kendi kendini belirleme de nesnel neden işini gören şey, amaçtır: bu da saf akıl tarafından veriliyorsa, bütün akıl sahibi varlıklar için aynı şekilde geçerli olmalıdır. Buna karşılık, etkisi amaç olan eylemin sırf olanağının nedenini içeren şeye a r a ç denir.” (Kant, 2015:44)

“Genel olarak koşullu bir buyruk düşündüğümde, neyi içereceğini önceden bilmiyorum, ta ki koşulu bana verilsin. Kesin bir buyruk düşündüğümde ise, neyi içerdiğini hemen biliyorum.” (Kant, 2015:37)

Burada demek istediği ben bir eylemi yapmaya karar verip onun benim istediğim eylem mi olduğunu biliyorsam bu kesin buyruktur. Böyle olmasının sebebi herhangi bir amaç için araç konumunda değil kendisi istenilen amaç durumunda olduğundan kesin buyruktur ve eylemin neyi içerdiği bilinmektedir. Koşullu buyrukta ise kesin buyruğun tam tersi olarak belli bir amaç için araç konumunda yani ulaşmak istenen aslında o değil başka bir şeydir ve bunun ne olduğunu o araç konumunda olan kullanılmadan bilinmemektedir.

“Nitekim akıl sahibi varlıkların hepsi, kendilerine ve diğer bütün akıl sahibi varlıklara hiçbir zaman sırf araç olarak davranmaları, her defasında aynı zama nda kendi başlarına amaç olarak davranmaları gerektiği yasasına bağlıdırlar.” (Kant, 2015:51)

“Demek ki ahlaklılık, eylemlerin istemenin özerkliğiyle, yani maksimleri aracılığıyla olanaklı bir genel yasamayla olan ilişkisidir. İstemenin özerkliğiyle bağdaşabilen eyleme izin vardır; bağdaşamayana ise izin yoktur. Maksimleri özerkliğin yasalarıyla zorunlu olarak uyuşan isteme, kutsal bir isteme, kayıtsız-şartsız iyi olan istemedir. Kayıtsız-şartsız iyi olmayan istemenin özerklik ilkesine bağlılığı (ahlaksal zorlanma) yükümlülüktür.” (Kant, 2015:57)

Burada istemenin özerkliği istemenin kendi kendine bir yasa olma özelliği anlamına gelmektedir. Özerkliğin bir diğer anlamı da özgürlüktür. Birey yaptığı eylemlerin de özgür bir şekilde davranır ve o neyi isterse onu seçer. Fakat seçtiği şeyin ahlak içinde değerlendirilmesi için kişinin kendinde iyi olanı istemesi gerekir. Yani kendi mutluluğu veya gereksinimleri doğrultusunda hareket etmemelidir. İsteddiği eylemin onu neye götüreceğini bilerek farkında olarak yapmalıdır. Bu şekilde yaparsa ahlaki açıdan değerlendirilir. Yoksa diğer türlü değerlendirilemez sadece ödevden dolayı ya da ödevle uygunluktan dolayı böyle davranmış demekten öteye gidilemez. (Kant 2015, 58)

“Hem özgürlük hem de istemenin kendi kendine yasa koymasının her ikisi de özerkliktir, dolayısıyla birbirinin yerine geçecek kavramlardır; tam bundan dolayı da, biri diğerini açıklamak ya da temellendirmek için değil, olsa olsa mantıksal bakımdan (aynı değerın farklı kesirlerini en küçük terime indirgediğimiz gibi) tam aynı nesnenin farklı görünen tasarımlarını bir tek kavrama indirgemek için kullanılabilir.” (Kant, 2015:69)

Kısacası ahlaklılıktan söz edebilmemiz için ilk olarak akıl sahibi bir varlığın olması gerekiyor ve bu akıl sahibi varlık kendi eğilimlerine, isteklerine ve ihtiyaçlarına göre eylemde bulunmamalıdır. Kendi çıkarlarını yok saymalıdır. Salt pratik akıl çerçevesinde hareket etmelidir ve bu sayede kesin buyruklara ulaşır. Kesin buyruklar sayesinde de bir eylemi yaparken o eylemin aracı değil amacı konumunda olur ve yaptığı eylemin neyi içerdiğinin farkındadır. Böyle olan bir eylemde ahlaksal bir değerden söz edilebilir. Diğer türlü sadece eylemlere araç ve neyi içerdiğini bilmeyen amaçsız bir şey olur. Demek ki ahlaktan ve onunla ilgili kavramdan söz etmek için ilk ve öncelikli olarak akıl sahibi varlığın kendinde iyi olanı istemesi gerekmektedir.

Sonuç

İnsanın özgürlüğü ve sorumluluğu konusuna baktığımızda İslam dini ile Kant’ın ifadelerine göz attık. İki görüşünde birbiriyle benzerlik gösterdiğini ifade edebiliriz. Kant ahlaktan söz etmek için iyi istemenin olması gerektiğini ve biz bunu bize verilen akıl sayesinde neyi yaparsam doğru veya yanlış çıkarımda bulunarak ona göre hareket etmemiz gerektiğini bu sayede yapılan eylemin ahlaklı olabileceğini dile getirmiştir. İslam dininde de aynı şekilde eylemde bulunmadan önce o eylemin sonucunun ne olacağını kestirebilmemiz gerekmektedir ve neyi yaparsam doğru olur diye düşündükten sonra hareket etmemiz gerekmektedir. Her zaman düşünmek için zamanımız olamayabilir o zaman da yapılmış davranışlar göz önüne alınabilir ve bu sayede daha doğrusuna yönelinmiş olunur. Bizler eylemlerimizi yapmakta özgürüz bunların sorumluluğuna katlanabilir olmak düzeyinde. Bizim özgürlüğümüz yaratıcının koyduğu kurallarla çizilmiştir bunun dışına çıkmak veya çıkmamak bize kalmış bir durum. Çıktığımız zaman da sorumluluğu üstlenmek zorundayız biz istesek de istemesek de bu böyledir.

Kaynakça

- Akgül, Mehmet vd. , İlköğretim Din Kültürü ve Ahlak Bilgisi Ders Kitabı 8. Sınıf, Saray Matbaacılık, 2011, Ankara
- Antik Yunan Felsefesi Terimleri Sözlüğü, “Entelegheia”, Paradigma, 2004, 104, 105
- Arslan, Ahmet, Aristoteles, Metafizik, Ege Üniversitesi Basımevi, 1993, İzmir
- Arslan, Ahmet, Lise Felsefe Ders Kitabı, İnkılap Kitapevi, 1998, İstanbul
- Arslan, Ahmet, İlkçağ Felsefe Tarihi 2 Sofistlerden Platon’a, İstanbul Bilgi Üniversitesi Yayınları, 2016, İstanbul
- Aydın, Mehmet S. , Alemden Allah’a, Ufuk Kitapları, 2014, İstanbul
- Aydın, Mehmet S. , Tanrı-Ahlak İlişkisi, Türkiye Diyanet Vakfı, 1991, Ankara
- Berkmen, Haluk; Aristo’nun Evreni, 2/1
- Gilson, Etienne, Tanrı ve Felsefe, Birleşik Yayıncılık, 1999, İstanbul
- Gökberk, Macit, Felsefe Tarihi, Remzi Kitapevi, 2010, İstanbul
- Gündoğan, Ali Osman; <http://www.aliosmangundogan.com/PDF/Bildiri/Ali-Osman-Gundogan-Eylemde-Sorumluluk-ve-Ozgurluk.pdf?i=1>
- Heimsoeth, Heinz, Kant’ın Felsefesi, (Çeviren T. Mengüşoğlu), Doğu Batı, 2007, Ankara
- Erdoğan, İ. (2004). Okul yönetimi öğretim liderliği. İstanbul: Sistem Yayıncılık.
- Kant, Immanuel, Ahlak Metafiziğinin Temellendirilmesi, (Çeviren I. Kuçuradi), Türkiye Felsefe Kurumu, 2015, Ankara
- Kant, Immanuel, Yargı Gücünün Eleştirisi, (Çeviren Aziz Yardımlı), İdea Yayınevi, 2016, İstanbul
- Kur’an’ı Kerim
- Leibniz, Gottfried W, Monadoloji Metafizik Üzerine Konuşma, (Çeviren A. Altınörs), Bilge Kültür Sanat, 2011, İstanbul
- Leibniz, Gottfried W, Monadoloji ya da Felsefenin İlkeleri, (Çeviren L. Özşar), Biblos, 2015, Bursa
- Öçal, Şamil, Platon’un Timaios Diyalogunda Tanrı ve Evrenin Oluşumu, Beytulhikme Philosophy Circle, 2017, Ankara, s.65-83
- Paradigma Felsefe Sözlüğü, “Yaratılış”, 1999, 919
- Russell, Bertrand, Batı Felsefe Tarihi, (Çeviren Ahmet Fethi), Alfa Yayıncılık, 2016, İstanbul
- Sekman, Aziz, “Kant’ın Ahlak Delili”, İnönü Üniversitesi Kültür ve Sanat Dergisi, 3/2
- Sevil, Ekrem, Platon’un Tanrı Anlayışı- Mitolojiden Rasyonel Tanrı’ya Geçiş, Birey Yayıncılık, 2007, İstanbul
- Tanrıverdi, H. , “Immanuel Kant’ın İman Anlayışı”, Gümüşhane Üniversitesi İlahiyat Fakültesi Dergisi, 1/2 37
- Tuncer, Adem, Ortaöğretim Din Kültürü ve Ahlak Bilgisi 10. Sınıf, Koza Yayın ve Dağıtım, 2011, Ankara
- Tunç, Mustafa Şekip, Bir Din Felsefesine Doğru, Türkiye Yayınevi, 1959, İstanbul
- Topaloğlu, A. , Filozofların Tanrısı, Uyak Yay, 2014, İstanbul
- Topçu, Nurettin; İsyah Ahlakı, çev., Mustafa Kök-Musa Doğan, İstanbul, Dergah Yayınları, 1995, s. 87-88.)
- Yıldırım, Dr. Ömer Ali, İslam Düşüncesindeki Yoktan Yaratma ve Kıdem Tartışmaları: Kelamcılar ve İbn Sina Merkezli Bir İnceleme, Kelam Araştırmaları, 2012, s.251-274

Self – Efficacy Of Educational Employees: Social Activation Workers- Questionnaire Items Construction

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Abstract

This study deals with a specific aspect of an interview with a focus group. The aim was to concentrate on the educational aspect of perceived professional competence of social activation workers working with an endangered family. The focus group was implemented in order to generate professional survey items for use in a survey on "Self-efficacy". There were found 44 important formulations among 10 participants, which, by their content, are telling of the professional competence of employees, with a focus on the educational area of work in caring for children in families. Dispersed replicas will be used when creating a research tool as a part of one of three dimensions for measuring the professional competence of social activation workers working with endangered families.

Keywords: *Self-efficacy, social activation workers, education, focus group*

1 Introduction

The concept of "self-efficacy" has a relatively complicated background, and understanding it requires a certain knowledge of basic terms and interconnected mechanisms. Fusing together here are the terms self-esteem, self-confidence, self-identity with their question of the place in the internal structure of a personality. This theoretical background is a part of the broader "Bandura's" context of social cognitive learning. The field of social pedagogy has yet to deal much at all with the concept. The reason for our interest in the concept is its gap in the field. The scope and extent of social pedagogy in practice is undoubtedly broad, so the center of attention will be a specific professional group of field employees whose subject of interest is social prevention of endangered families and their educational questions of parenthood.

Child upbringing is one of the areas in which endangered families often need a certain measure of support. Members of every specific society are sensitive to deviations in educational practices, which from their point of view disturb the fulfillment of basic educational principles. It is a very sensitive topic and clearly no unity of opinion prevails in the right way to educate (Bechyňová, Konvičková, 2011).

In the current Czech school system, there are no job positions as a school social workers, a profession that has long traditions in a series of countries (Matoušek, Pazlarová, 2014). On the other hand, this system functions outside the school organization. Here, the employee enters as a intermediary between the child, the family and the school, or possibly local authorities. In recent years in the CR, there has been relatively broad development of so-called *social activation services for families with children*, which practically fulfill this role. In light of this fact, this profession is the constant central point of interest of our study.

The main objective of the submitted paper will be to generate professional items for the survey "Self- Efficacy" of social activation employees working with endangered families. This aim will be met through fulfilling the following two goals. The first will be to identify the educational nature of the job from the viewpoint of its employees, and then to determine directions of their work. The second goal will be to generate the formulation of the competence of an educational nature in the interaction "social employee – family".

1.1 Concept of self-efficacy

The concept of self-efficacy formed a fulcrum in the framework of the social cognitive theory of professor Albert Bandura, who researched social learning from elementary forms like imitation and social strengthening, through observational learning, up to the most complex form of teaching a person to act in accordance with accepted principles. Bandura thus approached cognitive and humanistic psychology (Nakonečný, 2008).

Bandura (1987, p. 391, 1997 p. 3) defines self-efficacy as "*the conviction of an individual about his abilities to organize and perform a certain activity, which is necessary for achieving specific goals.*" This means that the ability of perception influences her or his thinking, feeling and behavior. As stated by Bandura (1997, p. 394) "*it influences thought patterns, individually performed activities as well as emotional reactions during current or expected interactions with the environment*". It includes our certain judgment on our capabilities to organize or elaborate a gradual plan for achieving a desired performance. The level of self-efficacy is mainly given by:

- personal performance, which is influenced by previous successes or failures, (this aspect is considered the most influential),
- abilities to observe performed activities and learn during such observation,
- communication skills and the gift to argue,
- physiological and emotional factors, mainly by experiencing stressful reactions.

The consequences of the effects of these factors, especially gained experiences, contribute to forming impressions on one's validation both in the professional sphere and in personal life.

In light of this, the concept of self-efficacy deserves great attention mainly in the area of education and pedeutology. No less research attention is paid in other professional disciplines worldwide.

Researches efforts mainly ascertained the level of perceived professional competence of teachers in practice (Gibson & Dembo, 1984; Tschannnen–Moranová & Woolfolk Hoy, 2001; Gavora, 2009, 2011; Gavora & Majerčíková, 2012; Greger, 2011, Šuverová & Ďurkovičová, 2012, Wiegerová & Ficová, 2012, Smetáčková et al., 2017). In the area of social pedagogy, Hrbáčková & Šafránková (2015) focused on this issue in the area of influencing the behavior of children, school success rates and leisure time of children with educational care center and children's home employees¹. It is important to mention, however, that in all ways, it concerned a personal conviction and not an objective finding.

According to Bandura (1997, 2012), it appears more advantageous to perceive one's capabilities more optimistically than pessimistically, because this is just what supports the application of professional competencies, i.e. true knowledge, skills and abilities in practice. A high level of self-efficacy helps create more optimistic stances, it contributes to approaching daunting tasks like challenges, and correlates to one's quality of life. These people aspire to achieve higher goals, they are more dogged in their efforts and generally more resilient towards failures.

In the framework of the profession, the specifically perceived competence is monitored through research less frequently (e.g. Chung, 2002). This is why we chose to research the specific profession. While searching international databases, we never came across any mention of a research tool of our selected professional group of employees specifically focused on working with families with children in the home environment. In light of this situation, we decided to work together in creating our own tool.

From the methodological aspect, constructing this tool thus appears highly complicated and complex, so it requires gradual steps towards constructing what will ultimately be a valid and reliable research tool.

In this study, we attempt to construct items for the survey "Self-efficacy" in the professional area with regard for the educational aspect of working with families.

1.2 Social activation services for families with children

It the currently established Czech system of care for endangered children exists the employee works as an intermediary between the child, the family, the school and possibly local authorities and professional institutions. The employee works directly in the field, and thanks to close contact with children and parents, he or she has good prospects for intervention. According to Franklin, Gerlach, Chanmugam's (2008) statistics, 12- 22% of children over the course of school attendance experience personal or educational issues over which they would like to consult with a professional. Among children from socially disadvantaged families, this number increases up to 50% .

In recent decades, the Czech republic has seen rather intensive development of "*social activation services*" for families with children - employees working in the terrain and helping families in educational areas and more. These are outreach programs implemented mainly by non-profit organizations and certain municipalities. This form of home care provides support to families with children whose development is endangered in consequence of the impact of a long-term crisis situation, which the family cannot overcome without outside assistance (Matoušek, Pazlarová, 2014). One of the activities of this service involves these very "*pedagogical, educational and activation activities*". So in practice one may observe a clear interconnection of social work with the family and support for education and upbringing of the children living in the family. A hidden aim in this is a certain preventative effect in families, which is a subject of interest of work in social pedagogy. In light of the nature of the research, we focus only on educational activity².

One of the target groups of support for families was designated in the mid-20th century as "multiple problem families" (Matoušek, Pazlarová, 2014). Other applied equivalents are the terms "*families in extreme distress*") (Sharlin, Shamai, 2000), "*families in perpetual crisis*" (Kagan, Schlosberg, 1989) or "*underorganized families*" (Apponte, 1976).

Support for families in this direction means access to a family wanting to improve its situation in the interest of the child and adults alike, and only after possible failure to find an alternative solution for the child. It is necessary to strengthen and show sources of support to families and children, for whom this source has not been available and which is not their own.

¹ A methodologically interesting student is diploma thesis by M. Málek (2017) from FHS UTB " *Self-efficacy studentů sociální pedagogiky v řízení volného času klientů*" [Self-efficacy of social pedagogy students in managing clients' free time]

²Legislatively, these working activities are anchored in the CR in the framework of providing social activation services in Act No. 108/2006 Coll., Sec65(2) as "*pedagogical, educational and activation activities*". (author's note)

2 Methodology

Qualitative research is frequently used as a certain step towards quantitative research (Macek, 2012). In light of this fact, we have opted for a qualitative research strategy using a focus group. The focus group serves us as a supplementary method and source of preliminary information for our survey (Morgan, 2001).

2.1 Research objective

The objective of the implemented partial research is to generate items for the survey on professional competence (self-efficacy) of social activation service (hereinafter "SAS") employees for working with endangered families. In regard to the nature of the pedagogical research objective, we concentrate on the formulation of items focusing on the educational area of working with families. The main research question was: *"What professional competencies appear most frequently among SAS employees in the framework of educational activities of work?"* In relation to this, the main aim was to generate professional items into the survey "Self-Efficacy" in the framework of the social pedagogy field.

2.2 Research method

In regard to the specificity of the profession, we decided on a qualitative research strategy applying the method of a focus group. The effort was to emphasize the specificity and orientation towards specific and detailed clarification of the experience of participants for the needs of future creation of the survey. Preceding the method were individual in-depth interviews, which helped us gain insight on the impression of the specificity of the profession and determination of the dimension of the questionnaire. These detailed experience thus helped us provide a basis for asking questions for obtaining information on the needed competency in the profession. In consideration of our needs, we decided to concentrate specifically on the focus group with regard to the educational nature in the area of home care for families and their children. The focus group, whose communication among participants we analyzed, was implemented on the basis of previous addressing of employees in SAS.

An advantage that appeared was the ability to form a concentrated set of information and codes in a relatively short period of time, which provides direct proof of similar experiences of participants in comparison with obtained conclusions derived from analyses of previously performed individual interviews. Another advantage was the targeted focus of interested and the quantity of data obtained on it.

2.3 Research sample

The subject of the survey involved social activation service employees for their work with endangered families with underage children in the natural home environment. When implementing the research, we were conscious of the specifics of the given professional group. The focus group was formed of ten field employees working in the Zlin Region, Czech Republic. Work with the focus group was implemented in April 2018. To select, we chose the form of an intentional qualified selection of employees from facilities providing these registered services. We made our selection based on below characteristics:

- 1) an employee working in social activation services for at least one year,
- 2) an employee willing to participate in research and consenting to acquisition of an audio recording.

The participants were guaranteed anonymity, so no specific names of persons or individual facilities do appear in the study. Participation in the focus group was voluntary; the volunteers were informed in advance of the intention of the survey, so it is possible to discuss the potential motivation for taking part in the survey.

3 Analysis And Interpretation Of The Data

In our case, the focus group served mainly as a preliminary research technique to generate professional survey items in the survey "Self-efficacy", so the analysis and interpretation of data were controlled by the needs of our research project.

The objective of the focus group was first to ascertain information on the educational objectives of this work, and then to generate competencies and formulate them into items serving for construction of the professional dimension of the questionnaire "Self-efficacy".

In light of the field interest of social pedagogy, the subject of the focus was professional competence with regard to the educational aspect of work of SAS employees in the natural home environment. According to Průcha et al. (2013), education means overall and lifelong development of an individual's personality achieved in both formal educational institutions and in the informal environment. This is also the case of our research sample, specifically in the natural environment in which the interaction takes place, during which roles are emphasized of both social perception and common activities. In the most general meaning, education is designated as any situation with human participants during which some type of learning takes place. In light of this, we will search in the profession for activities that closely relate to the term "education".

The main established objective of the focus group was to formulate survey items of professional competencies of an educational nature, which are important for the profession from the viewpoint of its employees from practice,

to generate such items and to divide them up according to the educational goal. Participants were asked "*What can I do in areas of educational activities when working with a family?*" The proposals were discussed in the focus group. Around 56 replicas of certain activities were mentioned. We intentionally eliminated certain replicas because they did not fit in with the nature of our focus. Most frequently stated activities are then dispersed into 44 items speaking of their professional activities with regard to the identified aims. Participants agreed that during formulation of the wording, it is good to work with the terms, "*motivation, management and action*". (I2: 10 :^{3*} "...we show them patterns of behavior..." I5: 119: "...we need to motivate them...." I4: 273: "...we lead them towards not neglecting basic needs." I9: 46: "...we need to act on them in a certain way in various directions.") During formulation of characteristic items, we were bound by the theoretical concept of A. Bandura (2006) so that items would be formulated explicitly and would require of employees assessment of their own capabilities of implementing specific activities in relation to the family and children with varying target intentions. We modified the formulation of items adequately and stylistically based on the needs of our survey. We started from statements of individuals and followed up with the group consensus. We modified the statements of individual participants and kept the statements with the most frequent mentioning, and then broke them down according to educational goal. For clarity's sake, we provide them in the table. (Tab. 1)

From the table below, professional activities are seen with focus on the educational area of working with families that employees encounter in practice and apply during implementation of goals set together with the parents.

Table 1: Generated formulations of professional competencies

Pedagogical, educational and activation areas	Statements "What can I do in the area of educational work with a family?"
Education towards increasing competencies of parents in bringing up and educating their children	<ol style="list-style-type: none"> 1) To lead parents toward teaching their children basic questions of social education / thanking, asking, greeting/. 2) To support and lead parents towards strengthening development of creativity among children. 3) To show parents and children a different way to behave and act in upbringing difficulties and scholastic learning. 4) Motivating and leading parents to prompt their children to prepare for school and to support their development /individually, through specialized institutions/. 5) To motivate parents towards activities with children so as to positively influence the level and scope of their capabilities and skills. 6) To show parents during work and educational activities with children how to use appropriate educational-didactic aids for child development. 7) To support and lead families towards their children's higher scholastic success. 8) To direct and lead them towards follow-through in educational questions.
Education towards more effective communication	<ol style="list-style-type: none"> 1) To point out minor successes of the family and praise its members for these. 2) To create a good relationship with the family. 3) To adequately support the family in mutual communication. 4) To show them how to understand their own needs. 5) To activate and lead parents and children alike to work on controlling their emotions in crisis situations. 6) To teach parents to react appropriately to their child's needs. 7) To strengthen parents to lead children towards contact with their contemporaries.
Education on spending leisure time	<ol style="list-style-type: none"> 1) To motivate parents towards engaging in common, one-time leisure activities. 2) To support and motivate parents when searching for activities that could support their spending of leisure time. 3) To motivate and adequately engage children in leisure time activities. 4) To motivate parents to select leisure time activities for their children. 5) To motivate parents to search for (material) means for supporting leisure time activities of their child/children. 6) To adequately convey a system of positive values through an educational role model during leisure time activities.

^{3*}The following numbers gave sign the number of informant and the line in the recording. (author's note)

Education towards practical skills in caring for the household and towards family financial issues	<ol style="list-style-type: none"> 1) To point out to and help families set up a safe environment for their child's development. 2) To appropriately influence eating habits to positively impact the physical development and health of children. 3) To strengthen basic personal hygiene habits through education. 4) To provide good information on consequences of inefficient establishment of a regimen. 5) To motivate the family to instill an appropriate daily regimen and its regularity in important activities. 6) To inform and have a preventative influence on parents in questions of the debt issue regarding the family interest. 7) To lead and motivate the family in developing its financial stability for the needs of the children. 8) To motivate and lead parents towards gradual resolution of the family's debt situation in the interest of the children. 9) To motivate towards regularities in paying essential expenses for the family. 10) To motivate and lead towards economically more advantageous alternatives in the interest of sustaining the needs of children.
Education towards searching for another support network for the family	<ol style="list-style-type: none"> 1) To allow the family to decide in selecting offered solutions. 2) Through leadership and motivation, to enable parents to determine priorities and aims according to their personal potential. 3) To strengthen the ability of parents to request assistance when solving problems that they do not know how to resolve themselves. 4) To adequately recognize support of the nearby surroundings.
Education towards handling stress and burdens in the family	<ol style="list-style-type: none"> 1) To help family be able without authority oversight to refuse inappropriate proposals. 2) Through emotional support, to compensate for the stress burden of families. 3) To appropriately intervene and point out discrepancies of the family in the true and the established aim. 4) To compensate for feelings of frustration and disharmony by means of activation by enacting concrete steps. 5) To point out and teach recognition of the seriousness of the situation and convey to the parents the possible consequences. 6) To be able to perform together with the parents practical exercises of specific situations. (telephoning, requesting work, authorities, school) 7) To motivate and lead towards more independent responsibility by introducing personal examples.

(Source: own)

We gradually included activities that participants indicated as important in this area into the presented formulations, which we assigned according to the content aim of their activity.

In the focus group, the following objectives were defined, which employees most frequently try to pursue in cooperation with the parents:

- 1) **Education towards increasing competencies of parents in bringing up and educating their children.** (19 r. 73) *"...to teach them to orient themselves in everyday matters, how to teach children basic things, for example how to say thank you, how to behave during class, how to develop abilities in educational questions."*

To achieve this objective, it is necessary to proceed by means of interviews that must be conducted with awareness of support, and not to enter into any cooperation with adult members of the family. Oftentimes inadequately developed competencies may relate to their personal history in various areas of life. According to the Bowlby theory of attachment (2010), the experience of parents from their original family has an influence on the development of adequate parental behavior (care models experienced, quality of relationship with parents), current relationships with parents, support and a peaceful environment.

(14: 276) *"...lead them not to forget the basic needs for the family, lead them through this process of ascertaining needs."*

It is necessary to offer parents a different direction of thought and view of the child, and to help them gradually change if needed their external manifestations, attitudes and behavior towards the child. To help them be more thorough in perceiving their own needs and those of their children. To call on the parents to formulate an opinion that is alternative, more advantageous, which shows that a wrong opinion runs contrary to some value, which is important for the family or the children.

2) Education towards more effective communication.

(I8:72) *"To teach them to distinguish an adequate and inadequate environment and how to communicate among one another, what to do in crisis situations and how to recognize their seriousness."*

Communication is a so-called upholder of the relationship as well as an indicator of a certain quality. Unclear message with conflicting meanings may influence the nature of the relationship. For ambiguous conversation, its deciphering is very difficult for adult individuals, and practically impossible for children, who need clarity and understandability in communication. In this case, the role of the employee lies in being a communications intermediary. In a well-developed relationship, we can speak of a certain family mediator. According to Trélaün (2005), this form of support acts as a bridge between persons who have built a wall up between each other. It helps them search for dialog and the possibilities of a resolution. It concerns so-called dialogue clarification, which sometimes may move the positional roles to more favorable positions. According to Mareš (2007), opinions are formed especially in childhood in strong dependence to personal relationships and emotions, whereas discovery and opinions act together along with motives and emotions on the behavior and development of the personality. Among the important agents forming relationships and styles of communication is the so-called normality of individuals, as well as the resilience of members of a family towards the destructive effects of other family members, so in light of these needs, the role of a perceptive and sensitively reacting employee is oftentimes important.

3) Education on spending leisure time. Appropriately spent leisure time may be an indicator of the developmental formation of the individual's personality. This objective represents a very important area of development and interest of the parents in supporting the child, in selecting leisure time activities appropriate for him or her in terms of age and reasonable towards the family's financial limitation and the search for other possible variants and sources of financing.

(I1: 219) *"To show them what leisure time activities are offered by the nursery school, primary school, as though that source of information comes freely, they need not do anything actively there, but once it concerns some other offer and it is necessary to adequately motivate, this does not work very well in most families, ...a major task or role is played by the financial availability of activities, so consider in this too the interest of parents to become engaged and search for a solution for financial support."*

4) Education towards practical skills in caring for the household and towards family financial issues.

(I1:79) *"Support in running the household, this is the first step for us in training parental competencies, support in maintaining and managing the family budget."*

Sufficient functioning of the family in this direction is founded upon the fact that at least one family member in a certain extent and quality provides the household with what it needs. The most serious type of breakdown of this functioning comes from situations where nobody buys anything, nobody cooks, nobody cleans or does the washing, etc., thus nobody provides basic care for the household. Operation of the household can be broken down into individual bounded spheres: care for children (including preparing them for school), shopping, meals, personal hygiene, management of finances, animals, time organization, social contacts, etc.). To judge how the household is run, a well founded relationship is necessary.

(I4: 18) *"I first have to have a good relationship built up with the client."*

It is further necessary to have available information on how the family was living before this time, what difficulties they have encountered in the past and how other family members took part in running the household, what resources the family had and has, who helps the family and whether or not any significant breakdown occurred in the family...some crisis situation. Also possible to include here are eating habits, their regularity and age adequacy that supports healthy growth.

(I10: 90 -93) *"For example, we lead mothers to a regular meals regimen, we explain them the combination of appropriate and inappropriate foods, their consumption and appropriate shopping. Practical creation of a daily menu in combination with their budget, though some are very young or don't know it from family experience, and the same applies to personal hygiene habits."*

In this case, the family budget plays a key role. Setting boundaries between essential and non-essential expenditures should be the result of a dialog between the SAS employee and the family as indicated by Matoušek & Pazlarová (2014).

(I7: 103) *"Teach them to think and take their own path, that first I will pay the rent when I receive my allowance or pay."* **(I8: 106)** *"We work with consequences so they would realize what consequences they will face if they don't take this step, when they don't pay the priority expenses."*

From practice we know that handling one's own finances is among the difficulties that families often face. Difficulties in managing this also result from lack of experience and possible absence of support in this area.

- 5) **Education in seeking out a support network for the family.** The objective is to exchange information, to assess the situation of the child and the family, to create and interconnect a support network and to seek out and determine the optimum solution and plan for a common procedure, which leads to fulfilling the needs of the child. (Bechyňova, Konvičková, 2011)

(I6: 157) *"When I see that the parent is not up to it intellectually to help with the child's homework, that it is beyond the parent's abilities, then according to need, I offer them the option of tutoring, some leisure time center, some volunteers or possibly experts in a specific problem."*

In this case, SAS employees attempt to search for motivation for support also among other support resources, including support from the wider family, friends or through the work of volunteers.

The focus group participants agreed that if the employee is working with a family

"online...., the family is capable of seeing and perceiving, so they can be shown specific things illustratively".(I10: 123)

- 6) **Education towards handling stress and burdens in the family.** Stress can be understood as *a specific case of a more generally conceived burden*. This concerns a state in which the measure of burden exceeds the acceptable limit in terms of adaptation possibilities of the organism under the given conditions (Paulík, 2017, p. 65). Families with low self-confidence have a natural tendency to see the world as black and white. In consequence of this, it is necessary to notice qualities, successes and efforts, to realize their power, sources and abilities, and through support, to help them build self-confidence and a more realistic assessment and noticing of themselves individually.

(I9: 216) *"Appreciation for that which they know, what they have already done."*

According to Soukup (2014), also necessary for this besides appreciation and recognition are material reflections, framing or summarizing spoken and perceived content shared by the client. In crisis situations, external assistance is generally important, providing a feeling of safety and emotional support and sharing important information. Clear arrangement of that which is shared may assist in achieving calm and a certain feeling of certainty. It is often appropriate to verify the possibilities of using one's own experience from similar situations, or those of people from the surroundings.

(I10: 302) *"To lead them towards independence and most importantly, to ascribe to them responsibility for everything that is happening to them."*

(I4: 65) *"...I activate them, I motivate them to come up with a solution in some way, to do it themselves and not let them procrastinate in resolving issues, and to proceed as such in similar situations as well."*

It is therefore possible to view the work as a certain form of education by an illustrative example, management and motivation. We can state that the educational nature of the work is thus in line with the opinion of Průcha et al. (2013, p. 345) on the current view of upbringing. Průcha views upbringing as *"a certain form of action, a process of intentional and purposeful creation and influencing of conditions enabling the optimal development of a person in accordance with his individual dispositions, stimulating his efforts in becoming an internally integrated and socialized personality"*. In this regard, it is necessary in practice along with the client to transform more general objectives into smaller, specific aims, which then can lead in the future towards affecting greater and longer-lasting changes in the family's life. A question of fulfilling these goals however is the certain level of openness of the family towards cooperation and their own motivation and desire to change (I3: 18.) *"...but if they don't want to, nothing can help or our influence is minimal."*

Just like the field of medicine, social pedagogy also resolves the conflict between that which it knows and the question of how large a number of families to which it may provide this. In our case, it concerns intensive work with the family of mainly a long-term nature.

4 Conclusion

The center of attention of our study was the concept of professional competence self-efficacy of a specific group of employees. The subjects of research were field employees working with endangered families. This is a professional group of outreach employees whose job description involves working with the family as a whole, whose aim is to help family members to mutually fulfill their needs and to act properly in regards to the interest of the children in the family even in the environment outside the family. Their task is to have a preventative and secondary effect in the family's social and educational upbringing issues. The objective of the presented study was to generate professional items in the survey "Self-efficacy" of employees working in the field of social pedagogy.

In regard to the specificity of the profession, a part of which are preventative and educational activities taking into account the needs of the target group, we started primarily from the question of why the endangered family approached cooperation in the first place. Employees must be sensitive during interviews with individual members of the family, to listen to their "hidden needs" and apply their knowledge in the framework of counseling. Based on such knowledge, the employee influences the family through preventative activities.

Herzog (2007) states that most programs of field work come from the KAB model (Knowledge, Attitude, Behavior). Knowledge is the basis of counseling. In the framework of such knowledge, it is necessary to pass on to the family basic, mainly easy-to-remember information orally, and supplement this with various information brochures, etc. Through attitudes, employees form a safe environment, which makes room for specific opinions of individual family members, to be more empathic, and offer parents and children alike structuring of an attitude or acquiring new attitudes. Behavior enables parents to consult a real situation from their lives; in this case the employee may help them search for their own new solutions to a situation. The objective is to practice more socially acceptable behavior or to eliminate potential risks in the behavior of individual members of the family. Success was achieved in fulfilling the objective and in contributing to sensible recognition of educational activities in the framework of the profession. The dispersed formulations will be used in creating the research tool "Self-efficacy" of a specific professional group for working with families. However, generated items will represent only one area of the survey, the professional dimension. For the next two dimensions, personality and burden, which were not the subject of the submitted study, we will try to search based on the acquired data for adequate standardized surveys towards our research purpose.

We realize the limits of our study. There was only one focus group, or the gained data cannot be compared group-wise, on the other hand individual interviews with employees preceded the group. Use of a combination of two differing qualitative methods thus represents only a partial step towards the overall research objective for quantitative research.

We believe that the study will help us construct a valid and reliable research tool for examining the professional competencies of social pedagogy employees working in the natural environment.

Acknowledgement

The research has been financially supported by Tomas Bata University, Faculty of Humanities SV60181704020/2110 *Self-efficacy of Educational Employees: Foreign Language Teachers and Social Pedagogues*.

References

- Aponte, H. J. (1976). *Underorganization in the Poor Family*. In P. Guerin (Ed.), *Family Therapy: Theory and Practice*. New York: Gardner Press.
- Bandura, A. (1987). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Prentice Hall: Englewood Cliffs.
- Bandura, A. (1994). *Self-efficacy*. In V.S. Ramachaudran (Eds.), *Encyclopedia of Behavior* New York: Academic Press. 4, 71-81. Available from: <https://www.uky.edu/~eushe2/Banvychvnedura/BanEncy.html>
- Bandura, A. (1997). *Self-efficacy. The Exercise of Control*. New York: W. H. Freeman and Company.
- Bandura, A. (2006). Guide for Constructing Self-efficacy Scales. In T. Urban & F. Pajares (Eds.). *Self-efficacy Beliefs of Adolescents*, Greenwich, CT: Information Age Publishing, 307–337. Available from: <https://www.uky.edu/~eushe2/Bandura/BanduraGuide2006.pdf>
- Bandura, A. (2012). On the Functional Properties of Perceived Self-efficacy Revisited. *Journal of Management*, 28 (1), 9-44. DOI: 10.1177/0149206311410606.
- Bechyňová, V., & Konvičková, M. (2011). *Sanace rodiny*. Prague: Portal.
- Bowlby, J. (2010). *Vazba*. (Attachment) Prague: Portal.
- Franklin, C., Gerlach, B. & Channugam, A. (2008). *School Social Work*. In Dulmus, C.N., Sowers, K.M.: *Comprehensive Handbook of Social Work and Social Welfare*. New York: John Wiley & Sons.
- Gavora, P. & Majerčíková, J. (2012). Vnímaná zdatnosť (self-efficacy) učiteľa: oblasť vyučovania a oblasť spolupráce s rodičmi. In *Pedagogická orientace*, 22 (2), 205 – 221. DOI: 10.5817/PedOr2012-2-205.
- Gavora, P. (2009). Profesijná zdatnosť vnímaná učiteľom. Adaptácia výskumného nástroja. *Pedagogická revue*, 61, (1 – 2), 19 – 37.
- Gavora, P. (2011). Zisťovanie profesijnej zdatnosti učiteľa pomocou dotazníka OSTES. *Pedagogika.sk*, 2, (2), 88–107. Available from: <http://www.casopispedagogika.sk/rocnik-2/cislo-2/Gavora.pdf>.
- Gibson, S., & Dembo, M. H. (1984). Teacher Efficacy: A Construct Validation. *Journal of Educational Psychology*, 76, (4) 569 - 589. DOI: 10.1037/0022-0663.76.4.569.
- Greger, D. (2011). *Jak čeští učitelé hodnotí vlastní efektivitu? Adaptace zahraničního dotazníku*. Paper at the conference ČAPV, Brno.
- Herzog, A. (2007). *Obsah terénní sociální práce s dětmi a mládeží*. In: Kontaktní práce. Prague: ČAS
- Hrbáčková, K., & Šafránková, A. P. (2015). Vnímání vlastní účinnosti pedagogických pracovníků v oblasti institucionální péče o děti a mládež. *Sociální pedagogika / Social Education*, 3, (2), 9-24. DOI: 10.7441/soced.2015.03.02.01

- Chung, Y. B. (2002). Career Decision - Making Self-efficacy and Career Commitment: Gender and Ethnic Differences Among College Students. *Journal of Career Development*, 28, (4), 277 – 289. DOI: 10.1177/089484530202800404.
- Kagan, R., & Schlossberg, S. (1989). *Families in Perpetual Crisis*. New York: Norton Professional Book.
- Macek, J. (2012). Nevyčísitelné porozumění: Kvalitativní výzkum online sociálních sítí. *ProInflow: Časopis pro informační vědy*. Brno: MU FF. 4 (1), 151-137. Available from: <http://www.phil.muni.cz/journals/index.php/proinflow/article/view/814/943>
- Majerčíková, J. et al. (2012). *Profesijná zdatnosť (self-efficacy) študentov učiteľstva a učiteľov spolupracovať s rodičmi. (Teacher Self-efficacy in Instruction and in Parent Involvement)* Bratislava: UK.
- Málek, M. (2017). Self-efficacy studentů sociální pedagogiky v řízení volného času klientů (Diplomová práce). Zlín: Tomas Bata University Matoušek, O. & Pazlarová, H. (2014). *Podpora rodiny*. Prague: Portal.
- Matoušek, O. et al. (2010). *Sociální práce v praxi*. Prague: Portal.
- Morgan, D. L. (2001). Focus Group Interviews. In J. Gubrium & J. Holstein (Eds.), *The Handbook of Interview Research* (pp. 141–160). Thousand Oaks, CA: Sage.
- Průcha et al. (2013). *Pedagogický slovník*. Prague: Portal.
- Sharlin, S. A., & Shamaï, M. (2000). *Therapeutic Intervention with Poor, Unorganized Families: From Distress to Hope*. Binghamton, NY: Haworth Clinical Practice Press.
- Smetáčková, I., Topková, P., & Vozková, A. (2017). Vývoj a pilotáž škály učitelské self- efficacy. *Lifelong Learning - celoživotní vzdělávání*. 7, (2). 26- 46. DOI: 10.11118/lifele2017070226.
- Soukup, H. (2014). *Motivační rozhovory v praxi*. Prague: Portal.
- Šuverová, S. & Ďurkovičová, S. (2012). Vplyv vybraných faktorov na úroveň profesijnej zdatnosti vnímanej študentmi špeciálnej pedagogiky. In *Patopsychológia - vznik a vývin*. Bratislava: Comenius University.
- Trélaün, B. (2005). *Překonávání konfliktů v rodině*. Prague: Portal.
- Tchannen-Moran, M. & Hoy, A. W. (2001). Teacher Efficacy. Capturing an Elusive Construct. *Teaching and Teacher Education*. 17, (7). 783 – 805, DOI: 10.1016/S0742-051X(01)00036-1.
- Wiegerová, A. & Ficová, L. (2012). *Vnímaná profesijná zdatnosť začínajúcich a uvádzajúcich učiteľov*. In: Wiegerová, A. et al. Self-efficacy (osobne vnímaná zdatnosť) v edukačných súvislostiach. Bratislava: SPN.
- Zakouřilová, E. (2014). *Speciální techniky sociální terapie*. Prague: Portal.
- Act No. 108/2006 Coll., on social services, as amended. (2018, june 10.). MPSV. Available from http://www.mpsv.cz/files/clanky/7372/108_2006_Sb.pdf

Self-Efficacy Of Educational Employees: Foreign Language Teachers

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Abstract

The main purpose of the study was an adaptation of a self-efficacy questionnaire for Czech EFL (English as a Foreign Language) teachers at secondary schools in the Czech Republic. It was an adaptation of the Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) to Czech conditions. The data were collected in a survey completed by 200 respondents. The questionnaire was focused on the following dimensions "The English teachers' perceived efficacy for student engagement, classroom management, and instructional strategies". A validation of a research tool applied to these teachers and its following evaluation showed that the dimension for "classroom management" has not been confirmed by the factor analysis. Thus the final adapted research tool with 20 items in 2 dimensions has been designed.

Introduction

Self-efficacy is the belief in one's ability to influence events that effect one's life and control over the way these events are experienced (Bandura, 1994). This concept was developed within the social cognitive theory. There are four ways how to build self-efficacy: mastery experiences, social modeling, social persuasion and states of physiology. Teachers' beliefs about their own effectiveness, known as teacher efficacy, underlie many important instructional decisions which ultimately shape students' educational experiences (Sodak & Podell, 1997, p. 214). Understanding teachers' perceptions and beliefs is important because teachers, heavily involved in various teaching and learning processes, are practitioners of educational principles and theories (Jia, Eslami & Burlbaw, 2006). Teachers' beliefs in their instructional efficacy influence the kind of learning environment they create to orchestrate learning. Teachers with a high sense of of teaching efficacy believe that difficult students can be teachable if the teacher puts extra effort (Gibson & Dembo, 1984). According to Bandura (1997) teachers who believe strongly in their ability to promote learning create mastery experiences for their students, but those beset by self-doubts about their instructional efficacy construct classroom environments that are likely to undermine students' judgements of their abilities and their cognitive development (p.241). Gavora (2008) pointed that Gibson and Dembo supported at least two separate dimensions of teachers' perceived efficacy: Personal Teaching Efficacy (PTE), a teacher's belief that he or she can impact student learning and General Teaching Efficacy (GTE), a teacher's belief that proffesion in general brings about student change. Although a number of studies have investigated teacher efficacy in different school subjects, just a little research has been realized to explore the perceived efficacy in nonnative English speaking teachers at secondary schools in the Czech Republic. Thus in this study we explored self efficacy beliefs among Czech secondary school EFL teachers.

In the survey we inverstigated teachers'perceived efficacy for student engagement, classroom management, and instructional strategies. Data were collected through the adaptation of the Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001). The results showed that the dimension for management has not been confirmed by the factor analysis in the Czech conditions.

Method

Respondents

The respondents in the study were 200 volunteers = nonnative English speaking EFL (English as a foreign language) teachers working at secondary schools in the Czech Republic (82,5% grammar schools, 17,5% vocational schools). The questionnaires were distributed via emails, approx. 400. The return rate of the questionnaire was more than 50%.

The demographic data of the respondents are shown below (Table 2, 3 and 4). A total of 200 Czech EFL teachers (112 women, 88 men) between 1-31+ years of experience teaching English and the age group 26-61+ participated in this study. As can be seen from Table 3, the highest percentage of respondents was reached at the age group of 51-60, 46,5%. The highest percentage (41%) of length of practice years was achieved in the category 21-30.

Table 1: School Types

School types	Number	%
Grammar school	165	82,5
Vocational school	35	17.5
Total	200	100

Table 2: Respondents' Gender

Gender	Number	%
Woman	112	56
Man	88	44
Total	200	100

Table 3: Respondents' Age Groups

Age group	Number	%
26 - 30	24	12
31 - 40	43	21,5
41 - 50	38	19
51 - 60	93	46,5
61 and more	2	1
Total	200	100

Table 4: Respondents' Length of Practice Groups

Length of practice group	Number	%
1 - 10	34	17
11 - 20	78	39
21 - 30	82	41
31 and more	6	3
Total	200	100

Instrument

A Czech adaptation of the Teacher Sense of Efficacy Scale = TSES (Tschannen-Moran & Woolfolk Hoy, 2001) in Teachers of English at secondary schools in the Czech Republic was developed for this study. Quantitative research dealt with the English teachers' perceived efficacy for student engagement, classroom management and instructional strategies. Firstly, the TSES questionnaire (12 statements) was translated into Czech language and then completed up to 45 statements, based on the Czech school background. Those 45 statements included three surveyed dimensions for student engagement, classroom management and instructional strategies. Each of the dimensions was made up with 15 statements (the piloting of understanding was checked on a group of 10 volunteers - Teachers of English at secondary schools). Secondly, the pre-checked questionnaires with 45 statements were distributed to secondary schools in the Czech Republic. All the answers regarding the teachers' self-efficacy were rated on 5-point Likert scales, ranging from never (1) to always (5). The study was carried out in spring 2018. Finally, the data obtained were analyzed using the SPSS programme.

Findings

To determine the suitability of the data, KMO and Bartlett's sphericity test was used.

Table 5: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,798
Bartlett's Test of Sphericity	Approx. Chi-Square	8961,511
	df	990
	Sig.	0,000

The data in the table show (the resulting coefficient 0.80) their suitability for factor analysis. We also examined the number of factors by using a scree test.

Table 6: A Scree Plot Test

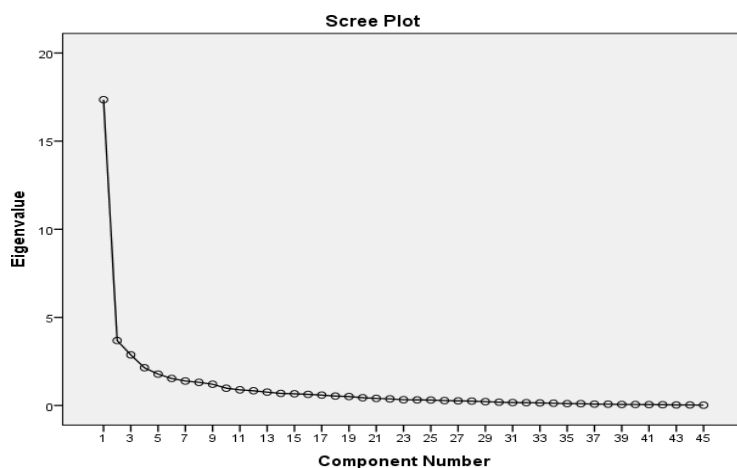


Table 6 clearly shows a break at the second factor. However, we tested a trifactorial solution, it did not appear to be interpretable. For the extraction of factors, the main component, Varimax Rotated Component Matrix method was used. As can be seen from the Table 7, there have been saturated 20 statements in 2 dimensions (the saturated dimensions are highlighted using the grey background).

Table 7: Rotated Component Matrix

	Component	
	1	2
S1	,432	,565
S2	,298	,589
S3	,144	,710
S4	,399	,469
S5	,027	,757
S6	,029	,672
S7	-,039	,731
S8	,149	,651
S9	,112	,473
S10	,198	,575
S11	,180	,669
S12	,333	,705
S13	,171	,722
S14	,273	,632
S15	,357	,729
S16	,458	,590
S17	,572	,560
S18	,387	,658
S19	,478	,493
S20	,464	,543
S21	,567	,328
S22	,494	,404
S23	,576	,266
S24	,539	,346
S25	,571	,448
S26	,504	,336
S27	,467	,437
S28	,444	,458
S29	,403	,600
S30	,491	,509
S31	,747	,389
S32	,726	,368
S33	,774	,268
S34	,808	,241
S35	,699	,267
S36	,369	,017
S37	,547	,130
S38	,787	,135
S39	,772	,164
S40	,732	,156
S41	,108	-,191
S42	,650	-,064
S43	,571	-,033
S44	,393	,022
S45	-,301	-,186

The table above shows the saturation of two factors in two dimensions, the first corresponds to teachers' perceived efficacy for „Student engagement”, and the second to “Instructional strategies”. The existence of the dimension

for teachers' perceived efficacy for "Classroom management" has not been confirmed. The number 0,40 and more has been set up for the sufficient level of saturation. The reliability of the instrument was assessed by computing Cronbach's alpha coefficients for each dimension, which resulted 0,89 in both components - teachers' perceived efficacy for „Student engagement”, and also for “Instructional strategies”.

Table 8: Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	10,641	23,646	23,646
2	10,401	23,112	46,758

Extraction Method: Principal Component Analysis.

As it is shown in Table 8, the total variance for component 1 = „Student engagement” was 23,65%, respectively 23,11% for component 2 = “Instructional strategies”. The total variance explained resulted in 46,76%. According to Gavora (2012), in humanities, 50% score of total variance explained is considered to be a relatively good result, therefore we considered this level to be satisfying.

Results And Discussion

Table 9: Mean and Standard Derivation by Gender of Respondents,

Component 1 = „Student engagement” Component 2 = “Instructional strategies”

Mean and standard derivation by gender of respondents, Component I.	Component I Woman	Component I Man	Component I Woman	Component I Man
	<i>M</i>	<i>M</i>	<i>SD</i>	<i>SD</i>
I am able to use professional teaching techniques to enable my students to acheive their best.	4,24	4,83	0,73	0,96
I am able to create a perfect teaching environment in my English classes.	4,28	4,17	0,60	0,61
When a student does not access the curriculum correctly I am able to use different teaching methods to motivate him / her.	4,37	4,28	0,55	0,64
I can adapt my teaching methods to differentiate between student individual educational needs.	4,34	4,23	0,50	0,53
I am able to give a personal example to increase the student motivation.	4,29	4,22	0,54	0,53
I am able to link the curriculum with practice in order to achieve higher interest in English.	4,36	4,24	0,50	0,55
I am able to praise a student in my English classes.	4,39	4,43	0,51	0,59
I am able to motivate a student to achieve their best in lessons.	4,31	4,10	0,60	0,65
I am able to achieve a sense of self-worth in a student.	4,24	4,06	0,59	0,66
I am able to properly introduce challenges in English classes.	4,32	4,22	0,57	0,65

I am able to employ/use the experiences and interests of the students in English classes.	4,13	4,07	0,53	0,54
Mean and standard derivation by gender of respondents, Component II.	Component II Woman <i>M</i>	Component II Man <i>M</i>	Component II Woman <i>SD</i>	Component II Man <i>SD</i>
I am able to be non-emotive feelings when interacting with a problem student.	4,37	3,90	0,60	0,53
I am able to prevent the occurrence of disturbing behaviour in my classes.	4,28	3,91	0,67	0,67
I respond adequately to cheating during tests within the classroom.	4,25	3,89	0,69	0,65
I am able to appreciate and respond to the positive student behaviour during classes.	4,56	4,43	0,53	0,58
I am able to deal with a situation when a student does not respond to/does not follow my instructions.	4,43	4,18	0,56	0,56
I am able to respond in a calm and professional way to inappropriate language in my classes.	4,44	4,05	0,62	0,67
I am able to give suitable consequences in cases of unacceptable behaviour.	4,52	4,23	0,43	0,67
I am able to remain calm and focused in the case of teaching in a challenging class.	4,21	3,84	0,73	0,84
I am able to clearly display to the students that the class teacher is in charge at all times.	4,63	4,42	0,50	0,63

Table 10: Mean and Standard Derivation by Respondents' Length of Practice

Component 1 = „Student engagement”

Component 2 = “Instructional strategies”

Mean and standard derivation by respondents' length of practice, Component I.	Component I 1-10 years <i>M</i>	Component I 31 years and more <i>M</i>	Component I 1-10 years <i>SD</i>	Component I 31 years and more <i>SD</i>
I am able to use professional teaching techniques to enable my students to achieve their best.	4,02	4,17	0,50	0,40
I am able to create a perfect teaching environment in my English classes.	4,12	4,67	0,58	0,49
When a student does not access the curriculum correctly I am able to use different teaching methods to motivate him / her.	4,21	4,67	0,60	0,49
I can adapt my teaching methods to differentiate between student individual educational needs.	4,19	4,67	0,48	0,49
I am able to give a personal example to increase the student motivation.	4,27	4,67	0,52	0,49

I am able to link the curriculum with practice in order to achieve higher interest in English.	4,27	5,00	0,49	0,00
I am able to praise a student in my English classes.	4,38	4,17	0,52	0,40
I am able to motivate a student to achieve their best in lessons.	4,12	4,50	0,61	0,49
I am able to achieve a sense of self-worth in a student.	4,14	4,00	0,59	0,00
I am able to properly introduce challenges in English classes.	4,23	4,67	0,61	0,49
I am able to employ/use the experiences and interests of the students in English classes.	4,06	4,17	0,57	0,40
Mean and standard derivation by respondents' length of practice, Component II.	Component II 1-10 years <i>M</i>	Component II 31 years and more <i>M</i>	Component II 1-10 years <i>SD</i>	Component II 31 years and more <i>SD</i>
I am able to be non-emotive feelings when interacting with a problem student.	4,15	4,17	0,60	0,40
I am able to prevent the occurrence of disturbing behaviour in my classes.	4,04	4,67	0,65	0,49
I respond adequately to cheating during tests within the classroom.	4,02	4,17	0,57	0,40
I am able to appreciate and respond to the positive student behaviour during classes.	4,46	4,67	0,54	0,49
I am able to deal with a situation when a student does not respond to/does not follow my instructions.	4,23	4,67	0,58	0,49
I am able to respond in a calm and professional way to inappropriate language in my classes.	4,21	5,00	0,66	0,00
I am able to give suitable consequences in cases of unacceptable behaviour.	4,29	4,50	0,63	0,49
I am able to remain calm and focused in the case of teaching in a challenging class.	4,04	4,50	0,59	0,49
I am able to clearly display to the students that the class teacher is in charge at all times.	4,52	4,50	0,54	0,49

Table 11: Mean and Standard Derivation by Respondents' Type of School

Component 1 = „Student engagement”

Component 2 = “Instructional strategies”

Mean and standard derivation by respondents' type of school, Component I.	Component I Grammar schools <i>M</i>	Component I Vocational schools <i>M</i>	Component I Grammar schools <i>SD</i>	Component I Vocational Schools <i>SD</i>
I am able to use professional teaching techniques to enable my students to achieve their best.	4,16	4,20	0,60	0,60
I am able to create a perfect teaching environment in my English classes.	4,24	4,28	0,58	0,50

When a student does not access the curriculum correctly I am able to use different teaching methods to motivate him / her	4,33	4,38	0,58	0,62
I can adapt my teaching methods to differentiate between student individual educational needs.	4,25	4,45	0,48	0,55
I am able to give a personal example to increase the student motivation.	4,26	4,25	0,52	0,59
I am able to link the curriculum with practice in order to achieve higher interest in English.	4,30	4,43	0,50	0,54
I am able to praise a student in my English classes.	4,39	4,43	0,52	0,54
I am able to motivate a student to achieve their best in lessons.	4,22	4,23	0,60	0,72
I am able to achieve a sense of self-worth in a student.	4,16	4,23	0,59	0,76
I am able to properly introduce challenges in English classes.	4,28	4,30	0,59	0,68
I am able to employ/use the experiences and interests of the students in English classes.	4,11	4,15	0,52	0,57
Mean and standard derivation by respondents' type of school, Component II.	Component II Grammar schools <i>M</i>	Component II Vocational schools <i>M</i>	Component II Grammar schools <i>SD</i>	Component II Vocational schools <i>SD</i>
I am able to be non-emotive feelings when interacting with a problem student.	4,24	4,13	0,63	0,58
I am able to prevent the occurrence of disturbing behaviour in my classes.	4,14	4,10	0,69	0,96
I respond adequately to cheating during tests within the classroom.	4,09	4,20	0,69	0,71
I am able to appreciate and respond to the positive student behaviour during classes.	4,50	4,55	0,56	0,55
I am able to deal with a situation when a student does not respond to/does not follow my instructions.	4,33	4,33	0,56	0,61
I am able to respond in a calm and professional way to inappropriate language in my classes.	4,29	4,23	0,66	0,72
I am able to give suitable consequences in cases of unacceptable behaviour.	4,43	4,30	0,62	0,64
I am able to remain calm and focused in the case of teaching in a challenging class.	4,09	4,95	0,76	0,92
I am able to clearly display to the students that the class teacher is in charge at all times.	4,56	4,50	0,57	0,59

Based on the SPSS programme analysis, the final adapted research tool with 20 items with 2 components has been designed. We suppose that the meaning of the statements for the dimension "Classroom management" seemed too similar to the dimension "Instructional strategies" to the respondents, therefore the findings were not saturated enough. The most significant findings obtained in the study, was the overall high ranking of answers. The lowest

number (3,84) on 5-point Likert scales, ranging from 1 never (1) to always (5), was *"I am able to remain calm and focused in the case of teaching in a challenging class"*. On the other hand, the highest (5,00) scored the statements: *"I am able to link the curriculum with practice in order to achieve higher interest in English"* and *"I am able to respond in a calm and professional way to inappropriate language in my classes"*.

For better statement orientation, as it can be seen above, tables 9 - 11 have been created: "Mean and standard derivation by gender of respondents table", "Mean and Standard Derivation by Respondents' Length of Practice table" and "Mean and Standard Derivation by Respondents' Type of School table".

The gender

The lowest score for women in "Student engagement" (4,13) was reached in the statement *"I am able to employ/use the experiences and interests of the students in English classes"*. In "Instructional strategies" with 4,21 it was *"I am able to remain calm and focused in the case of teaching in a challenging class"* statement. Considering the men, those were the statements with 4,06 *"I am able to achieve a sense of self-worth in a student"* in "Student engagement" and 3,84 *"I am able to remain calm and focused in the case of teaching in a challenging class"* in "Instructional strategies".

Full meanings of the highest score (4,39) reached for women were following: *"I am able to praise a student in my English classes"* in "Student engagement" and 4,63 *"I am able to clearly display to the students that the class teacher is in charge at all times"* in "Instructional strategies". The men scored highest with 4,83 *"I am able to use professional teaching techniques to enable my students to achieve their best"* in "Student engagement" and 4,43 *"I am able to appreciate and respond to the positive student behaviour during classes"* in "Instructional strategies".

The length of practice:

The lowest number in the group of participants with the length of practice 1-10 years (4,02) reached in "Student engagement" statement, was: *"I am able to use professional teaching techniques to enable my students to achieve their best"*. The same (4,02) number for "Instructional strategies" was scored: *"I respond adequately to cheating during tests within the classroom"*. On the other hand the group with the highest length of practice (31+) scored the highest (5,0) with the statement in "Student engagement" component with *"I am able to link the curriculum with practice in order to achieve higher interest in English"* statement. For "Instructional strategies" the same number (5,0) was reached: *"I am able to respond in a calm and professional way to inappropriate language in my classes"*. The implications of results obtained can assist in the importance of the length of practice for teachers in service.

A type of school:

The vocational school teachers surveyed, scored higher in all the statements for "Student engagement" than the grammar school teachers. This fact can be caused by the demands laid on the students in these types of schools. For the "Instructional strategies" the statement *"I am able to remain calm and focused in the case of teaching in a challenging class"* (4,95) scored the highest. The lowest resulted with 4,10 the statement *"I am able to prevent the occurrence of disturbing behaviour in my classes"*.

The overall results from the study indicates a very high level of self-efficacy in English language EFL teachers. Based on Bandura's (1997) theory, this finding is of value in that the teachers' judgements about their teaching competence influence EFL teachers' practice in efforts, goals, and challenges they set up for themselves and for their students.

The following step of the survey will be the correlation of the adapted questionnaire with the self-reported English proficiency of the abovementioned respondents and their self-reported pedagogical strategies.

References

- BANDURA, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of mental health*. San Diego: Academic Press, 1998).
- BANDURA, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- BANDURA, A. (2001). Social cognitive theory: An agentic perspective. *Annual review of psychology*, 52, 1-26.
- ESLAMI-RASEKH, Z. (2005). Enhancing the pragmatic competence of NNEST candidates. *TESOL NNEST Newsletter*, 7(1), 4-7.
- GAVORA, P. (2008). *Úvod do pedagogického výskumu*. Univerzita Komenského v Bratislavě.
- GAVORA, P. (2012). *Tvorba výskumného nástroja pre pedagogické bádanie*. Bratislava: Slovenské pedagogické nakladateľstvo.
- GIBSON, S. & DEMBO, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76(4), 569-582.
- CHACON, C. T. (2005). Teachers' perceived efficacy among English as a foreign language teachers in middle schools in Venezuela. *Teaching and Teacher Education*, 21(3), 257-272.
- JIA, Y., ESLAMI, Z. R., & BURLBAW, L. (2006). ESL teachers' perceptions and factors influencing their use of classroom-based reading assessment. *Bilingual Research Journal*, 29(2), 459-482.
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practicing teachers. *Journal of Research and Development in Education*, 30, 214-221.

TSCHANNEN-MORAN, M. & WOOLFOLK HOY, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805.

YILMAZ, C. (2011). Teachers' perceptions of self-efficacy, English proficiency, and instructional strategies. *Social behavior and personality*, 39(1), 91-100.

Sexual Harassment In Universities

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Abstract

The present investigation was carried out with an interdisciplinary approach that allowed an integral approach to the problem that represents the sexual harassment in universities. This paper is part of the research process carried out in the case study of the Autonomous University of Mexico Cuajimalpa Unit, and is integrated by a referential and methodological framework that supports the understanding of a qualitative study on the social representations of the student community, as well as the approach of a communication strategy that contributes to the incidence of those of the social representations and generates a cognitive change before the problem.

Keywords: Sexual harassment, violence, gender violence, culture, universities, social representations, interdisciplinary

Introduction

Sexual harassment represents only a fragment of an even bigger social problem, gender violence, nowadays this problem has been visible constantly through social networks becoming a topic of interest for public opinion. However, sexual harassment played in the saw public, workplaces, high school and universities, as well as other both public and private spaces are the result of social construction based on a culture in which it positions man in a hegemonic place in gender relations, a situation that generates inequalities and discrimination.

To begin, it is pertinent to mention that the concept of sexual harassment (In Spanish Acoso Sexual):

Sexual harassment consists of one or several focused interactions whose frames and meanings have an allusive content to sexuality, in which the performance of at least one of the participants may consist of indirect sexual approaches (use of symbols, written messages, whistles to distance, pornographic material), sexual bribery, approaches, looks, whispers and physical contacts or sexual propositions and comments that are unauthorized or unrequited, generate a hostile social environment and have negative consequences for those who receive them. It is possible that differences of hierarchy and status are involved, and necessarily imply an imbalance in the power relations between the individuals that can be counteracted or not during the same situation. (Gaytan, 2009, p.53)

However, it is important to mention that for the Mexican context, there is a differentiation between the concepts and the difference is in the hierarchical position of the main actors, since sexual harassment occurs in horizontal structures where the only hierarchical difference is determined by sex, whereas sexual harassment (In Spanish Hostigamiento Sexual) occurs in a real subordination of the victim and regularly occurs in school and work contexts (where relations are teacher - student and boss - subordinate) .

The Law of Access to Women to a life free of violence, in its article 13, defines sexual harassment (In Spanish Hostigamiento Sexual) as: "The exercise of power, in a relationship of real subordination of the victim to the aggressor in the work and / or school environments. It is expressed in verbal, physical or both, related to the sexuality of lascivious connotation "(Official Gazette of the Federation, 2017, p.5).

In general, the sexual reception is mostly identified by the acts that make up street harassment (such as touching, whistling, and sexual advances, among others) that is mainly presented on public roads or public areas such as public transport. This occurs both at the international level and at the national level, due to the high incidence recorded, the governments of some cities have carried out measures to prevent this type of violence.

As an example of the efforts mentioned, it is the 30/100 strategy implemented by the government of Mexico City in 2015, this strategy was developed with the cooperation of ONU Women in order to eradicate harassment in public transport and consisted of the implementation a publicity campaign to encourage reporting, surveillance operations, strengthening of the separation mechanism in wagons destined for women's use, security tools such as the distribution of whistles, the creation of a web page and a mobile application called Vive Segura, among other prevention measures.

Subsequently, #NoEsDeHombres (It's not from men) campaign was carried out, also implemented in Mexico City and elaborated by ONU Women. Other campaigns have taken place in different cities like Repor it for Stop it implemented to stop harassment in public transport in the UK in 2015. Like many others that have been implemented in different countries like Spain, Argentina and France to name a few, for end sexual violence against women.

With regard to sexual harassment in Universities or Higher Education Institutions (IES by its initials in Spanish), situations have been recorded in the national context that have evidenced the serious incidence in both public and private institutions; It is important to mention that the universities spaces destined for learning and social development shouldn't happened in this places.

It is worth mentioning some cases more visibles through social networks and media, in 2016 a student of Political Science at the Iberoamerican University reported having been sexually harassed by an administrative assistant when appealing to the authorities of the University and not receiving a response positive made a university movement through social networks in which the hashtag was used #NoEsNo, being supported by students from other universities and by the student community of the Iberoamerican University.

In the same year, the Metropolitan Autonomous University Xochimilco Unit (UAM X) was also the scene of accusations of sexual hostage acts, as students placed banners in the dining room with explicit complaints from professors who committed cases of sexual harassment (Hostigamiento sexual in Spanish) and misogynistic comments against female students.

As for the National Autonomous University of Mexico (UNAM) , multiple complaints have been made from acts of sexual harassment, sexist comments to murders typified as femicides that occurred in the University City facilities, it should be mentioned that according to the president of the Special Commission of gender of the University Council, Leticia Cano, the "February 28, 2018, the number of complaints about possible s gender violence increased to a total of 372, corresponding to 346 aggressors; that is, 20.6 complaints per month . "

Meanwhile, at the Autonomous Metropolitan University Cuajimalpa Unity (UAM C), the community in which our research is focused also showed incidence of harassment and sexual harassment, as during the session of the Academic Council of Unit CUA-141-17, where students requested the approval of a committee in charge of creating a code of ethics that integrates sexual harassment prevention and care within the University.

Ultimately and based on the above shows that the incidence of cases of sexual harassment in university environments is evident, in addition to that it is a problem has worsened because the education institutions lack prevention and attention measures. Consequently, the relevance of the investigation is demonstrated.

It is worth mentioning that it was derived to the mentioned cases and many others that were not so well known and were only treated internally by the different Universities; some institutions have reacted reactively generating preventive measures and attention to the problem contributing with contributions to influence the permanence of these acts.

Some of the most important contributions are: In the Iberoamerican University later the case mentioned occurred in 2016, the "Action Protocol for the prevention and treatment of discrimination and gender violence at the Iberoamerican University" in 2017 was performed. The National Autonomous University of Mexico, in 2016, made the "Protocol for the attention of cases of gender violence in the UNAM" which stipulates that the resolution of cases of gender violence will be through the institutional lawyer.

Other universities that have contributed to the realization of their own frameworks of action are the Autonomous University of Sinaloa, the Autonomous University of Ciudad Juárez, the Center for Economic Research and Teaching, among others.

It should be mentioned that the UAM C, presented the Immediate Protocol of attention to gender violence, this document addresses the procedure to be followed in case of being a victim of gender violence.

It is important to point out that these action protocols are guides that allow knowing the route to denounce an act of this type and that most of them are only designed for operation in the university context and in specific it is framed by the specific characteristics of the institution that he does it. As it is demonstrated, the authorities of the Universities have prioritized their field of action in the establishment of routes of action for denunciation and attention of the victims with the creation of protocols of attention, in spite of this, there are very few solutions alternatives that have been developed, one of them is the campaign carried out through social networks in the city of Monterrey where a blog was created to invite the victims of sexual harassment in universities to participate, using the hashtag # AcosoEnLaU.

In this way, the relevance of this research is demonstrated in which sexual harassment is identified as a problem that mainly affects women and that is very recurrent in different contexts, but in spite of what is a problem identified in the field school is very complicated because its solution routes that are internal and care in its majority the strategies they question only the complaint and there is no real s n prevention mechanism.

Consequently, the present investigation develops around the sexual harassment in universities, locating the object of study in the university community of the UAM C, specifically the actors: students, teachers and professors.

Derived from the great problem that the presence of cases of gender violence in university spaces implies, the Autonomous Metropolitan University Cuajimalpa Unit, concerned and aware of the need to address and stop sexual violence acts in the development of tools to eradicate this violence.

Regarding the main objective of this research is to develop an interdisciplinary system that allows students to access meaningful information that generates a cognitive change regarding sexual harassment and harassment in the Autonomous Metropolitan University Cuajimalpa Unit. This is achieved thanks to the intervention of the three knowledge lines Communication Strategies, Information Technologies and Information Design, which interact in the creation of social solutions in the postgraduate course called Master in Design, Information and Communication taught at the UAM C.

To achieve a specific objective, a prior study of a theoretical framework that allowed framing the research in an interdisciplinary development that provided a comprehensive understanding of the problem through different approaches was required, as well as a field study that made it possible to identify the incidence of the problem, the students' knowledge about this and the possible relevant solutions.

In addition, specific objectives were established:

- Propose a comprehensive communication strategy that affects the behavior change of students and teachers, to prevent cases of harassment and sexual harassment in the Autonomous Metropolitan University Cuajimalpa Unit.
- Generate a system that provides information that helps the main actors recognize the ways in which sexual harassment and harassment occur.
- Create a proposal that allows the user to appropriate this significant information with an enriching experience.

In this way, the pertinence and contribution of this research is highlighted, because although many Universities are working to stop the incidence of gender violence, the proposals only have a reactive aspect and attend the events that have occurred, provide routes for reporting and information, however, this project seeks to influence the main basis of the problem, since social constructions are projected by the behaviours or postures that are taken in front of a problem, providing adequate information and betting on a non-formal education, students can adopt a posture according to gender equality and against violence.

Now, the structure of this document is composed of the theoretical framework of the present research that integrates the present introduction, the referential frame in which the problem develops in the cultural context of Mexico, a conceptual framework that explains the main factors of the problem then methodological framework that explains the methodology used, as well as tools for practice work with the student community, the results and analysis of the study, the explanation of the proposed solution and conclusions.

Theoretical Framework

This section addresses the conceptualization of sexual harassment practices through social representations, the importance of these, as well as their construction and analysis, as well as the theoretical approach of elements that contribute to the incidence of the problem, such as culture, violence, the reproduction of social inequalities and, in the context of the problem, inequalities based on gender. The concept of gender implies a notion of sexuality that does not necessarily correspond to the physical sex with which one reaches the world in a certain way. From this perspective it cannot be affirmed that gender is only the product of one sex, these judgments are based on a social representation constructed historically on the differences between gender and sex, which show a radical discontinuity between sexed bodies and culturally constructed genders, that is, that the concept of gender is established from the circumstances or conditions in which it occurs, therefore, we can understand that it is given from the culture and society that surround it (Lamas, 2013).

To begin it is important to start with the proposition that sexual harassment is derived from a violent and hostile context in which these acts are part of gender violence, and occurs in an environment where gender inequality prevails derivative to cultural constructions inherited from generation to generation, fostering acts of discrimination and legitimating gender roles and stereotypes that support the masculine gender over the feminine gender and over any other gender identity.

Gender violence is given by gender relations, is the violence that is exercised from the hegemonic model of masculinity embodied mostly by men, but also by some women, against all women and also against men who follow other models of masculinity non-hegemonic both heterosexual and homosexual (Oliver and Walls, 2004, p.16).

As explained the notion of gender and its inference in acts of sexual harassment are based on social representations, which have been inherited and accepted through a process of socialization in which the media, social interactions, institutions (educational, governmental, religious, among others) and the family nucleus contribute to the formation of these.

It is worth mentioning that the importance of social representations for understanding the problem of sexual harassment and harassment lies in the fact that it is made up of a series of knowledge that supports the behavior of a community. The social psychologist Serge Moscovici

defines social representations as: "Representation is an organized corpus of knowledge and one of the psychic activities through which men make the physical and social reality intelligible, they are integrated in a group or in a relationship daily exchange "(Moscovici, 1979, p. 17-18).

Social representations are not in the mind of the individual at all times, but they think, arise and are built from crisis or conflict, what he calls "emergency", and to reach this state of emergency, Moscovici It concludes that three conditions must be presented:

- 1) The dispersion of information: The data that most people have to answer a question, to form an idea or purpose of a precise object, are generally insufficient and superabundant.
- 2) The focus of the subjects on a social relationship, or a particular point of view, has an undoubted impact on the style in question: An individual or a group gives specific attention to some very particular areas of the surrounding environment and takes a distance from it, other areas of the same medium. The student, the teacher or the worker locate psychoanalysis differently in their universe.
- 3) The presence of a pressure to infer: In ordinary life, circumstances and social relationships require the individual or social group to be able, at all times, to act, to take a position. (Moscovici, 1979, p. 176-178).

On the other hand, for the analysis of social representations the existence of dimensions is established, which are the knowledge pertaining to a group about a social object, and suggests that they compose the universe of opinion from three axes:

- Information: is the sum of knowledge about an event, event or social phenomenon.
- The field of representation: organization of content in a hierarchical way, which varies from group to group and even within it.
- The attitude: it is the position that is had in relation to the social object, this dimension can be favorable or unfavourable.

As the psychologist Moscovici explains, social representations are made up of common sense knowledge about a topic and support social behaviour before something.

However, the internalization process of information that promotes and reproduces acts of gender violence, such as sexual harassment and harassment, as well as sexist comments, discrimination, devaluation, insults among others, is the same process of socialization to which the individual is exposed from the first day of his birth, which allows him to adopt a specific cultural context of the geographical environment to which he belongs, in which the naturalization of violent and discriminatory behaviours can be determined, forming part of a patriarchal system and the preminence of the masculine gender over others.

It should be noted that these hierarchies in social relations have been historically established in culture, however, biological differences should not imply the hierarchical inequalities generated by cultural constructions:

A woman, she needed to carry her children in her innards for nine arduous months, and then feed them for years. Throughout that time I had few opportunities to obtain food, and I needed a lot of help. I needed a man. In order to ensure her own survival and that of her children, the woman had no choice but to accept the conditions that the man stipulated in order to ensure that he did not get too far away and assume part of the burden. As time passed, the female genes that succeeded in passing on to the next generation were those belonging to women who were submissive caregivers (Harari, 2014, p.151).

At this point it is relevant to mention that the concept of culture is understood as:

It is the social organization of meaning, internalized in a relatively stable way by subjects in the form of schemes or shared representations, and objectified in "symbolic forms", all in historically specific and socially structured contexts, because for us, sociologists and anthropologists, all social facts are inscribed in a specific spatio-temporal context (Giménez, 2005, p.5).

On the other hand, it is important to involve the concepts of power and violence, which are widely linked, violence is exercised to obtain power over others, which implies the notion of control, superiority and vigilance. Violence is conceived as a human aspect and is established in the social structure through a mechanism that perpetuates hierarchical inequalities. Violence is specifically human and, in this sense, it is a freedom (real or supposed) that wants to force another. I would call violence the use of an open or hidden force, in order to obtain from an individual or a group that which they do not want to consent freely "(Domenach, 1980, p.33).

Regarding this research, problems framing in the sexual harassment, is encouraged by gender violence instituted by the culture which is reflected by the social representations of a given group which in turn plays an unequal hierarchical system, allowing the exercise of power of some towards others.

In this way, the way in which violence is established in a social structure through different mechanisms is exemplified, some of which are very evident such as physical and / or verbal violence, economic manipulation or

more subtle mechanisms in which subordinate groups accept so domination without claims or grievances against those who exercise it. This mechanism is known as symbolic violence and the sociologist Pierre Bourdieu developed approaches to this.

Symbolic violence is that coercion that is instituted through an adhesion that the dominated cannot avoid giving to the dominant (and, therefore, to domination) when he only has to think and think or, better yet, to think about their relationship with him, of instruments of knowledge that he shares with him and that, being no more than the incorporated form of the structure of the relationship of domination, they make it appear as natural; or in other words, when the schemes put into operation to be perceived or evaluated or to perceive and evaluate the dominant ones (high / low, male / female, white / black, etc.), are the result of the incorporation of the classifications, that way they are naturalized, whose fruit is their social being (Bourdieu, 1999, p. 224-225).

It should be added that symbolic violence is the mechanism that allows the reproduction of unequal structures in society, because it is identified in gender relations, in racial groups, as well as in the economic strata that make up a society.

Added to this violence goes through an alleged cycle in which it is implemented in a structural manner, because in a very subtle way the social nuclei, media, government institutions and educational institutions such as government and private mental constructions previously accepted by society where they encourage the establishment of ideologies, gender roles and stereotypes which they allow these behaviours to be naturalized and subsequently be adopted in a structural way in society.

In this way lies the importance of social representations for research because although all the elements that allow to form a knowledge and position on an event supports the behaviour of a group or group, it is important to know how they conform and how they can be influence on these so that a gradual cognitive change can be achieved through meaningful information that allows to sensitize and reflect on the practices that integrate gender violence such as sexual harassment and harassment, but mainly to contribute to the implementation of a culture of equity. Next, the field work carried out in the UAM C will be approached, which constitutes a research with mostly qualitative tools and a survey, which allowed to know in a more detailed way the incidence, the knowledge that the student community knows the problem and This way to identify proposals that allow to solve the acts that integrate sexual harassment and harassment within the university.

Methodology

After proposing a theoretical framework that allowed identifying the approach to the study of the problem, it was important for the research process to know in depth the study community and in this way be able to generate viable solutions for the problems that occur in the University.

It is worth mentioning that for the development of this project, the Participatory Action Research (IAP) methodology was used as a guiding principle, because this type of horizontal methodologies allows the study community to be an active part of the research process, generating a dialogue to the construction of their own solutions. According to the sociologist Ander Egg Any methodology of social action requires

That people have an intervention in the study of their reality, in the elaboration of a situation diagnosis, in the programming of what is decided to be carried out and in the way of carrying it out. Better yet, if people, reflecting on their own actions, evaluate their activities. This is not achieved with statements or just encouraging the participation of people. It requires a set of guidelines and technical elements - operational, so that participation is possible and effective (Ander-Egg, 2003, p.5)

The majority of the research carried out was of a qualitative nature because information was collected on behaviours, social representations that reflect a level of knowledge and culture of the study community. However, one tool used was the application of a survey applied online, this study allowed to know the incidence of sexual harassment, this survey mostly allowed to know quantitative data and qualitative information that allowed to know the incidence of the problem, as well as the main actors of the problem.

To begin the research process in the exploratory phase it was recognized that one of the premises to investigate was whether in the university community of UAM C there were cases of sexual harassment and harassment, in case of existing the actors involved and how informed they were the students were on these acts.

To answer these questions, it was decided to apply an exploratory survey to a sample of convenience, through an online questionnaire, the instrument was composed of 10 closed questions and 11 open questions.

The survey was answered by 86 students, of whom 61% were female and 39% were male. The age range ranged from 18 to 50 years old, however, the highest participation was registered in 21 year olds, and the students who

answered this instrument were mostly from the Bachelor's degrees in Communication Sciences, Design and Information technology.

Among the most salient findings are, from the question, have you felt sexually harassed within UAM C? 30% of the women answered yes, 10% of the surveyed population does not know it, while 60% answered no. While only 12% of men answered yes, 3% did not know and 85% did not.

As for the question, who was or is the aggressor? The women answered first a student with 37.5%, followed by a teacher with 25% and with 12% more than one aggressor. While the male gender responded with 100% that by a student.

In the question, in case you were a victim of sexual harassment, would you know how to act? Only a part of the surveyed population answered yes (33%), 10% answered no, and 57% said they were not sure.

Finally, with the question do you consider that you, consciously or unconsciously, could have sexually harassed someone? Women responded with 76% who did not, 20% who was not sure and 4% who did. Meanwhile, men responded with 85% no, 12% yes, and 3% answered not being sure.

Derived from this first approach can be identified that sexual harassment and harassment is a problem that is present in the UAM C, the students are mainly victims of these acts, the main aggressors are the students, followed by teachers and professors. The majority of the students would not know how to act in front of a problem of this type and that they do not know how to identify the acts that make up the harassment and sexual harassment derived from the naturalization of these behaviours.

Subsequently, an exercise in social representations was carried out to understand the level of information held by the students, in addition to knowing the composition of the social constructions of the community in order to clearly understand the behaviours and positions students about the sexual harassment.

This method of qualitative character was applied to a sample of convenience conformed by 152 students, chosen of random way, without taking into account age, plan of studies that are signed up, identity of sort; The study to know the conformation of the social representations was made through the natural semantic networks.

One or more stimulus words are selected from which you want to know the meaning given by the subjects members of a particular group. They are asked to define the word stimulus by a minimum of five single words, which can be verbs, adverbs, adjectives, nouns, names or pronouns, without using articles or prepositions. When the subjects have made their list of defining words, they are asked to individually hierarchize them according to the proximity or importance of each of the words with the word stimulus. It will assign the number one to the word closest to the stimulus, the second to the next, and so on, until all the defining words are exhausted (Hinojosa, 2008, p.135).

The stimulus words used were abuse, sexual abuse, harassment, sexual harassment, harassment, sexual harassment, machismo and feminism, however for questions of relevance of information the interpretation of the units of analysis will be presented: sexual harassment (acoso sexual and hostigamiento sexual in Spanish, by the Mexican context).

Regarding the words sexual harassment (acoso sexual in Spanish) stimulus was obtained that the words that make up the conceptual core (three concepts that the individual s designate higher ranking) were women (24.34%), violence (16.44%) and abuse (15.13%), while that the peripheral concepts with greater weighting were man (12.5%), violation (13.15%), annoyance (8.5%), fear (9.2%) and harassment (7.23%) ; the study result in other contextualizing words and with little relevance for the analysis.

With the results obtained it can be interpreted that the students identify that these acts integrate a problem related to gender violence, in which women are the main victim, besides that these actions imply an abuse of the exercise of power. On the other hand is the relationship between the terms fear and complaint, because of this feeling is one of the main causes for not reporting. In addition, all the terms that make up the nucleus and the first periphery, such as rape, annoy, fear, are words that are at a level of happiness that is almost nil according to the specialized feelings dictionary. Affective Norms for English Words ANEW (Bradley, MM, and Lang, PJ)

Finally, an ambiguity is identified between the terms bullying and harassment because they do not find a difference between them.

Now with the words stimulus sexual harassment (hostigamiento sexual in Spanish) was obtained a conceptual core composed of the concepts bother (17.76%), harassment (13.81%) and abuse (11.84 %) and the first peripheral was formed by the terms bother (12.5%), fear (10.52%), violence (9.21%), touching (5.26%) and persecution (4.6%). The social representation obtained with the term sexual harassment shows the ignorance of information on the part of the student community because there is a wide confusion between the terms harassment and sexual harassment. In general, it was concluded that they do not know the differentiation between the terms and there is a wide disinformation about the problem, besides identifying cultural features in the context of the problem.

Conclusions

Finally, as part of the solution proposal, a communication strategy was elaborated that integrates the contributions of the three knowledge lines that intervened in the project, on the one hand the strategic development of actions that help to influence the cognitive and behavioural change, on sexual harassment, in addition to the approach provided by the Information Design and Information Technology lines, who through the investigative process granted integral solutions for the appropriation of information.

In this way, the actions that integrated the communication strategy were developed to influence the social representations supported by information and awareness, using tools that allow the appropriation of a new knowledge such as non-formal education.

The integrated strategic plan or actions that are developed along three phases corresponding to three years, in terms of implementation due to existing resources was carried out the first phase that included a first informative day that provided a space in which experts on the subject expressed their knowledge and work contributed on the subject, as well as a sensitization workshop; In this way, the actions allowed a space for dialogue and personal communication with the students.

In conclusion this comprehensive plan provides the student community resources to create new knowledge which allows the appropriation of information and awareness of behaviours that make bullying and sexual harassment in order obtain reflection on the subject.

Finally, guidelines are established for the development of repetitive communication strategies in order to influence social representations and the behaviour of certain groups. As well as, future research that contributes to the eradication of gender violence.

References

- Ander-Egg, E. (2003). *Repensando la Investigación-Acción-Participativa*. Buenos Aires: Grupo Editorial Lumen.
- Bourdieu, P. (1999). *Meditaciones Pascalianas*. Barcelona: Ed. Anagrama.
- Bradley, M. M., y Lang, P. J. (1999). Affective norms for English words (ANEW): Instruction manual and affective ratings (pp. 1-45). Technical report C-1, the center for research in psychophysiology, University of Florida. Recuperado de: <https://www.uvm.edu/pdodds/teaching/courses/2009-08UVM-300/docs/others/everything/bradley1999a.pdf>
- Diario Oficial de la Federación. (2017). Ley general de acceso de las mujeres a una vida libre de violencia. México: Cámara de Diputados. LXI Legislatura.
- Domenach, J. (1980). "La Violence", en *La Violence et ses causes*, París: UNESCO.
- Gaytan, P. (2009). *Del piropo al desencanto: un estudio sociológico*, México: UAM –Azcapotzalco.
- Giménez, G. (2005). *La cultura como identidad y la identidad como cultura*. Consejo Nacional de la Cultura y las Artes. México.
- Harari, Y. (2014). *De Animales a Dioses. Una breve historia de la Humanidad*. Editorial digital: Titivillus.
- Hinojosa Rivero, G. (2008). El tratamiento estadístico de las redes semánticas naturales. En *Revista Internacional de Ciencias Sociales y Humanidades, SOCIOTAM*, 18(1). Recuperado de: <http://www.redalyc.org/pdf/654/65411190007.pdf>
- Lamas, M. (2013). *El género la construcción cultural de la diferencia sexual*. México: Programa Universitario de Estudios de Género, UNAM.
- Moscovici, S. (1979). *El psicoanálisis, su imagen y su público*. Buenos Aires, Argentina: Huemul.
- Oliver, E y Valls, R. (2004). *Violencia de género. Investigaciones sobre quiénes, por qué y cómo superarlo*. Barcelona: El Roure Editorial, S. A.

Sınıf Öğretmeni Adaylarının Görüşlerine Göre Özgün Fiziksel Oyun Oluşturma Sürecinin Değerlendirilmesi

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Özet

Problem Durumu

Bilişim çağında, çocukların fiziksel etkinliklerden uzak bir şekilde elektronik ortamlardaki oyunlara yoğunlaştıkları ve en küçük zaman aralarında bile mobil cihazlarla oyun oynama eğiliminde oldukları gözlenmektedir. Bu bağlamda fiziksel etkinliklere yönelik oyunların okullarda uygulanması özel bir önem kazanmaktadır. Sınıf öğretmenlerinin fiziksel etkinliği olan oyun ortaya koymada üretken olmaları öğrencilerin oyun oynamasını ve fiziksel gelişimini olumlu yönde etkileyecektir. Aynı zamanda bazı geleneksel oyunlardaki fiziksel etkinlik eksikliği ve ilkokullarda oyun uygulamalarında benzer oyunlara yer verilmesi çocukları oyunlara karşı isteksiz hale getirebilmektedir. Bu nedenle öğretmenlerin yeni özgün oyun üretmeleri çok önemli hale gelmiştir. Hizmet öncesi eğitimde öğretmen adaylarının bu yönde alacağı bir eğitim öğrencilerin gereksinim duyduğu çağdaş oyunların üretilmesini kolaylaştıracaktır.

Araştırmanın Amacı

Bu araştırmanın amacı sınıf öğretmeni adaylarının beden eğitimi ve oyun öğretimi dersinde oluşturmuş oldukları özgün fiziksel oyunlara ilişkin görüşlerinin değerlendirilmesidir.

Araştırmanın Yöntemi

Bu araştırma sınıf öğretmeni adaylarının fiziksel oyun üretmedeki becerilerinin geliştirilmesine ve bu sürece ilişkin görüşlerinin tespit edilmesine yönelik olduğundan “eylem araştırması” tercih edilmiştir. Öğretmen adaylarının gereksinimleri doğrultusunda oluşturulan 14 haftalık uygulama sürecinde hem araştırmacılar hem de öğretmen adayları özgün oyunlar ortaya koymuşlardır.

Çalışma Grubu: Araştırma gerçekleştirileceği çalışma grubunun belirlenmesinde kolay ulaşılabilir durum örnekleminden yararlanılmıştır. Çalışma 2017-2018 öğretim yılının bahar döneminde Pamukkale Üniversitesi Eğitim Fakültesi Sınıf Öğretmenliği Ana Bilim Dalında, 2. sınıf öğrencileri ile Beden Eğitimi ve Oyun Öğretimi dersi kapsamında gerçekleştirilmiştir. Sürece 17 kız, 20 erkek olmak üzere toplam 37 öğretmen adayı dahil edilmiştir.

Veri Toplama Aracı: Araştırma verilerinin elde edilmesinde araştırmacılar tarafından geliştirilmiş olan “yarı yapılandırılmış görüşme formu” kullanılmıştır. Başlangıçta 5 sorudan oluşan form alanında uzman 4 öğretim elemanı ve 2 sınıf öğretmenin görüşüne sunulmuş elde edilen dönütler doğrultusunda düzenlemeler yapılmıştır. Form son hali ile 3 soru ve kişisel bilgiler kısmından oluşmaktadır.

Verilerin Toplanması ve Çözümlemesi: Özgün fiziksel oyunlar üretmesi için gerçekleştirilen 14 haftanın sonunda öğretmen adaylarının sürece ilişkin görüşleri tespit edilmiştir. Sürece katılan bütün öğretmen adayları ile birebir görüşmeler yapılmış, bu görüşmeler yaklaşık olarak 20 dakika sürmüştür. Katılımcılarla yapılan görüşmeler araştırmacılar tarafından not edilmiş ve elde edilen nitel veri seti araştırmacılar tarafından içerik analizine uygun bir şekilde değerlendirilmiştir. Veriler ayrıntılı bir şekilde okunarak bilgisayar ortamına aktarılmış ve araştırmacılar tarafından tablolara dönüştürülmüştür. Daha sonra oluşturulan tablolara ilişkin açıklama ve yorumlara yer verilmiştir. .

Bulgular ve Tartışma

Öğretmen adayları ile sürecin başlangıcında yapılan görüşmelerde yalnızca 3 geleneksel oyun isminin sıralandığı tespit edilmiştir. Bunlar “yakar top, yağ satarım bal satarım ve bezirgan başı” isimli oyunlardır. Ancak 14 haftalık eylem araştırması sonunda 15 özgün ve 16 da geleneksel oyunları sıraladıkları belirlenmiştir. Bu durum öğretmen adaylarının hem çağdaş oyunlara hem de geleneksel oyunlara ilişkin bilgi düzeyinde dikkate değer bir artış olduğunu göstermektedir. Diğer taraftan öğretmen adaylarının görüşlerine göre özgün fiziksel oyunlar ilkokul öğrencilerini motor, bilişsel, sosyal ve duygusal yönden geliştirici bir yapıya sahiptir.

Öneriler

Beden eğitimi ve oyun öğretimi dersi kapsamında öğretmen adaylarına kendi kültürlerinin bir parçası olan geleneksel oyunlar öğretilmelidir. Diğer taraftan ilkokul öğrencilerinin yaş özelliklerine uygun,gereksinimlerine yanıt verebilecek bir şekilde özgün oyunlar oluşturmaları sağlanmalıdır.

Smart Phone Usage Of Faculty Of Education Students In Learning-Teaching Environments

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Abstract

In this research, it was aimed to identify how student teachers use smartphones in learning-teaching environments, their intended purposes in using smart phones, and their perceptions on how to develop the use of smartphones in learning-teaching environments. The research was conducted with screening model and 570 student teachers who study at Faculty of Education in Duzce University and Aksaray University in 2017-2018 academic year were included in the scope. The data were collected with “The Use of Smart Phones in Learning-Teaching Environments Scope” which is developed by Göksoy and Yenipinar (2017). The data were analyzed and interpreted using T-test and Anova test. Research results demonstrate that student teachers know how and why they should use smart phones in learning-teaching environments. It is also found that student teachers’ views on how and why they use smart phones are at a high level and that their views on the development of the usage of smart phones are at a moderate level. Student teachers’ views on smartphone use, purpose and necessity in the learning-teaching environments, designing and developing smartphone usage do not differ according to university, gender and age variables. However, these are significantly different according to the field variable. The highest level of use in the learning-learning process is among students studying in the field of foreign languages. Second place is classroom teaching students and the lowest usage among the groups belongs to the students in social sciences teaching. Based on findings; it can be said that it is necessary to offer student teachers different activities and applications, additional education and personal development opportunities in order to improve the usage of smartphones in learning teaching environments.

Key Words: *Learning- teaching, teacher, smart phone*

Introduction

Today's contemporary society and its constituent individuals have advanced technology and use it intensively when compared with the examples of the past. People, especially children and young people, feel and experience technology more efficiently in their lives (Yıldırım, Yaşar and Duru, 2016). Smartphones, one of the most common products of contemporary information technology, have entered into every aspect of life. It is not possible to prevent this situation. Today, students live and grow up with technology (Ağca and Bağcı, 2013). It can be seen that some of the students who have recently started school have more functional information about technology than their teachers have. While the contemporary individual is constantly changing, transforming and developing the technology, at the same time their behaviors are being influenced by the technology they created.

To provide functional education services to large masses, to improve human and material resources, to provide high quality education, to meet individual differences and community demands, to raise social justice, democracy and equality in education, to reduce costs, to make use of the existing opportunities in the best and creative way are the indispensable necessities of technology and educational technology. These benefits of educational technology depend on the power of technology, the quality of the educational philosophy on which it is based, and the reliability of the educational science. The success of educational technology can improve only with the importance given to education. Also, educational technology reach significance if it focuses on actual needs of education in a planned and programmed way (Alkan, 1997; MEB, 2002).

While information technology in education is defined as tools to help teachers in order to educate and enhance the quality of education during educational activities (Aşkar, Seferoğlu, 2006), instructional technology can be defined as the application of systematic information which is obtained from scientific researches to practice (Yalın, 2003). Instructional technology is the application of systematic strategies and techniques adapted from behavioral sciences, physics and other sciences with aim of solving teaching problems. According to this definition: instructional technology is concerned with how the problems in teaching can be solved according to scientific principles. Instructional technology and materials are important in order to ensure that learning is more qualified. Teaching with technology and materials decreases the need to spend time and energy on determining the needs of students and adjusting the education accordingly. If the concepts of technology and material are handled

educationally, it can be indicated that they have many functions. The main functions are teaching-learning materials. They convey information, provide presentations and conversation. They are objected education systems and symbolization tools (Kaya, 2006).

When we look at the place and importance of tools in teaching, research results show that instructional technology and materials must be utilized in order to reach the goals in all kinds of educational applications. The more a learning activity is addressed to the sensory organs, the more permanent the learning is, the later it is to forget. We learn things % 83 through the sense of seeing, % 11 through the sense of hearing, % 3.5 through the sense of smelling, % 1.5 through the sense of touching and % 1 through the sense of tasting. Teaching is made more economical with the use of technology and materials (Yalın, 2003). At this point, smartphones enable teachers and students to access many opportunities quickly and with less effort and resources. Many objects, cases, personal information, photographs and situations can be reached instantly and used in learning-teaching environments.

Teachers' attitudes and skills related to the use of technology and materials are effective in students' learning levels. Some teachers may have enough knowledge to use technology and materials in their lessons, but some may not. Some teachers may be reluctant to use newer and current technology and materials. In addition, some teachers may feel pressure with the impression that it is difficult to use technology and materials, or they may rely more on traditional strategies and traditional technologies and materials. With all these assumptions, the use of smartphones in educational environments is an inevitable reality. Even if principals and teachers are not fond of it, these tools have fallen into teaching environments. Educators can not prevent these tools from being used in school and teaching environments by prohibition or other methods. Instead, it is a more logical and realistic approach to take advantage of these tools, which enter into teaching environments without the cost of public services. For this reason, teachers have to be good at using smartphones for educational purposes. In order to get reduce the negativities in this regard, teachers should be given necessary information and training on how to use educational technology products (Kaya, 2006). In educational applications, there are three main requirements to use instructional technologies and materials. The first is to bring education services to wider masses, the second is to make the learning-teaching processes in existing educational institutions more productive, and the third is to individualize learning and teaching activities. All other possibilities provided and can be provided by teaching technology and materials seem directly or indirectly related to these three basic needs mentioned above. To put it more precisely, it can be said that instructional technology and materials are mostly used in studies which are aimed at creating capacity in education and increasing the productivity of education (Hızal, 1983).

Instructional technology and materials had secondary importance in the learning-teaching environments, but in recent years the use of technology and materials has become more obvious, especially with the development of instructional technology and materials. The use of technology and materials in teaching is more difficult than the use of traditional teaching tools. It requires the use of more technical, complex and combined information. Therefore, it is harder to include technology and materials in the scope of methodological applications. Because advanced technology and materials may create more obstacles, are more complicated and more expensive. In addition, since they attract attention while using, they require guidance and training in their usage (Kaya, 2006). The above clarifications illustrate the need for greater use of technology for faster, more effective learning in an educational process that fully meets social needs. Teaching tools provides various ways and environments through which the information can reach the learner (Yalın, 2003). For this reason, technology should be used as a tool rather than a goal in educational settings. The main reason for the existence of technology is that people develop tools and methods to solve their own problems. These tools and methods can reach their goals only if they are used correctly (Kaya, 2006).

In this world of information, information is increasing at a rapid rate as a result of the effect of technology. The increasing problems of today's world such as overpopulation, information explosion, access to information, production of information, individualization can only be solved by utilizing contemporary technologies. It is not possible to solve today's problems with yesterday's method. Thus, we have to solve today's problems using today's opportunities. Today, business and operations are being carried out on information networks that are spread all over the world and open to everyone's use. According to Marşap (1999), advances in science and technology, particularly rapid changes in information technology, are pushing modern organizations to seek more successful managerial practices (cited from Balay, 2013). Smart phones are one of the solutions reached at the end of this seeking and the most widely used one. Smartphones are today's popular technology devices that combine many features, such as the Internet, a camera, video, audio recorder, navigation, music player, as well as communication applications. These features are rapidly increasing the areas and rates of the usage smartphones (Demirci, Orhan, Demirtaş, Akpınar and Sert, 2014). Smartphones that provides opportunity to use all of the features interactively have sneaked into all areas in life and this cannot be avoided even in the most private areas. Learning-teaching environments are also one of these areas. Teachers and faculty members can not prevent the use of smartphones

in classrooms, especially for young people because of their interest. In this case, the rational behavior should be to seek ways to utilize these tools in the direction of educational goals.

The aim of the research is to identify how student teachers use smartphones in learning-teaching environments, their intended purposes in using smart phones, and their perceptions on how to develop the use of smartphones in learning-teaching environments. The following questions have been sought in the research:

- 1) What are the opinions of student teachers on the usage, necessity and purpose of smartphones, and on improving the use of smartphones in teaching-learning environments?
- 2) Is there any significant difference among the opinions of student teachers on the usage, purpose, necessity and improvement of the use of smartphones in terms of university, gender, age and field/branch variables?

Method

In the research, the screening model was used in order to determine the current situation. In screening research, the appearance of a particular situation that occurs at a given time can be investigated as well as the changes that generally occur over time in a previously determined topic (Christensen, Johnson & Turner, 2015).

Data Collection Tool

A scale was used in the research in order to collect data. "The Use of Smart Phones in Learning-Teaching Environments Scope" which is developed by Göksoy and Yenipinar (2017) was applied. The scale consists of four parts. In the first part, there is personal information form. This form is designed to analyze students in more detail and to determine what effects student characteristics may have on variables. The other sub-sections are: a) How to use the smartphone (1, 2, 3, 4, 5 (n = 5), b) The purpose and necessity of the smartphone (6, 7, 8, 9, = 5) and c) Improvement of the smartphone use (11, 12, 13) (n = 3). The general alpha coefficient of the scale (.864), in order of size; how to use the smartphone (.811), the purpose and necessity of the smartphone (.765), and the improvement of smartphone use (.665). The alpha reliability of the scale was re-calculated with the current research and the results are as follows: scale general alpha coefficient (.764) according to dimensions; How to use the smartphone (.870), the purpose and necessity of the smartphone (.865), and the improvement of smartphone usage (.894).

Data Analysis Method

In line with the aim of the research, normality and skewness-kurtosis values were examined by applying the Kolmogorov-Smirnov and Shapiro-Wilk tests to the collected data before analyzing the subproblems. As it is seen in Table 1, it was determined that the subscales of the scale demonstrated normal distributions in terms of personal variables. After this process, data of 570 participants were analyzed. In the analyzes of the data, descriptive statistics (f, Ss), t test from parametric statistical techniques and One Way Anova Test were used for analysis and interpretation. For the interpretation and grading of the mean scores obtained according to the quintile scale used in the scale: 1.00 - 1.79 (never), 1.80 - 2.59 (rarely), 2.60 - 3.39 (occasionally), 3.40 - 4.19 (frequently) 4.20 - 5.00 (always) were used.

Table 1. Kolmogorov-Smirnov results of the scale

	Kolmogorov-Smirnov		
	Statistic	Df	Sig.
How to use the smartphone (HTUS)	,085	570	,000
The purpose and necessity of the smartphone (PANOS)	,077	570	,000
Improvement of the smartphone use (IOSU)	,108	570	,000
University	,367	570	,000
Gender	,464	570	,000
Age	,512	570	,000
Field/Branch	,211	327	,000

Research Population and Sample

The population of the research is composed of 939 undergraduate student teachers who are studying at Düzce University Faculty of Education and 996 undergraduate student teachers who are studying at Aksaray University Education Faculty in 2017-2018 academic year. The scales were distributed to all student teachers consisting the population, however they were applied only to 720 student teachers who stated that they would participate voluntarily. According to the results obtained from the scales given to 314 students from Düzce University Faculty of Education and 256 students from Aksaray University Faculty of Education, the scale was found to be suitable for research purposes. Thus, the results were interpreted on a total of 570 scales.

Demographic variables selected in the research are university, gender, field (branch) and age. Distribution of participant student teachers in terms of demographic variables is given in the following tables. The distribution of the student teachers in the research in terms of university variable is demonstrated in Table 2.

Table 2. Distribution of participants in terms of university variable

University	N	%
Düzce	314	55
Aksaray	256	45
Total	570	100

As seen in Table 2; 55% of the student teachers have been studying at Düzce University; 45% of them have been studying at Aksaray University. The distribution of participants according to universities appears to be very close to each other. The distribution of the student teachers in the research in terms of gender variable is demonstrated in Table 3.

Table 3. Distribution of participants in terms of gender variable

Gender	N	%
Female	423	74
Male	147	26
Total	570	100

As it is shown in Table 3, %74 of the student teachers who participated in the research are female and %26 of them are male. It can be concluded that this distribution reflects the real situation.

The distribution of the student teachers participated in the research in terms of age variable is demonstrated in Table 4.

Table 4. Distribution of participants in terms of age variable

Groups	N	%
17-25	483	84.7
26-35	87	15,3
Total	570	100

As it can be seen in Table 4, The majority (84.7%) of the student teachers who participated in the research were between the ages of 17-25.

The distribution of participant student teachers in terms of field/branch variable is given in Table 5.

Groups	N	%
Turkish-Literature	142	24,9
Psychological Counseling and Guidance	142	24,9
Classroom Teaching	100	17,5
Social Sciences	43	7,5
Foreign Language	43	7,5
Mathematics	100	17,5
Total	570	100

As it is demonstrated in Table 5, 24.9% of the student teachers participating in the research are in the field of Turkish and Literature; 24.9% in Psychological Counseling and Guidance; 17.5% in Classroom Teaching and 17.5% in Mathematics Teaching. Students with the least participation (7.5%) are in Social Studies and Foreign Language education in the research.

Findings

In this section, the findings obtained from the collected and analyzed data in the research process are given in the order of research subproblems. In addition, interpretations were given on the reasons for the findings.

1) The first subproblem of the research: “*The opinions of student teachers on the usage, necessity and purpose of smartphones, on improving the use of smartphones in teaching-learning environments*” is given in Table 6 according to scale subdimensions.

Table 6. Arithmetic mean and standard deviation values for smartphone use

Dimensions	N	\bar{X}	SS
How to use the smartphone (HTUS)	570	3,730	,772
The purpose and necessity of the smartphone (PANOS)	570	3,481	,808
Improvement of the smartphone use (IOSU)	570	2,570	,972
Final Total	570	3,260	,705

As can be seen in Table 6: opinions of the student teachers participating in the research on how to use the smartphone and on the necessity and purpose of using smartphones are at “frequently” level. It can be indicated that student teachers use smart phones in learning-teaching environments and they know how and why smartphones are used in learning-teaching environments. Opinions of the participant student teachers on improving the smartphone use are at “occasionally” level. The final total of the opinions about the smartphone use is at moderate level. As seen in the table, the standard deviations of research findings are close to one another. It can be said that the opinions of the participants have not been very different different.

Table 7 demonstrates the item-based mean and standard deviation values in order to elaborate the opinions of participant student teachers regarding smartphone use in learning-teaching environments.

Table 7. Arithmetic mean and standard deviation values of the scale items regarding the use of smartphones in teaching-learning environments

Dimension	No	Item	\bar{X}	Ss
How to use the smartphone (HTUS)	1	I know how I can use smart phones in a suitable way according to the topic.	4,08	,87
	2	I can explain the difference among the educational programs in the smartphone.	3,44	1,03
	3	I can explain the importance of the use of smartphone in a lesson.	3,75	1,03
	4	I can analyze the role of smartphone according to time and experiment within the learning teaching process.	3,61	,97
	5	I can use the smartphone to evaluate the learning teaching process.	3,75	1,10
The purpose and necessity of the smartphone (PANOS)	6	I use the smartphone for educational purposes in educational environments (classrooms, lecture halls, etc.).	3,54	1,09
	7	The use of smartphones in teaching and learning environments affects the educational quality positively.	3,58	1,04
	8	There is an educational need for smart phones to be used in teaching-learning environments.	3,42	1,12
	9	I think that using smartphone in teaching-learning environments may be beneficial for education and training.	3,62	1,05
	10	Faculty members have the necessary information and technology to use smartphone in educational settings in accordance with their educational purposes.	3,23	1,10
Improvement of the smartphone use (IOSU)	11	I use smartphone to determine negativities in educational environments (classrooms, lecture halls, etc.).	2,73	1,07
	12	I can develop an original model for smartphone use that will solve the problems in learning-teaching process.	2,53	1,21
	13	I can design smartphone use for learner-based education.	2,43	1,24

As it is seen in Table 7, when the arithmetic mean values of student teachers’ levels of smartphone use in the teaching-learning environments are handled on the basis of item, the item stated as “I know how I can use smart phones in a suitable way according to the topic” has the highest mean value ($\bar{X}=4,08$). The following item is stated as “I can explain the importance of the use of smartphone in a lesson” ($\bar{X}=3,75$) and it is given as the third one. Item that has the lowest mean value is the thirteenth which is stated as I can design smartphone use for learner-based education ($\bar{X}=2,43$). The items lower than the thirteenth are the twelfth “I can develop an original model for smartphone use that will solve the problems in learning-teaching process” ($\bar{X}=2,53$) and the eleventh “I use smartphone to determine negativities in educational environments (classrooms, lecture halls, etc.)” with the mean of ($\bar{X}=2,73$). Average scores of two items with the highest average are at “frequently” level and average scores of three items with the lowest average are at “occasionally” level. The obtained findings demonstrates that opinions of the student teachers participating in the research on the use of smartphone and on the necessity and purpose of

using smartphones are at “frequently” level and their opinions on the improvement and design of the use of smartphones are at moderate level. It is concluded that smartphones are highly used in learning-teaching environments. Nevertheless, it is not completely certain that this usage is suitable for educational purposes. On this subject, research should be carried out, especially on the smartphone usage contributing to the aims of education. The fact that the lowest arithmetic mean values are on the improvement of smartphone use is a matter to be considered. The necessary arrangements should be made so that the tools of the educational technology can be developed and the student teachers are equipped with the necessary knowledge and skills.

In the direction of the findings obtained; it can be said that different activities and applications should be provided for student teachers in order to design and develop the use of smartphones in the teaching learning environment. Also facilities of additional education and personal development should be considered.

2) The second subproblem of the research: “Any significant difference among the opinions of student teachers on the usage, purpose, necessity and improvement of the use of smartphones in terms of university, gender, age and field/branch variables”. Related findings are given above.

2. 1. Findings related to university, gender and age variables

T-test results on the opinions of participant student teachers on the usage, purpose, necessity and improvement of the use of smartphones in terms of university, gender and age variables are given in Table 8.

Table 8. T-test results regarding the university, gender and age variables

Variables		N	\bar{X}	ss	sd	T	p
University	Düzce	314	3,31	,71	567	2,13	0,306
	Aksaray	255	3,19	,68			
Gender	Female	422	3,22	,70	567	-2,19	,619
	Male	147	3,37	,71			
Age	17-25	482	3,29	,70	567	2,96	,420
	26-35	87	3,05	,67			

*p<0,05

When we analyze the T-test results on the opinions of participant student teachers on the usage, purpose, necessity and improvement of the use of smartphones in terms of university, gender and age variables, it is seen that there is no difference according to these variables ($p>,05$). The fact that there is no significant different according to the variables can be interpreted as the smartphone usage is not affected by the university, gender and age variables in teaching-learning environments.

2. 2. Findings related to field/branch variable

One Way Anova Test was applied in order to determine whether the opinions of participant student teachers on the usage, purpose, necessity and improvement of the use of smartphones differ in terms of field/branch variable and the results are given in Table 9.

Table 9. One Way Anova results related to brach/field variable

Scale	Field/branch	N	\bar{X}	SS		K.T.	SD	K.O.	F	p	Difference	
General Scale	(1) Turkish – Literature	142	3,07	,65	Intergroups	11,57		2,31 ,48				
	(2) Psychological Guidance and Counselling	142	3,30	,74	Intragroup	270,98	5		4,8	,00*		
	(3) Classroom Teaching	100	3,44	,71		-					1,2,4,6,	
	(4) Social Sciences	42	3,15	,76		-					3,4,6, 3-5	
	(5) Foreign Language	43	3,49	,59		-					6	
	(6) Mathematics	100	3,23	,66		-						
Total						282,56						

*p<,05

When Table 9 is analyzed, One Way Anova Test was applied in order to determine whether the opinions of participant student teachers on the usage, purpose, necessity and improvement of the use of smartphones differ in terms of field/branch variable and the results demonstrates that there is a significant difference among the opinions ($p<.05$). As a result of the Tukey-b test to determine the source of the difference: The student teachers' opinions on the use of smartphone in teaching-learning environments differ according to the branches: (1) Turkish-Literature, (2) Psychological Guidance and Counselling, (3) Classroom Teaching, (4) Social Sciences, (5) Foreign Language, (6) Mathematics. The numbers of the student teachers are the ones that demonstrated significant difference.

2. 3. One Way Anova results of opinions on field / branch variables in terms of scale subdimensions

One Way Anova Test results on the opinions of participant student teachers on the usage, purpose, necessity and improvement of the use of smartphones in terms of field/branch variable are given in Table 10.

Table 10. One Way Anova results of opinions in terms of scale subdimensions

Dimension	Branch	N	\bar{X}	SS	K.T.	SD	K.O.	F	P	Difference
(HTUS)	1)Turkish-Literature	142	3,59	,65	Intergroups	8,08		1,61	2,7	
	2) PGC	142	3,73	,74	Intragroup	330,66		,58		
	3) Classroom Teach.	100	3,83	,71	Total	338,75	5			1, 2, 3, 4, 6
	4) Social Sci.	42	3,68	,76					,018*	
	5) Foreign Lang.	43	4,04	,5						2, 3, 5
	6) Mathematics	100	3,70	,65						
(PANOS)	1) Turkish-Literature	142	3,27	,82	Intergroups	10,57		2,11		
	1) PGC	142	3,51	,81	Intragroup	360,27		,64		
	2) Classroom Teach.	100	3,62	,81	Total	370,56	5		3,30	,06*
	3) Social Sci.	42	3,46	,79						1, 2, 3, 4, 6
	4) Foreign Lang.	43	3,70	,72						2, 3, 4, 5, 6
	5) Mathematics	100	3,49	,75						
(IOSU)	1) Turkish- Literature	142	2,34	,90	Intergroups	21,64		4,32		
	2) PGC	142	2,66	1,00	Intragroups	516,03		,97		
	3) Classroom Teach.	100	2,86	,98	Total	537,68	5		4,72	,00*
	4) Social Sci.	42	2,30	,94						1-2, 4, 6,
	5) Foreign Lang.	43	2,72	,91						2-5,6
	6) Mathematics	100	2,51	,94						

* $p<.05$

When Table 10 is analyzed, it is seen that there is significant difference among the opinions of student teachers on the usage, purpose, necessity and improvement of the use of smartphones in terms of field/branch variable ($p<.05$). Differences are found in all dimensions and total points. According to the results of the Tukey-b test which was conducted to understand the source of the difference, mean and standard deviation of student teachers according to field variable are as follows: (1) Turkish-Literature, (2) Psychological Counselling and Guidance, (3) Classroom Teaching, (4) Social Sciences, (5) Foreign Language, (6) Mathematics. Their opinions are significantly different in these fields. When viewed in terms of average, the highest level of use is among students studying in the Foreign Language field (ATNK \bar{X} =4.04, ATKAG \bar{X} =3.70, ATKG \bar{X} =2.72). In the second place is the student teachers of Classroom Teaching (ATNK \bar{X} =3.83, ATKAG \bar{X} =3.62, ATKG \bar{X} =2.86). The averages of the views of the students of classroom teaching on improving the use of the smartphone in the learning-teaching environment are higher than the other groups. The lowest average among the groups belongs to the student teachers studying in Social Sciences (ATNK \bar{X} =3.68, ATKAG \bar{X} =3.46, ATKG \bar{X} =2.30). The cause of all these results needs to be studied. These results may be due to factors such as the smartphone technology that the students have, the economic level of the family, the proficiency to become a teacher, and the ability to transfer smartphone technology to learning-teaching environments.

Results, Discussion And Suggestions

The current research aimed to identify how student teachers use smartphones in learning-teaching environments, their intended purposes in using smart phones, and their perceptions on how to develop the use of smartphones in learning-teaching environments. Based on findings, the following results were obtained: Student teachers use smart phones in learning-teaching environments and they know how and why smartphones are used in learning-teaching environments. Also they frequently use smartphones. This result is the same as the result of Yildirim,

Yaşar and Duru (2016) "smartphones attract the attention of students". However, it is inconsistent with the view of Ağca and Bağcı (2013) that mobile devices have been seldomly used previously for teaching purposes. This situation may have been due to the fact that students confused what it means to use smartphones with educational purposes. Students may have also accepted smartphone usage outside of the subject course as an educational use. This situation can affect the learning-teaching process negatively, rather than contributing to this process. Student teachers' views on how to use a smartphone in learning-teaching environments are at a high level and their opinions on designing and developing their use are moderate.

The opinions of participant student teachers on the usage, purpose, necessity and improving and designing the use of smartphones according to the needs of education do not demonstrate any significant difference in terms of university, gender and age variables. However, their opinions differ according to field/branch variable. This result does not coincide with the results of the research carried out by Demircioğlu and Yadigaroglu (2011) stating that "there is no significant difference among the opinions of student teachers studying at different branches about information and communication technologies". This difference may be due to the research population and the methods used. It can be suggested that further research on the subject should be continued to clarify the situation. It seems that the smartphone is among the students in the field of Foreign Languages that has the highest level of use in the teaching learning process. Second place is the students of Classroom Teaching. In fact, the average of the opinions of the students in the classroom teaching field on improving the use of the smartphone in the teaching-learning environment is higher than the other groups. Among the groups, the use of the smart phone in learning-teaching environments is the lowest among the student teachers in the Social Studies field. The reasons for these results should be studied. Also, these outcomes may have stemmed from many variables such as the content of the ongoing program, the smartphone technology that the students have, the economic level of the families, the proficiency to become a teacher, and the ability to transfer smartphone technology to learning-teaching environments.

In line with the findings, for researchers; it may be advisable to carry out research that can be used to compare quantitative and qualitative research involving students and faculty members in each area / branch and that research on increasing the use of smartphones in learning-teaching environments and designing new applications to facilitate this usage should be conducted. For the application, it can be suggested that faculty members should be an example for the students using their smartphones for their educational purposes in their classes and that students who discover new ways and methods on the use of smartphones to be used in learning-teaching environments should be supported.

References

- Ağca, R. K. ve Bağcı, H. (2013). Eğitimde mobil araçların kullanımına ilişkin öğrenci görüşleri. *Eğitim ve Öğretim Araştırmaları Dergisi*, 2(2), 295-302.
- Alkan, C. (1997). Eğitim teknolojisi, Ankara: Anı Yayıncılık.
- Aşkar, P., Seferoğlu, S. (2006). Bilgi ve İletişim Teknolojileri. Ankara İlköğretim Genel Müdürlüğü, Okul Yönetimlerini Geliştirme Programı.
- Balay, R. (2013). Yönetimde Yaratıcılık. Yönetimde yeni yaklaşımlar (Editörler, Hasan Basri Memduhoğlu, Kürşad Yılmaz). Ankara: Pegem A Akademi.
- Büyüköztürk Ş., Akgün Ö.E., Karadeniz Ş., Demirel F. ve Kılıç E. (2016). *Bilimsel Araştırma Yöntemleri*. Ankara: Pegem Akademi Yayıncılık.
- Büyüköztürk, Ş. (2009). Sosyal bilimler için veri analizi el kitabı (10.Baskı). Ankara: Pegem A Akademi.
- Büyüköztürk, Ş. (2005). Anket Geliştirme. *Türk Eğitim Bilimleri Dergisi*, 3(2), 133-151.
- Christensen, L.B., Johnson, R.B. & Turner, L.A. (2015). Research Methods Design and Analysis. (Çeviri Ed. A. Alpay). Ankara: Anı Yayıncılık.
- Demirci, K, Orhan, H. Demirtaş, A. Akpınar A. ve Sert, H. (2014). Validity and Reliability of the Turkish Version of the Smartphone Addiction Scale in a Younger Population. *Klinik Psikofarmakoloji Bülteni*, Cilt 24, Sayı3. www. Psikofarmakoloji. org. adresinden 20.03.2017 tarihinde indirilmiştir.
- Demircioğlu, G ve Yadigaroglu, M. (2011). Öğretmen Adaylarının Öğrenme-Öğretme Ortamlarında Bilgi ve İletişim Teknolojilerinin Kullanımına İlişkin Görüşleri. 2nd International Conference on New Trends in Education and Their Implications 27-29 April, 2011 Antalya-Turkey
- Göksoy, S. Yenipınar, Ş. (2017). Development of Usage of Smart Phones in Teaching-Learning Environments Scale. INTE. Editör: Aytekin İşman, Ahmet ESKİCUMALI, Basım sayısı:1, Sayfa Sayısı 11, ISBN:2146-7358, (Yayın No: 3691582)
- Hızal, A. (1983), Uzaktan Eğitim Süreçleri ve Yazılı Gereçler, Ankara: Ankara Üniversitesi Eğitim Bilimleri Fakültesi Yayınları No 122.
- Kalaycı, Ş. (2008). SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri. Ankara: Asil Yayınları.
- Kaplan, S.(2000). Bilimsel Araştırma ve İstatistik Teknikleri. Ankara: Bilim Yayınevi.

- Karasar, N. (2005). Bilimsel Araştırma Yöntemi. Ankara: Nobel Yayın Dağıtım.
- Kaya, Z. (2006). Öğretim teknolojileri ve Materyal geliştirme. Ankara: Ankara: Pegem A Akademi.
- MEB. (2002). Eğitim teknolojisi kılavuzu, Ankara: EARGED.
- Özdamar, K. (2013). Paket Programlar İle İstatistiksel Veri Analizi. Ankara: Nisan Kitabevi.
- Şimşek, Ö. F. (2007). Yapısal eşitlik modellemesine giriş: Temel ilkeler ve LISREL uygulamaları. Ankara: Ekinoks.
- Tavşancıl, E. (2010). Tutumların Ölçülmesi ve SPSS ile Veri Analizi. Ankara: Nobel Yayın Dağıtım.
- Yalın, İ., H. (2003). Öğretim teknolojileri ve materyal geliştirme. Ankara: Nobel Yayıncılık.
- Yıldırım, A. ve Simsek, H. (2005). Sosyal Bilimlerde Nitel Araştırma Yöntemleri. Ankara: Seçkin Yayıncılık.
- Yıldırım, K., Yaşar, Ö. ve Duru, M. (2016). Öğretmen ve öğrenci görüşleri temelinde akıllı telefonların eğitim öğretim ortamlarında kullanılmasının ve etkilerinin incelenmesi. Uluslararası eğitim, bilim ve teknoloji dergisi Cilt 2, Sayı 2, 72-84
- Yiğit, N., Bütünler S.Ö., ve Dertlioğlu, K. (2008). Öğretim Amaçlı Örütbağ Sitesi Değerlendirme Ölçeği Geliştirme. Necatibey Eğitim Fakültesi Elektronik Fen ve Matematik Eğitimi Dergisi (*EFMED*) Cilt 2(2), 38-51

Social Networking Sites And The Construction Of Digital Selfness

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Abstract

New communication technologies have become increasingly common in all areas of our daily lives. The transformation of interactive networks offered by information technologies has also affected many components of social life. While these technologies digitally exist as individuals, they also give them the freedom to relate to the digital self. Social networking networks can be considered as an expression of self with both the profiles they create and the shares they make. It is assumed that as individuals shape their digital self, they are influenced by the views of other users attached to their social network and are going to design an ego as a result of interaction. In the method part of the study, four cases belonging to the digital identity of a user actively using social networks are distributed in four groups and these four cases have been analyzed by different groups of individuals from different statuses formed within the framework of semi-structured interviews.

Key Words: Social Networking Sites, Social Media, Digital Self, Digitalization

1. New Communication Environments And Socialization

Socialization is the process of forming human identity, teaching the current values and norms of society to individuals. In the process of socialization, the individual learns how to behave in society, expects society and expects to exhibit socially acceptable behaviors. In the process of socialization, the individual creates his identity by moving from family to the outermost social layer. The socialization process is divided into two. The first is the period of primary socialization that starts in the family and covers the period up to the school and the secondary socialization starts with school and continues until the end of human life. A person who was born as a biological entity becomes a socio-cultural personality in this process (İşman&Buluş, 2016:612).

Despite the influence of society on the individual, individuals are also influenced by society and social changes. Socialization is a constant interaction. In socialization based on mutual social relations, the behavior of each member in the group affects, controls and regulates the behavior of others; so socialization is also mutual. As a result, socialization is the process of becoming a part of this whole by accepting the concept of a high degree of freedom, eliminating the natural self of man, forming an identity and interacting with society.

There are three important stages in the process of social interaction (Berger and Luckmann, 1966: 108-130): 1. Externalization 2. Objectivity 3. Internalization

In the process of externalization, individuals create a decisive culture in the social structure. In this phase, which gives an objective qualification to the material and cultural conditions of social material, the individual carries subjective values and worlds of meaning. Role-based activities and typologies based on traction are the basic tools at this stage (Berger and Luckmann, 1966). Then a ground should be prepared where the ideas that are externalized will become a constant reality. In this phase, called objecting, individuals shape the norms they claim to be necessary for coexistence. For example, when we go to a hospital, the behavioral patterns we have inherited have actually been created before us and institutionalized in the historical process (Berger and Luckmann, 1966). Thus, behavioral patterns have become an external reality.

In the third stage, the process of internalization reveals the transfer of this external reality to the subjective areas of the individual through socialization (Berger and Luckmann, 1966). People construct a certain norm and object it into the next generations as an external reality. What is expected is that in the processes of socialization of individuals, they carry this external fact to their subjective universes and internalize the social reality that is constructed according to their own reality. At the end of this process, internalized patterns are reproduced by externalizing through roles and actions and transferred to later generations (Berger and Luckmann, 1966).

Socialization is a dynamic and multifaceted process. The media has a very effective role in this process. The transformation of communication environments and the possibility of socialization have also been differentiated. According to Mc. Quail, the media has five main functions: informing; cultural continuity; socialization; creating publicity and amusement. With the web 2.0 technology, known as second-generation Internet services, was introduced into the market in 2004, resulting in a cyberspace public space left behind by geographical borders. With the possibility of global communication provided by social networking networks and the possibility of continuity, the person keeps a constant identity development process. The interaction with the community is accelerating and increasing, and the individual has more to do with the cultural influences than ever before. Cultures are interacting with other cultures and become as open as ever before. Through social networks, social traditions, values and culture, global regulation from national boundaries are carried. As globalization, inter-individual interaction, products, capital and public space are overcoming the boundaries, while the boundaries are becoming more and more fierce with the new communication medium, the cultural product is becoming a product

that is uncovered from the hand and the cultural encounters in the expanding circle have been realized. This process which is also expressed as cultural globalization has become a product of the global village. The identities that are influenced by the multifaceted process of socialization carried on the global stage are noses with different cultures, and what they receive from dominant cultures are like building blocks that integrate into the culture of the society they are in (<http://ab.org.tr/ab13/bildiri/228.pdf>).

Individuals can turn their personal information into digital codes and form a profile with the forms directed after joining the social network. The accessibility feature can be customized with the view profile of the created profile. Other users can then be invited to the same network via this platform. It is the most important feature of social sharing sites that the list attached to the created profile is also open to others. This feature, which allows the profiles to connect indirectly, extends the network's volume. The use of social media has come to be referred to as a new mode of socialization, as it comes to being an objectified element in the way of social reality: "Individuals' social forms of existence can be classified under the following headings: representation, performance, profile, surveillance, surveillance, create, organize, carry out actions / campaigns in virtual space, and even move to offline everyday life " (Dunbar and Goffman, 2009: 29).

2. Social Network Sites And The Digital Self-Presentation

Dökmen (2010:169) describes selfness as "every feature and process that distinguishes me from the others." Goffmann (2009:16, 33) also tells us that when we present ourselves to other people, we display different performances according to different roles, and social life is actually a scene. When a person is in an act, he or she wants to make an impact on the person he or she follows. They want the viewers to believe that the character presented to them is actually a real character. Dökmen (2010:169) also says that according to the theory of self presentation, the behavior of a person depends on his / her gender concepts, his / her ability to act in accordance with the expectations of others. Therefore, it should be taken into consideration that the presentations of self are different according to the different social roles of women and man.

We can think of social media networks as environments in which individuals redefine society's integration process with digital codes. Web 2.0 technologies that enable simultaneous and bilateral sharing of user-based content have made the theory of Berger and Luckmann (1966: 108-130), the mechanism of producing social reality more dynamic. In providing these changes, it is necessary to talk about the social network areas created by the new media. Binark et al. (2012: 124-125) have thought of this space as a free and dynamic living space that can be easily found in new tribes, where new ones can easily be encountered by similar ones and "others". From these definitions, Web 2.0 can be seen as a means of freedom that an individual can use while creating digital identity. The development of the Internet has changed the conditions of traditional identity construction. Previous work on self-presentation in online environments has usually focused on constructing identities in anonymous (anonymous) user environments where the identity of the persons is not clear. Binark et al. (2012: 118) have considered the digital identity creation process as a process of constantly building/constructing. According to them, this process is not only a "future" but also a "being" with its past sentences. That is, the construction of the identity of the individual, which the individual creates, is proceeding at a time of its own shaping. According to Gonzales (2008) and Melcombe (2011), facebook users have the ability to present their own controllable images to friends and followers using personal profile pages. When users make a decision about Facebook identities, they are determined based on how other users want to perceive themselves. The fact that the information is under control in this way is vital for self presentation. When compared with what happens in the face-to-face communication of the self-presentation, it offers the user the ability to be selective about features that are presented for self-modifiable and manipulable online self-presentations. In other words, individuals decide for themselves which identity they are to offer on Facebook. Timisi (2005:97) defines this new situation as a centerless communication field as a perfect opportunity of self-creation. The user can place the desired visual or textual content on this page in the virtual entity. The person now has a copy of the digital components.

The results of the work Zhao and colleagues (2008) identities are different from identities in the anonymous online environment or those in the offline real world. Facebook users emphasize or exaggerate the ideal self characteristics that are socially desirable but not observed in real life. At the same time, users tend to hide their undesirable features. The emergence of Facebook has empowered its users on selective self presentation. Zhao et al. (2008) have identified desirable identities as inconsistent social network identities with real life personalities. These online identities are often positively shaped to express one's socially desirable and sympathetic attitude and are carefully constructed to reflect social and cultural norms.

Hood (2012: 315) approaches the subject in another way in the sub-title of "we all want a second life" in social media's work on the creation process of the self. Hood (2012) thinks of the social media user as an individual who designs an online world where he can live an extraordinary life in beautiful homes where he can have a great body that does not get old and does not get sick. Then he gives a striking example of the difference between the real and the self created in the virtual space. In these examples, it indicates that the individual creates the self which others want to see while forming their own self.

Facebook, Twitter, Foursquare, Instagram, Vine, Youtube, Pinterest, blogs, wikis, and many social networks that we can duplicate have undoubtedly different features, dynamics, usage limitations. However, when it is evaluated from the general perspective, it can be seen that a profile belonging to the user (selected profile photograph, identity descriptions, age, sex, relationship status, business information, education bill, cover photo, motto) opinion), likes, comments, friends (followers, followers). These properties are filled in to the individual's preference, either true or completely indistinguishable. Individuals who are looking for absolute power in social networks are also constructing their actions and social networking practices in this direction (Uğurlu, 2015:242). The individual expresses an identity that he or she does not feel by manipulating it through images through social networks. Social media, as an area where it can fill the gap between what it is and what it wants to be, just becomes functional in this process. When we are thinking about the subject, we have a virtual self that can make identity control itself by means of perfection on the body, in short, creating, organizing, attaching, extracting or delighting in digital visual materials by re-producing and re-producing digital visual materials. Agger (2011:168) defines the virtual self as: Existence is the act of being in the world rather than abstract philosophical ideas. In the formal, flashing, imaginary world of the Internet, where people create themselves electronically, more than ever is needed for self-editing. It is also possible to say that self-assembly is necessary. In other words, reality is debatable, creating a fictional self is like evidence of social nobility in the presence of individuals. It is able to offer the mechanism of repair and regulation to equip the body with images, to polish and shine the life stories, to complete the incomplete, to transform all these voluntarily into voluminous items, to say, I am special.

3. The Method Of Research

In the method part of the research, three cases belonging to the digital identity of a user actively using social networks are distributed in three groups and three cases have been analyzed by different groups of individuals from different status formed within the framework of semi-structured interviews. The first group is consisted of academicians, the second group is from administrative staff of an university and the third group is consisted of students. It is chosen from different status because it should be shown that how the same person's different social network sites sharings are evaluated by people who have different status.

The purpose of these negotiations is to reveal implicit and explicit information that can be obtained from digital sources. Three digital data belonging to an individual were selected in the interviews. These are the person's one of the Instagram account's post, the other Facebook profile photo, the avatar that is used in the next Twitter account. Each of these data is distributed in three groups of five persons. Based on the data from each group, they were asked to make estimates about their personal information, lifestyle and personality. At the end of the interviews, the third person assessed the said individual together with the digital data and reached the conclusion that he had cut it from its real context and identified the same person as four different "persona".

The elements that are basically measured are as follows. 1. Marital status 2. Age 3. Gender 4. Occupation 5. Economic income status 6. Hobbies 7. Cultural and Social Activities. These interviews are of great importance for our research. It uncovered how third-parties perceived the large, personalized information archive that was accumulating as a major source of reliance when pulled out of the relevant networks. Significant results were obtained in the talks.

The actual information of the individual who receives the digital identities is as follows (Personal permission has been obtained for the sharing of this information) :

1. Marital Status: Married
2. Age: 33
3. Gender: Female
4. Occupation: Instructor (Child Development Department)
5. Economic income status: 4.500
6. Hobbies: Reading book, imagining, shooting, discovering new places, writing, thinking and interpreting
7. Cultural and Social Activities: Helping living things in every situation, theatre, cinema and concerts in different cities, chat with people meaningfully and intellectually, organizing reading activities, making activities by recognizing the works of art

Group 1 (Academicians), evaluating the person's Facebook photo, was found in descriptive explanations and commented on the character of the person. The information they provide by way of image analysis is as follows:



1. Marital Status: Married
2. Age: 40
3. Gender: Male
4. Occupation: Doctor
5. Economic income status: 5.000-10.000
6. Hobbies: Listening to music, Diving, Swimming, Skiing
7. Cultural and Social Activities: Participating in conversations and concerts, theatre

“We think that a person is alone in the crowd. It’s a person who likes less things in his home, eats ^{less} food and wants fewer people in his life. He’s gentleman with culture and art. It looks like a human born to nature. we think that he loves loneliness and that he has an unrequited love.”

Group 2 (Administrative staff), who is on the way out of the Twitter avatar of the quiche, has gone through a general analysis of the clues they have found:

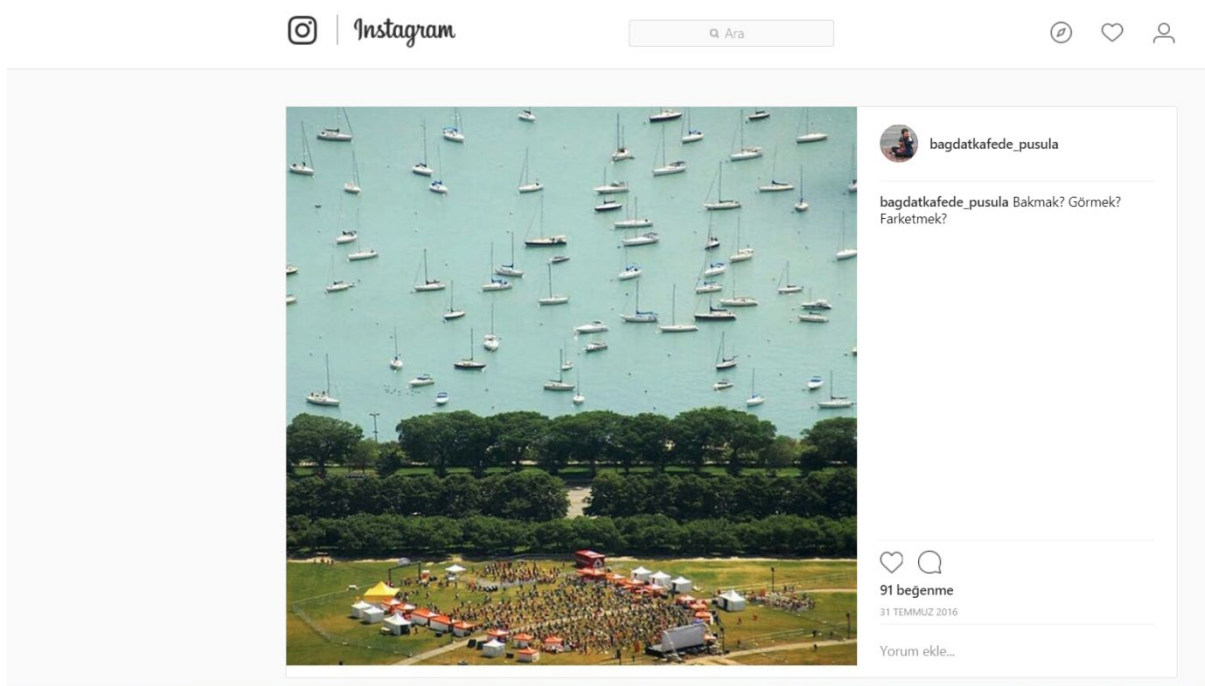


1. Marital Status: Married
2. Age: 35
3. Gender: Male
4. Occupation: Academician
5. Economic income status: 5.000-7.000
6. Hobbies: Watching films, Reading books, Being in nature
7. Cultural and Social Activities: Shooting, Travelling

“We think that having Little Prince photo as twitter avatar shows that he has child soul and colourful personality so his children are very lucky. He has a retweet about rectors so we assume that he is an academician

and he likes his job because he writes that his job and his soul are the same and whole. He likes children very much also he has positive perspective on life."

Group 3 (students), who is on the way out of the Instagram post, has gone through a general analysis of the clues they have found:



1. Marital Status: Single
2. Age: 35
3. Gender: Male
4. Occupation: Blogger
5. Economic income status: 5.000-6.000
6. Hobbies: Travelling, Shooting, Reading books, Discovering, Tracking, Dealing with antiquities
7. Cultural and Social Activities: Exhibitions and artistic activities, theatre

"We think that he is single because he has free spirit but he has a child in his spirit that he can not grow in. He also tries to show his own truths through artistic activities. He likes nature very much."

At the end of the talks, these three interpretations were revealed to the groups of the same person who actually represented the same individual. The interviewer's group makes different comments for the user and responds differently to the questions, indicating that the user has created his digital identity differently for each social network. This shows us that users design their identities in the online environment according to the existence and expectations of others.

Conclusion

The user who enters the virtual extension is in fact building an identity from the moment it first enters this area. This process goes in line with how one wants to be seen by others. It is possible to read each of the shares in social media profiles as performance. The person is aware that he is being watched by an audience during the performance, and he wants to make a certain impact on that audience. It is in the interests of the user to obtain the consent of other participants and to share them in order to make them accepted by them.

At the end of the talks, these three interpretations were revealed to the groups of the same person who actually represented the same individual. The interviewer's group makes different comments for the user and responds differently to the questions, indicating that the user has created his digital identity differently for each social network. This shows us that users design their identities in the online environment according to the existence and expectations of others.

This confirms the claim of the article. The difference in users' self-organization in digital media spaces has shown that this is a design process.

References

- Agger, Ben. iTime: Labor and life in a smartphone era. Time&Society Journal, volume: 20 issue: 1, April 20, 2011; Issue published: March 1, 2011
- Berger, Peter L., Luckmann, Thomas (1966). The Social Construction of Reality, USA
- Binark, M., Bayraktutan, G., Kepenek, E. (2012/11). Devrim Yahut Vasat; Üretim, Deneyim, Teknoloji. Ankara: Bağlam Yayın.
- Binark, M. (2004). “Kimlik(lenme) Dipnotsuz İletişim ve Etnik Laflama Odaları”. İnternet, Toplum, Kültür içinde. Der. M. Binark ve B. Kılıçbay, Ankara: Epos Yayınları.
- Dökmen, Z. (2010). Toplumsal Cinsiyet: Sosyal Psikolojik Açıklamalar, Remzi Kitabevi, İstanbul.
- Goffman, E. (2009). Günlük Yaşamda Benliğin Sunumu. İstanbul: Metis Yayınları. Gonzales A L ve Hancock J T (2008) Identity Shift in Computer-Mediated Environments, Media Psychology, 11(2), 167-185.
- Hood, B. (2012/1). Benlik Yanılsaması: Sosyal Beyin Kimliği Nasıl Oluşturur. (Çev. Eyüphan Özdemir). İstanbul: Ayrıntı Yayınları.
- İşman, A., Buluş, B., Yüzüncüyıl, K. (2016). *Sosyalleşmenin Dijitale Dönüşümü ve Dijital Benliğin Sunumu*. TRT Akademi, Dijital Medya Sayısı, 1-2.
- Melcombe M (2011) Women's Perceptions Of Identity Construction On Facebook, Master Thesis, Gonzaga University, Washington.
- Timisi, N. (2005). “Sanallığın Gerçekliği: İnternetin Kimlik ve Topluluk Alanına Girişi”. İnternet, Toplum, Kültür içinde. Der. M. Binark ve B. Kılıçbay, Ankara: Epos Yayınları, 89- 105
- Uğurlu, Ö, M Yakın (2015). İletişimde Sosyal Medya, Sosyal Medyada Kimlik Temsilinin Mekân Üzerinden Okunması: Foursquare, Kalkedon Yayınları, İstanbul
- Zhao S, Grasmuch S ve Martin J (2008) Identity Construction On Facebook: Digital Empowerment In Anchored Relationships, Computers in Human Behavior, 24(5), (<http://ab.org.tr/ab13/bildiri/228.pdf>).

Socialization Of Youth Into Historical Consciousness In The Czech Republic

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Abstract

This study presents results of qualitative research focused on transmission of historical consciousness to pupils and students on primary, secondary and tertiary levels of education. The study is based on data from 11 focus groups with 88 participants aged 12 - 25 which took place in late 2015 and early 2016. Analysis of the data was carried out according to the general coding paradigm. The study describes the modalities of historical consciousness transmission in four key socializing institutions: (1) non-formal intergenerational learning within family, (2) television broadcasting, (3) internet usage and (4) formal educational institutions. In this regard, the study supplements findings of existing research not only by describing the particular mechanisms of intergenerational transmission of historical consciousness, but it also demonstrates that a successful socialization into historical consciousness requires congruence of multiple institutions. Otherwise, a process of forgetting takes place.

Introduction

Since its formulation in the late 1980s in Germany and later in Scandinavia, the concept of historical consciousness has become a significant subject of international research in the domains of history didactics and understanding of the role history has in the everyday lives of pupils and students (Ahonen, 2005). A key contribution to establishing this subject's position was an extensive European-wide project Youth and History, which in 1995 and 1996 implemented a comparative survey among 15 and 16 year old europeans (Angvik & Von Borries, 1997).

Various authors (Angvik & Von Borries, 1997, p. 36; Blanuša, 2005, p. 33) regard historical consciousness to represent a complex interconnection among interpretations of the past, perceptions of the present, and expectations of the future based on the existing knowledge of the past. In such a frame, historical consciousness serves to provide a temporal orientation in an individual's life and to form a historical identity (Rüsen, 2008).

Existing research in the domain of historical consciousness focuses on a number of phenomena which are located at the intersection of educational sciences and sociology. In this regard, researchers study (1) how the use of various didactic materials, especially textbooks, contributes to its formation (Ammert, 2010; Thorp, 2014), (2) the contents of historical consciousness of pupils and students (Seixas, 2006), (3) and the modalities of understanding the world based on historical consciousness (Rüsen, 2008).

In the case of Czech Republic, historical consciousness has become a subject of research only in the last decade (see e.g. Labischová, 2011, Labischová, 2012; Grácová & Labischová, 2012; Šubrt, 2010). We agree with Labischová (2012), that in the existing research two approaches can be distinguished: (1) educationally oriented and (2) socially oriented. The educationally oriented approach focuses on the way history is taught at schools and how are the latest findings about historical events presented to students. In this regard, Czech researchers have so far focused not only on inquiring about the educational content and information sources within history classes (Grácová & Labischová, 2012), but lately also on innovative didactic techniques aimed at development of history-informed thinking (Labischová, 2015). On the other hand, the socially oriented approach focuses on the descriptive characteristics of the Czech population, i.e. the results of its transmission. It also pays heightened attention to the attitudes of adults to history, evaluation of certain historical periods and also to social determinants of history interpretation (Pfeifrová & Šubrt, 2009, Šubrt, 2010; Šubrt, Vinopal & Vávra, 2013). It also seems that the approaches of international research of the subject correspond to the approaches described above.

Even though both approaches produced significant findings about historical consciousness of the Czech population and its formation by the educational system, we think that some important questions concerning the phenomenon have not yet been resolved. This is true especially of the *question of historical consciousness formation in the so-called "sensitive period"* (Schuman & Corning, 2000, p. 916) between the 14th and 25th year of life which is by many authors (Hart-Brinson, 2014; Kyoung & Hye-Kyung, 2015) regarded as key for development of this type of consciousness.

While the educationally oriented approach tackles this problem exclusively as a problem of transmission of historical consciousness in schooling institutions, the socially oriented approach takes the processes and mechanisms of transmission of historical consciousness to children and youth as granted; it assumes their existence instead of regarding them to be a subject of empirical investigation. In the first case, we lack a deeper understanding of *how is the historical consciousness in the form of particular symbolic representations of the past transmitted by various institution simultaneously*, that is, not only by school, but also by family, or by various kinds of media. Furthermore, the question is whether there exist relationships among these institutions, which could lead to intensification or attenuation of transmission of historical consciousness. According to many authors (Duquette, 2011; Rüsen, 2008, Thorp, 2014), the impact of family environment and other upbringing institutions can significantly influence the relationship to history and through that also influence the appropriation of knowledge within the educational system. In this regard, we attempt to broaden the findings of the educationally oriented approach by describing the mechanisms of transmission of historical consciousness in various institutions which are responsible for its development during adolescence. In other words, we study the social environment which affects the formation of historical consciousness of pupils and students in the Czech Republic. This environment is regarded as an important socialization agent also by authors in the field of social pedagogy (Kraus & Poláčeková, 2001; Kraus, 2008).

In the case of socially oriented approach, *appropriation of historical consciousness in the course of the sensitive period*, during which children and youth form their relationship to history, interpretation schemes and basic political orientations (Alwin & Krosnick, 1991) is not properly elaborated. Because of that, the socially oriented approach is not able to explain why certain attitudes to history are present in the adult population.

We believe that the focus of this study on the mechanisms of transmission of historical consciousness to pupils and students will allow us not only to enrich the approaches empirically, but also to initiate their mutual interaction.

Methods

This research answers the call of several authors (e.g. Seixas, 2006, Rüsen, 2008, Labischová, 2011) for a more frequent use of qualitative methodology in the study of historical consciousness. In this regard, our intention was to study the ways in which pupils and students develop their historical consciousness about four particular symbolic representations of the past embodied by the following political events: (1) the terrorist attacks in New York on 11th September 2001, (2) the change of political regimes in Czechoslovakia in November 1989, (3) the events of August 1968 which culminated in the invasion of the armies of the Warsaw Pact to Czechoslovakia and (4) the communist coup d'état in Czechoslovakia in February 1948.

Informants from three levels of the educational system were selected for the purposes of the research: (1) elementary schools (IESCD 2) aged 12 – 14 (N = 21, 10 females, 11 males), (2) middle schools (IESCD 3) aged 17 – 20 (N = 46, 23 women, 23 men) and (3) universities (IESCD 6) aged 23 – 25 (N = 21, 10 women, 11 men). In total, 88 informants participated on this research project. Their selection was guided by two basic principles: first, it was aimed to cover all educational levels which correspond to the sensitive period (Schuman, Corning, 2000); second, it aimed at highest possible diversification of informants within the respective age groups. Because of that, at least two institutions differing by their specialization (technical, humanities) or character (vocational school, gymnasium) were selected at each educational level. The only exception to this concerns the level of elementary schools where we were able to develop cooperation only with a single school.

The data gathering for this research took place in late 2015 and early 2016. It was carried out through focus groups according to a single script executed by an interviewer (4 interviewers were involved in the research project). In total, 11 focus groups took place with participation ranging from 3 to 12 informants, having a character of discussion guided by half-structured script. The script was focused on the four historical events mentioned above, on the information sources that the informants used with regard to them, on the meaning the events have and on the ways of learning about them.

The transcribed material from focus groups was analyzed consistently with an approach known as the generic inductive qualitative model or as the general coding paradigm (Hood, 2014). We first carried out open coding of all of the transcribed material, while also making memos containing emerging interpretations and conceptualizations. Subsequently, we grouped the codes according to their topical affinities and generated four general categories which account for the processes of transmission of historical consciousness in the particular socialization institutions mentioned by the informants.

Results

We present our main findings by describing the respective socialization mechanisms embedded in four institutions that are formative of the historical consciousness of the interviewed students and pupils.

Family: parents and grandparents

Family members were among the most often stated sources of information with regard to the given historical events. In particular, the role of parent and grandparent narration constitutes one of the most important sources of information and attitudes toward the events. A more detailed look at the data reveals that there is a shift in that the parents of older students (tertiary level) narrate more often about older events from our script (August 1968, February 1948) than the parents of younger pupils. The same tendency is visible with regard to grandparents, although there is a difference in that parents tend to focus in their narration on their personal experience with the events, while grandparents tend to compare the periods more generally. From our data, it seems that grandparents are inclined to focus on the implicit question “What was it like to live at that time?”, while parents tended to narrate as if the question posed by their children was “What did you do when this event took place?” As a result, the information our informants had from grandparents were often concerned with meso- or macro-level conditions of life such as the feeling of certainty or the overall conditions of life. On the other hand, the information provided by parents were concerned with micro-level events – personal stories and biographical narration.

However, the narrations of parents and grandparents did not differ only with regard to content. They also differed with regard to the situations in which the narration took place, especially when taking into account what prompted the narration. Here, we must take into consideration the fact that it is not generally common that three generations share a household so that the narration of grandparents were limited to visits as opposed to everyday occasions for narrations of parents. However, during visits, grandparents do not need a specific prompt to begin with their narration. Our respondents characterized it in a way that their grandparents often “just told the story”. In contrast, when we focus on parent narration, we see that it usually takes place as a response to something. The impulses for narration take various forms such as direct questions asked by children, collective watching of television broadcasting (news, series, films, or even advertisements) which covers the given event, or celebration of anniversaries when the topic “is being talked about everywhere.” As a result, we can see that contact with children can be a sufficient prompt for grandparents to narrate, while for parents further prompts are needed to trigger narration.

Television

A second source of information permeating all cohorts was television broadcasting. As hinted above, this information source is also tightly associated with the role of parents as they are the ones controlling television while children are young and as parent’s narration is often triggered in a situation when the family gathers to watch television together. In television broadcasting, there are several types of content with varying relationships to the historical events we inquired about and to the mnemonic practices of our informants. There are television news which played key role for our older informants with regard to September 11th as they experienced this event through the means of television reporting. This mediation of the event resulted, as our informants reported, in vivid experience and a strong emotional response. Interestingly enough, what keeps the event in the everyday consciousness of our informants is not the emotional experience itself, but the issue of trustworthiness of information regarding the event. While some of the informants believe that they will never be certain about what really happened and resign to reach a conclusion, the problem of trustworthiness motivates others to actively seek further information and discuss them with their peers.

However, television news are not relevant only with regard to events that took place during the lifetimes of our informants. They also mediate other current events such as anniversary commemorations or events that are by our informants associated with the original historical events such as current terrorist attacks, which are associated with the perceived discontinuity of September 11th, or domestic political problems associated with the unfulfilled potential of 1989. In this way, television news keep some of the more recent events – which are commemorated or are seen as a beginning of current type of events – in everyday consciousness of our informants.

There are also television series covering some or most of the events we examined. Most notably, there is a series called “Vyprávěj” (which could be translated as “Tell us Your Story”) which narrates the life experience of one generation since the 1950’s to present and therefore serves as a source of information and as a prompt for narration for multiple historical events. Furthermore, films are most commonly cited with regard to 1968 as this event is, according to our informants, “heavily covered by films.” We could even argue that for our informants, films are the most significant source of information with regard to 1968 as they provide information and “feeling” for an event that is “definitely part of history” for them. Finally, we found out that even advertising has a mnemonic

potential. Our informants repeatedly pointed to an advertisement for one of the largest Czech banks. The ad attempted to emphasize the long tradition of the banking institution (it celebrated 190 years of existence) and so it depicted by animation the crucial events of the 20th century.¹ In this way, it was able to keep reminding our informants of the events we were examining.

Internet

A third source of information present at all three educational levels were websites, streaming services and social networks accessible through internet connection. Although internet as an information source was talked about very often during focus groups, closer inspection reveals that most of the options it provides are considered only potentially (as an answer to the question about how would informants gather further information), while the actual practice seems to consist of frequent visits to few selected websites, which only have limited potential of informing their visitors about historical events (e.g. during anniversary). As a potential source of information on the internet, our informants listed a broad range of websites such as Wikipedia, search engines (Google, Seznam.cz) or video streaming sites (YouTube, stream.cz). On the other hand the set of websites representing actual sources of information was much more narrow – it involved home pages, news sites and social networks. Furthermore, our informants usually were not able to describe their use of this medium beyond the first step of going to some of the listed pages. While one could see this as an indication of interactivity of the Internet as a medium, we also see that as an indication of absence of a stable mnemonic practice established around the Internet use.

School

A fourth stable source of information was school. In one way or another, this information source was present with regard to all examined historical events. Except for September 11th, the events were part of standard school curriculum and so information were often gathered from textbooks and teaching (although some informants reported that in their history classes, they never covered history more recent than World War II.). In some cases, our informants reported that their teachers told them about some of the events regardless of the subject they taught. In this sense, school is an actual source of information for our informants. Yet in the interviews, school also represents a potential source of further information – informants would often opt to consult their teachers (especially if the teachers talked about the event during classes) together with searching on the internet or asking their parents. This option, however, is no longer present at the tertiary level of education.

However, our analysis suggests that school cannot be seen as a self-sufficient source of information about the past. With regard to older events that we examined (August 1968 and February 1948), school usually represents the first and dominant source of information because these events appear sporadically in other sources (the only exception is the existence of numerous films depicting the events of August 1968 mentioned earlier). And it is precisely in these situations, when school is not accompanied by other information sources, that our informants begin to exhibit vague knowledge of the events, or even explicitly report forgetting. As a result, it seems that transmitting knowledge about historical events cannot be achieved by a single institution, even though it is the one most specialized in education.

Discussion

To summarize our findings, we point out that the core structures forming historical consciousness are constituted by family (parents and grandparents), school (curriculum and especially teacher narration) and audiovisual media (television and internet). In this regard, our findings are consistent with the theoretical assumptions about key factors influencing historical consciousness (see Grácová & Labischová, 2012; Labischová, 2011). However, the role of Internet, although mentioned quite often, seems to consist largely of a potential information source with no specific mnemonic practices related to it.

Despite their purpose, a number of educational internet platforms, which were lately established in order to educate about the second half of the 20. century (see e.g. DSTR, 2017, CZ3889, 2017), do not constitute a relevant source of information for our informants. We believe that this state resulted from an absence of their promotion during history classes, which is consistent with a relatively low level of attention paid to the political events of the second half of the 20. century on all levels of the educational system (see e.g. Labischová & Grácová, 2011; Labischová, 2012).

¹ The advertisement was also uploaded to Youtube by an official account of the institution. It is accessible here: <https://www.youtube.com/watch?v=y2hiE6B4nvE>.

Another important point that our data showed is that practices surrounding other information sources we elaborated imply a certain interconnectedness: parents control the television program to be watched and they also narrate in reaction films and series they often watch with their children; teachers narrate during anniversaries of significant events which resonate through the media. Furthermore, the interconnectedness is most visible when only one information source remains in the situation of remembering. In our case, it was the school providing information about some of the older events. In such a situation, knowledge transmission becomes problematic and the resulting historical consciousness is vague and fragmented. Consequently, it seems that to talk about the structures forming historical consciousness (or even study them) as separate entities is a simplification limiting our knowledge about the phenomenon. We hope to have demonstrated that the distinction between them is of analytical nature rather than ontological.

Overall, we can see that with regard to formation of historical consciousness of pupils and students in the Czech Republic, a continuous and simultaneous influence of multiple institutions is of vital importance. Influence of a single educational institution does not seem to be enough for the pupils and students to appropriate a “coherent” historical consciousness about the given events, or even to become part of their “historical identity” (Rüssen, 2008). The formation of historical consciousness is supported by influence of multiple institutions, a wider educational environment as defined by Kraus (2008).

According to what our informants reported, it seems clear that historical consciousness becomes more articulated either overall with higher age of the participants or for particular events depending how close they are to their year of birth. This finding is especially relevant for the two most recent events in the focus group script (November 1989 and September 11th 2001) which from the perspective of our informants have the strongest consequences for their everyday life and for their future. The didactics of modern history should emphasize also the consequences of older historical events for the current and future life of pupils and students if the aim is for these events to become a larger part of their historical consciousness.

Conclusion

Our findings provide evidence that effective transmission of historical consciousness requires congruence of multiple institutions. Nevertheless, as the statements of our informants referring to the event of September 11th illustrated, the transmission does not necessarily have to be consensual, that is, socialization may involve contradictory information and narratives. If some of the socializing institutions (e.g. family or media) provide interpretations of history that are substantially different to the ones provided by other institutions, informants may exhibit higher reflexivity with regard to given historical events, may use more sources of information and may even bear a more intensive interest in history overall. This finding relates to the works of Duquett (2011) and Rüssen (2008) who claim that differing interpretations of history among school and other institutions affect negatively the appropriation of the official version of history. However, such cases of incongruence may not be seen only in a negative light. Our data suggest that these cases may lead also to higher reflexivity of the actors and to intensification of their cognitive development (Kaufman & Baer, 2006). It could then be the task of pedagogues to support the reflexivity and to guide it by cultivating critical ways of thinking about history. To be sure, a deeper understanding of the relationship between incongruent socialization content and the extent of reflexivity of pupils and students clearly requires further research.

References

- Ahonen, S. (2005). Historical consciousness: A viable paradigm for history education? *Journal of Curriculum studies* 37 (6), 697-707.
- Ammert, N. (2010). To bridge time: Historical consciousness in Swedish history textbooks. *Journal of Educational Media, Memory, and Society* 2 (1), 17-30.
- Angvik, M. & Von Borries, B. (1997). *Youth and History. A Comparative Survey on Historical Consciousness and Political Attitudes among Adolescents*. Hamburg: Körber-Stiftung.
- Alwin, D. F. & Krosnick, J. A. (1991). Aging, Cohorts, and the Stability of Sociopolitical Orientations over the Lifespan. *American Journal of Sociology*, 97 (1), 169-195.
- Blanuša, N. (2005). Historical Consciousness of Young People in Europe at the Turn of the Millennium. *Politická misao*, 42 (5), 31-54.
- CZ3889. (2017). *Československo 38-89*. Dostupné na adrese: <http://www.cs3889.cz/>
- Duquette, C. (2011). *Le rapport entre la pensée historique et la conscience historique. Elaboration d'un modèle d'interprétation lors de l'apprentissage de l'histoire chez les élèves de cinquième secondaire des écoles francophones du Québec*. Québec: Université de Laval.
- Grácová, B. & Labischová, D. (2012). Současná teorie a praxe dějepisného vzdělávání na školách. *Pedagogická*

- orientace*, 22, (4), 516-543
- Hart-Brinson, P. (2014). Discourse of generations: The influence of cohort, period and ideology in Americans' talk about same-sex marriage. *American journal of Cultural Sociology*, 2 (2), 221-252. Doi: 10.1057/ajcs.2014.3
- Hood, J. D. (2014). Orthodoxy vs. Power: The Defining Traits of Grounded Theory. In Clarke, A. E.; Charmaz, K. (2014). *Grounded Theory and Situational Analysis. Volume I. History, Essentials and Debates in Grounded Theory* (pp. 105–119). London: Sage.
- Kaufman, J. C. & Baer, J. (Eds.). (2006). *Creativity and Reason in Cognitive Development*. Cambridge: Cambridge University Press.
- Kraus, B. (2008). *Základy sociální pedagogiky*. Praha: Portál.
- Kraus, B., & Poláčková, V. (Ed.). (2001). *Člověk – prostředí – výchova: K otázkám sociální pedagogiky*. Brno: Paido.
- Labischová, D. (2011). Empirical Research on Historical Consciousness in History Didactics, its Possibilities and Perspectives. *The New Educational Review*, 25 (3), 260-269.
- Labischová, D. (2012). Factors Shaping the Historical Consciousness of Pupils, Students, and Teachers in Czech Schools. *The New Educational Review*, 26 (3), 148-161.
- Labischová, D. (2015). Možnosti využití metody eyetrackingu ve výzkumu kompetencí historického myšlení na příkladu analýzy ikonografického pramene – karikatury. *Pedagogická orientace*, 25 (2), 271-299
- Ma, Kyoung Hee – Kim, Hye Kyung [2015]. Collective Memory and Formation of the “Uncosconscious” Political Generation: Focusing on the Former Period Baby Boomers in Korea. *Development and Society* 44 (1): 77-106.
- Pfeiferová, Š. & Šubrt, J. (2009). Veřejné mínění o problematice českých dějin. *Naše společnost*, 7 (2), 16-23.
- Seixas, P. (Ed.). (2006). *Theorizing Historical Consciousness*. Toronto: University of Toronto Press.
- Schuman, H. & Corning, A. D. (2000). Collective Knowledge of Public Events: The Soviet Era from the Great Purge to Glasnost. *American Journal of Sociology*, 105 (4), 913-956.
- Rüsen, J. (2008). *History: Narration, Interpretation, Orientation*. New York: Barghahn Books.
- Šubrt, J. (Ed.). (2010). *Historické vědomí jako předmět badatelského zájmu: teorie a výzkum*. Historická Sociologie, Kolín: Nezávislé centrum pro studium politiky.
- Šubrt, J., Vinopal, J. & Vávra, M. (2013). Czechs and their View of History. *European Societies*, 15 (3). <http://dx.doi.org/10.1080/14616696.2013.840735>
- Thorp, R. (2014). Historical Consciousness and Historical Media – A History Didactical Approach to Educational Media. *Education Inquiry*, 5 (4), 497-516.
- DSTR. (2017). *Ústav pro studium totalitních režimů*. Dostupné na adrese: <https://www.ustrcr.cz/>

Sociological Profile Of Subscribers Of The Jazz Bulletin Of The Jazz Section Of The Union Of Czechoslovak Musicians

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Abstract

Jazz is one of the basic types of non-artificial music. Non-artificial music is a relatively autonomous developmental sphere of the European music culture, formed since the 19th century and developing specific features and internal differentiation in the course of the 20th century. The Jazz Section of the Union of Czechoslovak Musicians (hereinafter just “JS”) was a very important and unique part of cultural life in Czechoslovakia of the latter half of the 20th century. Despite the difficulties brought by the normalisation period the JS was a very active organiser, methodologist and publisher. One of the fundamental publication outcomes was represented by the publication of the periodical for JS members called *Jazz Bulletin of the Jazz Section* (hereinafter just “JB”). The main purpose of my research was to record interviews with the key representatives of the JS and analyse types of JB subscribers on the basis of sociological categories by the methods semi-structured interview and semi-structured questionnaire.

Introduction

The origin and the whole period of existence of the JS fall within the period of “normalisation”. Normalisation is the stage of Czechoslovak history between April 1969 and November 1989, characterised by gradual suppression of the democratisation processes and reform efforts of the sixties and renewal of full Communist power. Thus not only the area of art but also all other areas of human activity in the country were subject to attributes like controlled censorship, cancellations and bans of various organisations, moral decay and repression. Musical life of the time was developing along three lines: the official music scene, the grey zone and the illegal - underground - music.

Jazz Section Of The Union Of Czechoslovak Musicians

The JS existed between the years 1971-1987. In that period the JS had over eight thousand official members. Its key personalities were Karel Šrnp, Vladimír Kouřil, Josef Skalník, Čestmír Huňát and Tomáš Křivánek.

In October 1971 the constituting conference of Jazz section of the union of Czechoslovak musicians created the organisation. In the same year the Ministry of the Interior approved establishment of the Jazz section of the union of Czechoslovak musicians as a special-interest organisation, albeit without full autonomy. The JS as a special-interest organisation therefore belonged to the Union of Czechoslovak Musicians (Kouřil, 1999, p. 14-20).

The Union of Czechoslovak musicians was dissolved by the Ministry of Culture’s administrative act in 1984 including the organisations associated with it, one of them being the JS. Continuation of the JS activity would have made it an illegal organisation. The courage, activity and conviction of its members meant that, despite the complex and dangerous situation, the JS continued its activity, joining the grey zone of the period culture. The representatives of the grey zone were neither the official scene nor the underground but moved along its thin borderline.

In the beginning the JS was exclusively jazz oriented. In connection with the cultural development and establishment of new music genres the originally purely jazz orientation of the section began to widen. The main goals of the Jazz Section included support and encouragement of interest in jazz music in Czechoslovakia, which was reflected by its extensive organisational, concert and publication activities (Švoncová, 2013, p. 11).

Concert organisation activity was the focus of the JS’s attention until the issue of the order of restriction and ban of these activities. In the years 1974-1979 the JS organised nine of the originally planned eleven music festivals titled *Prague Jazz Days* (hereinafter just “PJD”). The tenth and the eleventh editions of PJD were already banned by the authorities. The first edition, spanning across two days, developed into an eleven-day festival over the years. The PJD by its time scope, musical content (traditional jazz, modern jazz, rock, jazz-rock, alternative, punk, music experiments, etc.) as well as visitor rates outgrew all other music festivals held in Czechoslovakia up to that time. Major unofficial events organised by the JS also included a performance of the American avant-garde theatre ensemble, the *Living Theatre*, taking place on 12 October 1980.

After the banning of the concert organising activity the focus of interest of the JS moved to publication. Thanks to the omnipresent systematic censorship the situation was not favourable in this area either.

All printing that was not officially censored and approved was illegal. The textual and the graphic components were subject to compulsory official approval. The texts were first auto-censored, then censored and finally censor supervised by an official or political institution. The graphics of every envelope or poster had to be officially released. For the publication activity of the Jazz Section not to step beyond the boundaries of legality, all its

publications were declared supplements to its membership periodical or publications of a special-interest club, which did not require official supervision, censorship and approval (Kouřil, 1999, p. 247).

The rich publication activities of the JS were headed by the *JB periodical for JS members*, and included bulletin 43/10/88 and *Diskorama*, separate editions *Jazzpetit* and *Situace* and a series of books on music, literary, art, history of culture and philosophy themes. The major ones include publication of the novella by Bohumil Hrabal *Obsluhoval jsem anglického krále [I Served the King of England]*.

This wide spectrum of activities made the JS unique in the Czechoslovakia of the normalisation period. Despite that all five leading personalities of the JS were followed by the period regime, accused of illegal business, sentenced and imprisoned in 1986. Court rehabilitation of the JS only put things right in 1991.

Jazz Bulletin

The major publication activity of the JS was represented by the *Jazz bulletin* periodical for JS members (hereinafter just "JB"). In the years 1972-1982 all regular members of the JS subscribed to the JB and the JS issued 28 issues in irregular intervals.

In the beginning, the membership-oriented periodical, JB, like the JS, was strictly jazz-oriented. As time passed its music spectrum extended to rock, jazz-rock, the alternative music scene or contemporary music in general. In addition to music themes the bulletin also began to publish articles on film, theatre, rock - classical music syntheses, punk, electronic and minimalist music, ethnic music and fine arts. This wide scope is proof of the absolute uniqueness of this periodical in the Czechoslovakia of 1980s and 1990s.

Research

The object of my research included key personalities of the JS and former JS members - subscribers of JB. The subject was the JB periodical for JS members. The chosen research methods included semi-structured interview and semi-structured questionnaire.

The interview research method allowed obtaining unique data from the key representatives of the JS themselves. I recorded the observed phenomena by means of audio-recordings, video-recordings and a record sheet. The results were analysed by means of qualitative analysis, transcript, first-order reduction, coding, timeline work, clustering, and the contrasting and comparison method.

The questionnaire research method allowed accumulation of information about former members of the JS at the time of their subscribing for the JB periodical and now and comparison of the past and present situation data. The first stage of the specific investigation has lasted for 4 months so far. Material collection and research result analysis combined quantitative and qualitative design and used contingency tables, tables of absolute and relative frequencies and bar charts of relative frequencies.

The interview of Vladimír Kouřil as a key personality of the JS was held in Prague on 5 May 2018.

The interview of Josef Skalník as another key personality of the JS was held in an art studio in Prague on 12 May 2018.

Further interviews with the other key personalities of the JS are included in the next research stage schedule.

The questionnaire was compiled in the course of methodology preparation and final research instrument preparation, which took one month.

The interview with Vladimír Kouřil crystallised into cooperation in the form of professional patronage over the questionnaire which facilitated its sending to 98 former JS members and implementation of the research among them. The questionnaire return rate in the first research stage was 35 active respondents.

The main purpose of the research was to record interviews with key JS representatives, analyse types of JB subscribers by sociological categorisation and compare their music preferences at the time of their subscriptions and today for compilation of their sociological profile. The basic working hypothesis was that the subscribers of the JB membership periodical have the same music preferences today as they had at the time of their JB subscription.

Questionnaire

A questionnaire is one of the most common research techniques where the respondents answer the posed questions in writing. The main purpose of the questionnaire is accumulation of information about the respondents, their opinions and attitudes to a certain theme. The questionnaire, unlike the other research techniques, uses the form of written answers (Pelikán, 2011, p. 104-105).

The target group of the questionnaire research was former members of the JS - subscribers of the JB periodical for members. The questionnaire itself focused on sociological categories including gender, age, education, place of residence, music preferences at the time of JB subscription and at present. The questionnaire included twenty-two non-parametric closed (multiple-choice), semi-open and open questions. The closed questions asked about

numerical, geographical and other data and the respondent had to choose one of the offered variants. The semi-open questions also offered response variants but provided space for specification of the chosen variant. Open questions provided the respondents with unlimited space for their own formulations.

The statistical processing of non-parametric questions was based on establishment of absolute and relative values as this type of questions cannot be processed by standard statistical procedures (Pelikán, 2011, p. 109). Open questions were processed by sensible categorisation.

Question 1

VARIANT	FREQUENCY	%
male	32	91.4
female	3	8.6
total	35	100

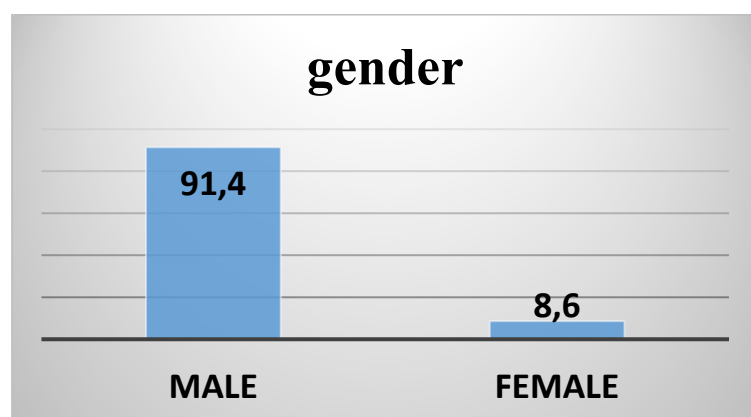


Figure 1, table 1: The opening closed question concerned the gender of the respondents. The table of absolute and relative frequencies and the bar chart of relative frequencies show that the first research stage included 8.6% female and 91.4% male respondents.

Question 2

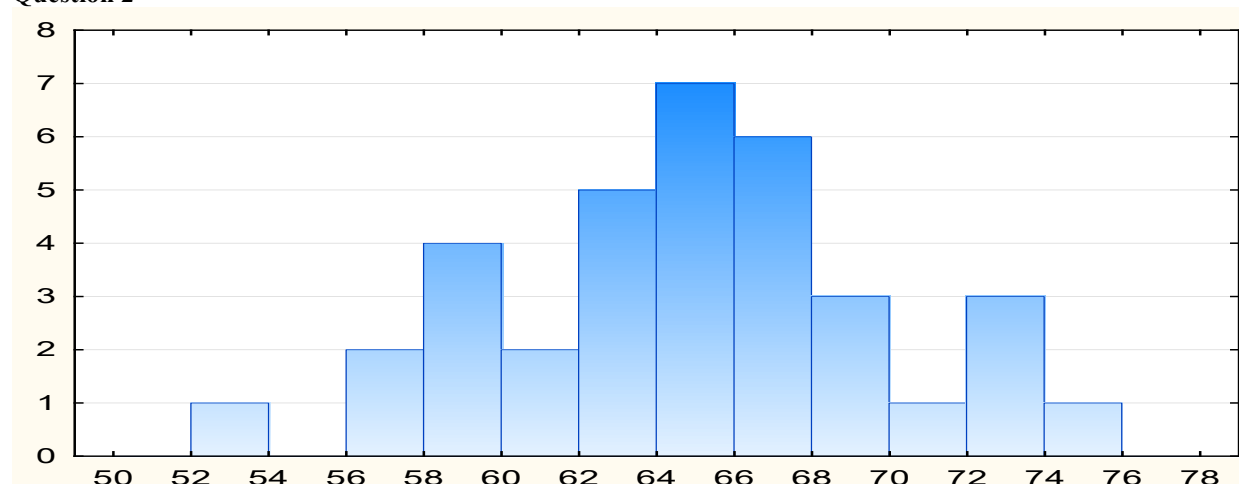


Figure 2: The second closed question focused on the age of the individual respondents. The bar chart of absolute frequencies showed that the youngest of the addressed respondents was 53 and the oldest 75 years old. Most respondents were 65 years old.

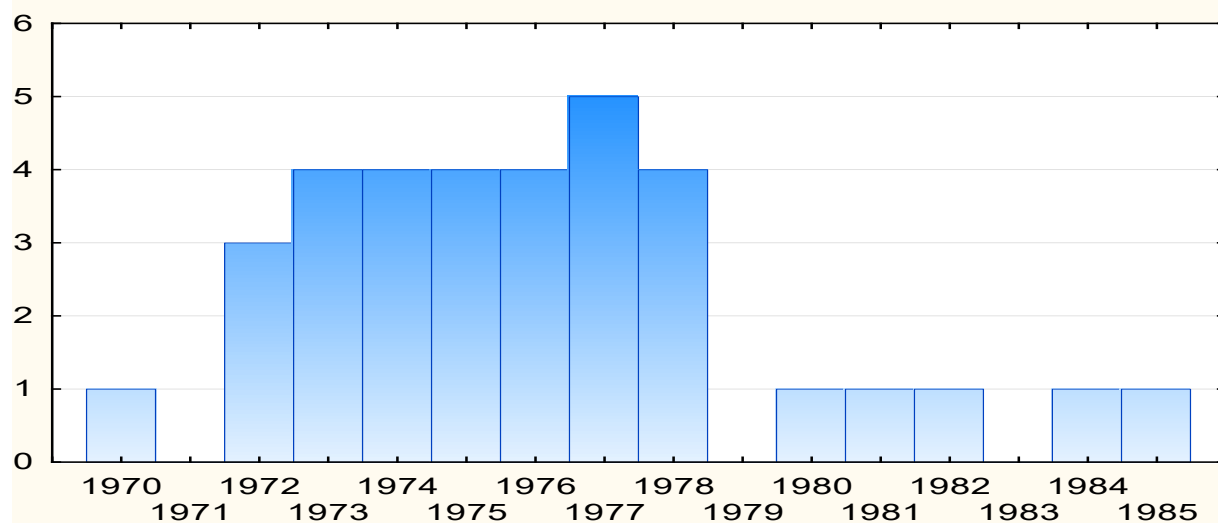
Question 3

Figure 3: The third closed question mapped the year of joining the JS by the individual respondents. Most of the respondents (14.3%) became JS members in 1977. (11.4% of the respondents joined the JS in the years 1973-1976 and in 1978 and 8.6% entered the JS in 1972.

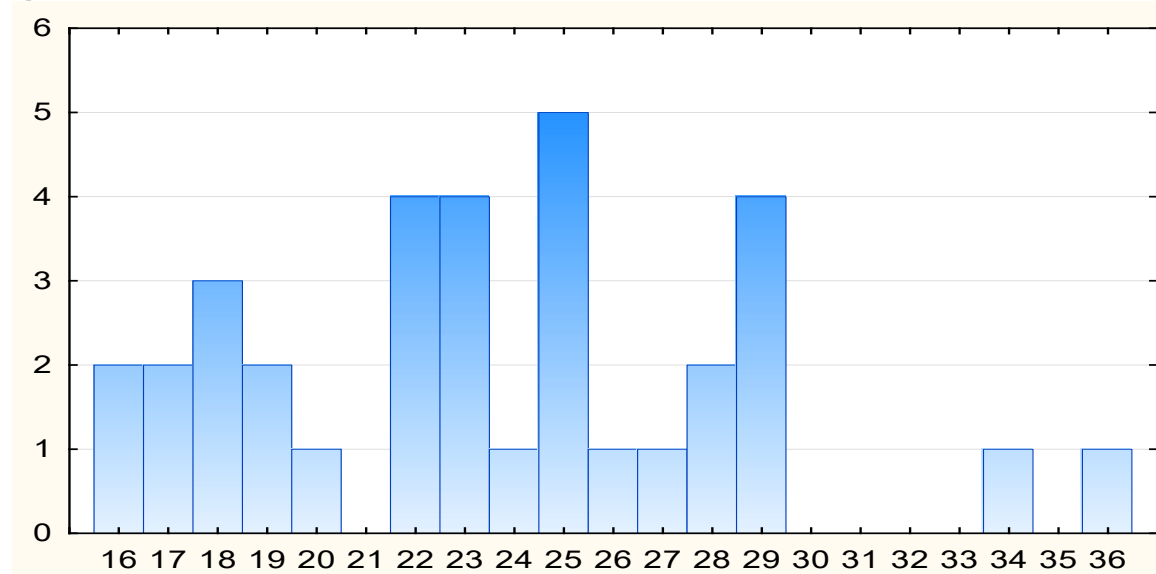
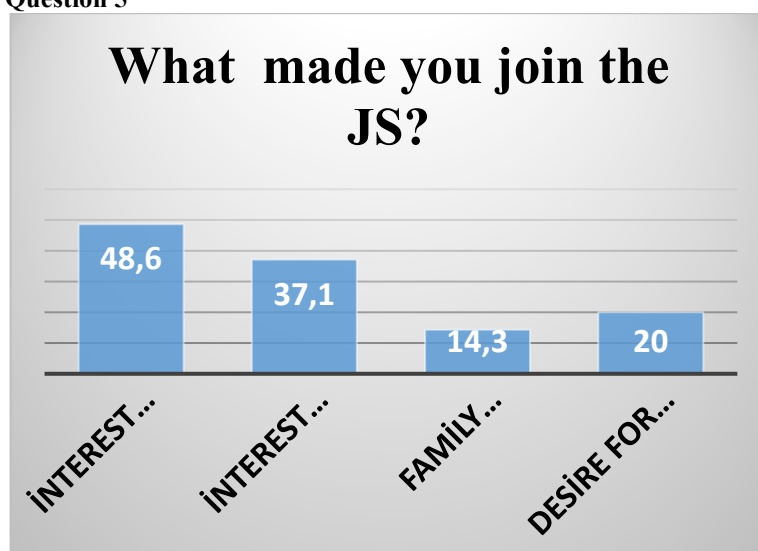
Question 4

Figure 4: The fourth closed question asked about the age of the respondents on entering the JS. Most JS members joined the Jazz Section at the age of 25 (14.7%), and 11.8% became JS members at the age of 22-23 and 29 years. The youngest respondent was 16 on entering the JS and the oldest member was 36 when joining the JS.

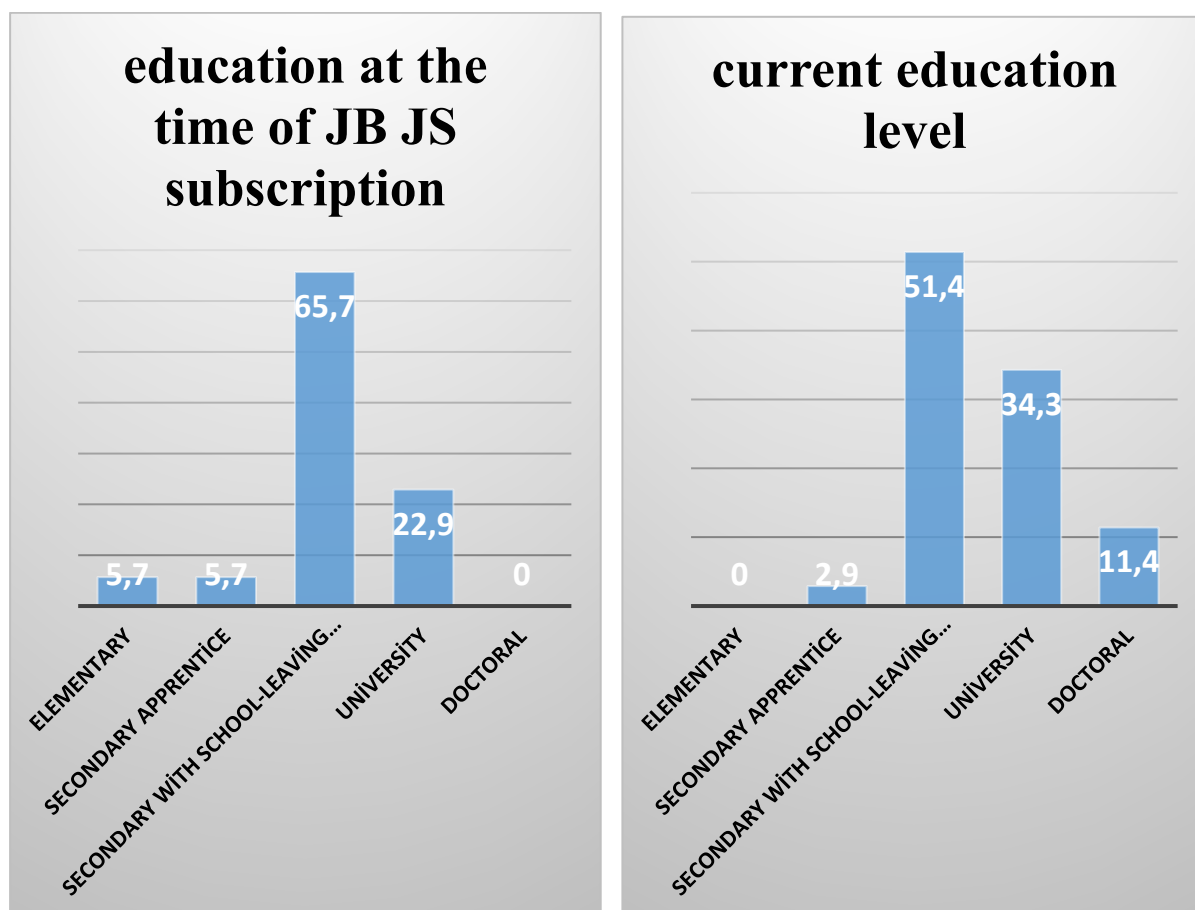
Question 5



VARIANT	FREQUENCY	%
interest in music	17	48.6
interest in culture and art	13	37.1
family and friends	5	14.3
desire for knowledge and freedom	7	20

Figure 5, table 2: The open question asked the respondents what made them join the JS. The table of absolute and relative frequencies and the bar chart of relative frequencies show that most of the respondents joined the JS because of their interest in music, the specifications giving jazz music as the more specific answer to this question in most cases. The lowest number was represented by respondents motivated to join the JS by their family and friends.

Questions 6 And 7



PIVOT TABLE 3			
EDUCATION AT THE TIME OF JB JS SUBSCRIPTION	%	CURRENT EDUCATION LEVEL	%
elementary	5.7	elementary	0
secondary apprentice	5.7	secondary apprentice	2.9
secondary with school-leaving examination	65.7	secondary with school-leaving examination	51.4
university	22.9	university	34.3
doctoral	0	doctoral	11.4

Figures 6, 7, table 3: The sixth and the seventh question mapped the levels of achieved education of the respondents at the time of their JB subscription and at present. No respondent was a doctoral graduate at the time of his/her JB subscription. Most respondents were secondary school graduates with passed school-leaving examination then and now as well (65.7% and 51.4%, respectively), followed by university graduates (22.9%). At present 11.4% of the former JS members are doctoral graduates.

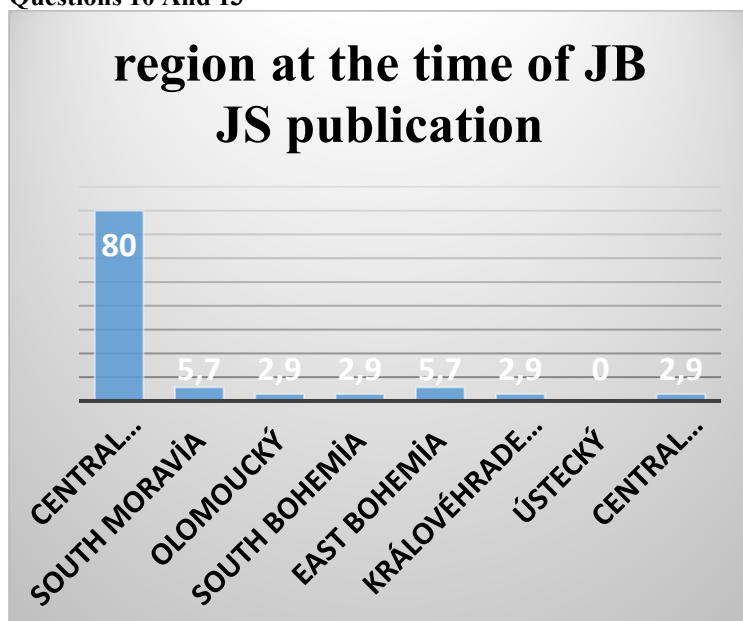
Questions 8 And 9

PIVOT TABLE 4			
JS PERIOD PROFESSION	%	CURRENT PROFESSION	%
student	27.27	old-age pensioner	23.91
musician	9.09	musician, composer	13.04
designer	9.09	self-employed	8.70
graphic artist	6.82	academic worker	6.52

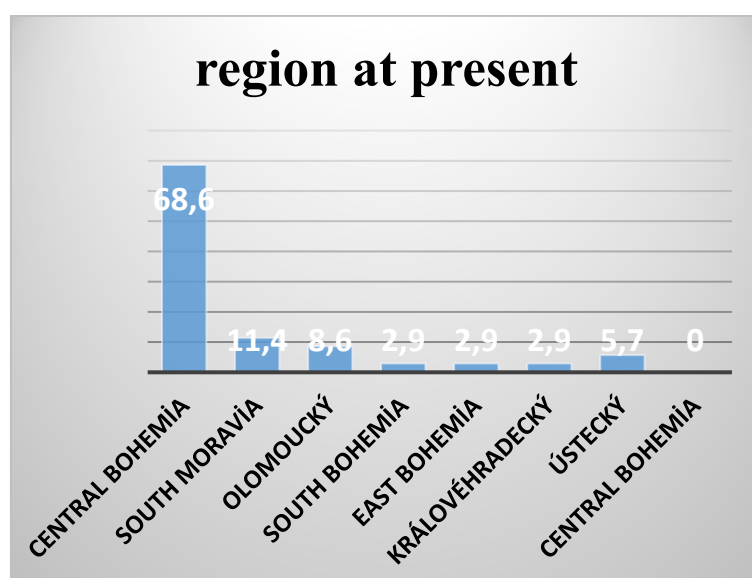
assistant	4.55	music editor	6.52
labourer	4.55	painter/graphic artist	6.52
physician	2.27	producer	6.52
designer	2.27	teacher	4.35
soldier	2.27	translator	4.35
printer	2.27	designer	4.34
translator	2.27	physician	2.17
boiler man	2.27	lawyer	2.17
engineer	2.27	data centre manager	2.17
forewoman	2.27	journalist	2.17
animal husbandry advisor	2.27	lecturer	2.17
librarian	2.27	train dispatcher	2.17
american information agency	2.27	astrologist	2.17
teacher	2.27	-	-
american embassy in Prague	2.27	-	-
train dispatcher	2.27	-	-
machine adjuster	2.27	-	-
guard	2.27	-	-
factory planner	2.27	-	-

Table 4: The eighth and the ninth open questions dealt with professions and professional activities of the respondents at the time of their JB subscription and now. Most respondents were still students at the time of their JB subscription. A lot of them were active in the music sphere or worked as designers, painters or graphic artists. At present most respondents are old-age pensioners; a large number of them are still active in the field of music, business, academic work, music editing, painting, graphic art or production.

Questions 10 And 13



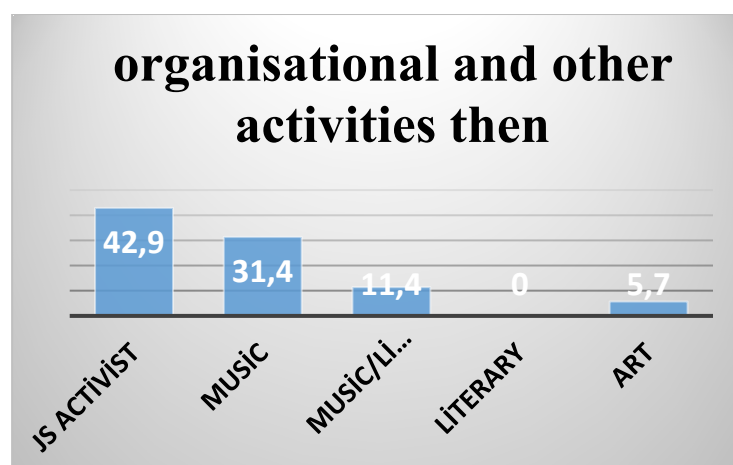
VARIANT	FREQUENCY	%
Central Bohemia	28	80
South Moravia	2	5.7
Olomoucký	1	2.9
South Bohemia	1	2.9
East Bohemia	2	5.7
Královéhradecký	1	2.9
Ústecký	0	0
Central Bohemia	1	2.9



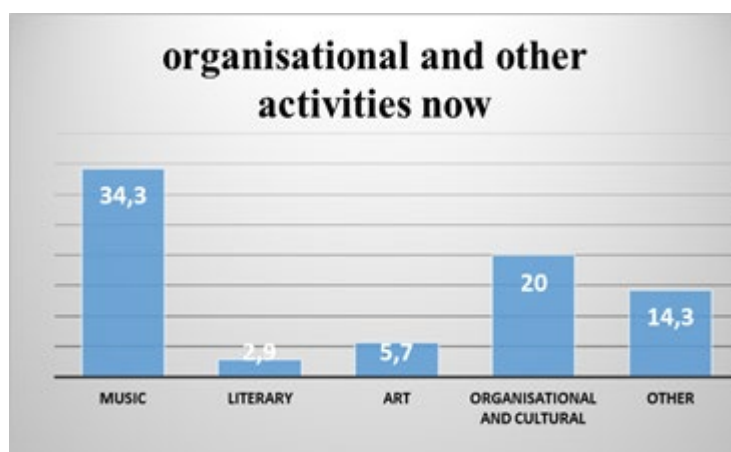
VARIANT	FREQUENCY	%
Central Bohemia	24	68.6
South Moravia	4	11.4
Olomoucký	3	8.6
South Bohemia	1	2.9
East Bohemia	1	2.9
Královéhradecký	1	2.9
Ústecký	2	5.7
Central Bohemia	0	0

Figures 8, 9, tables 5, 6: The tenth and the thirteenth questions were aimed at the region where the respondents lived at the time of JB subscription and where they live now. Most of the respondents (80% and 68.6%, respectively) were and are living in Central Bohemia Region, most often in Prague.

Questions 11 And 12



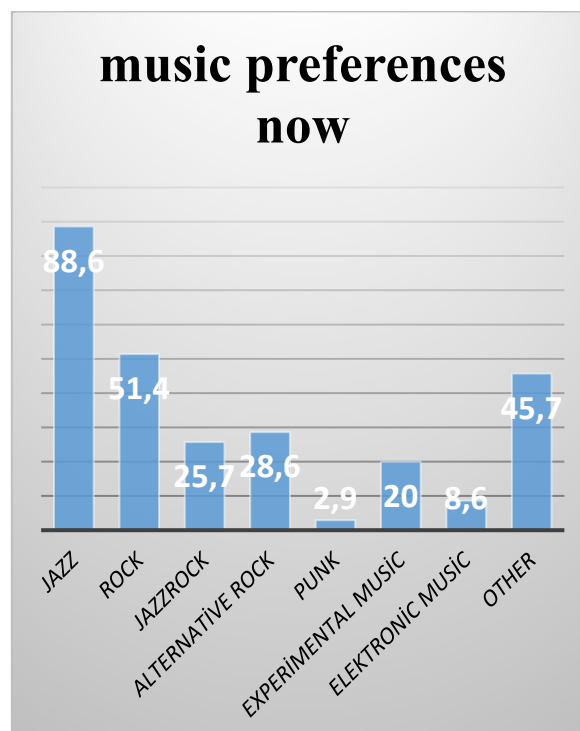
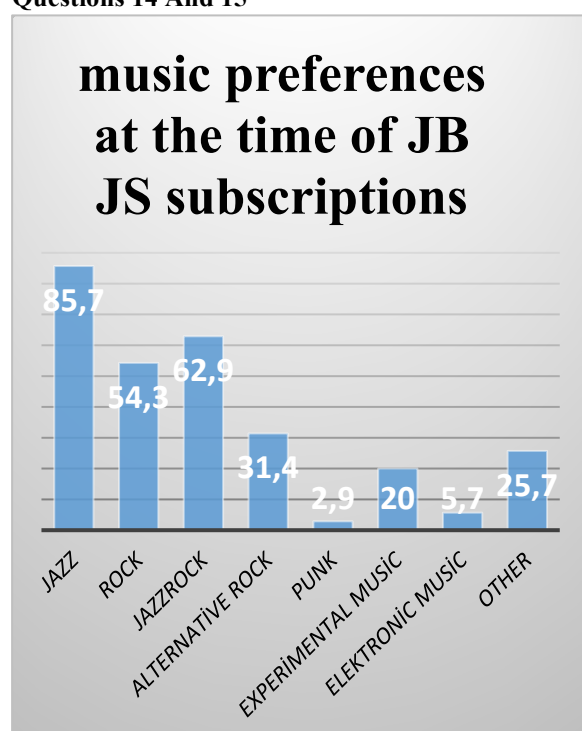
VARIANT	FREQUENCY	%
JS activist	15	42.9
music	11	31.4
music/literary	4	11.4
literary	0	0
art	2	5.7



VARIANT	FREQUENCY	%
music	12	34.3
literary	1	2.9
art	2	5.7
organisational and cultural	7	20
other	5	14.3

Figures 10, 11, tables 7, 8: Open questions eleven and twelve dealt with past and present organisational and other activities of the former JS members. At the time of JB subscription most respondents were active around the JS (42.9%), followed by music-related activities (31.4%). At present music-related activities obtained 34.3% and organisational and cultural activities 20%.

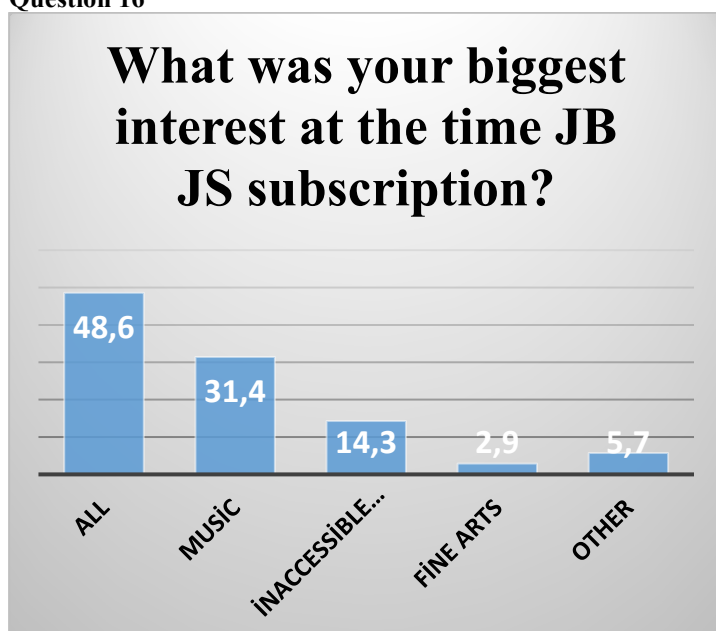
Questions 14 And 15



PIVOT TABLE 9			
MUSIC PREFERENCES THEN	%	MUSIC PREFERENCES NOW	%
jazz	85.7	jazz	88.6
jazz-rock	62.9	rock	51.4
rock	54.3	other	45.7
alternative rock	31.4	alternative rock	28.6
other	25.7	jazz-rock	25.7
experimental music	20	experimental music	20
electronic music	5.7	electronic music	8.6
punk	2.9	punk	2.9

Figures 12, 13, table 9: The fourteenth and fifteenth semi-open questions grasped a complete survey of music preferences of former JS members at the time of JB subscription and now. Out of the eight music categories five remained in the same order as at the time of the periodical subscription. Only three categories changed their rank.

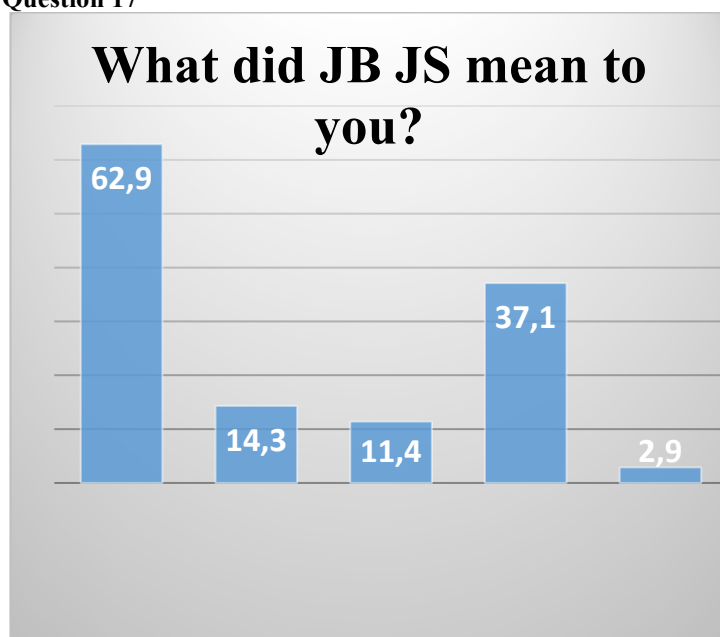
Question 16



VARIANT	FREQUENCY	%
all	17	48.6
music	11	31.4
inaccessible informations	5	14.3
fine arts	1	2.9
other	2	5.7

Figure 14, table 10: The sixteenth open question mapped the preferred interests of the respondents in terms of the JB contents. The above bar chart of relative frequency and the attached table of absolute and relative frequencies show that nearly one half (48.6%) of the respondents were interested in the complete contents of the periodical. Selective preferences mainly included music (31.4%) and information not elsewhere available (14.3%).

Question 17



VARIANT	FREQUENCY	%
source of information	22	62.9
source of recordings	5	14.3
inspiration on for foreign language learning	4	11.4
existension of cultural outlook	13	37.1
fine art knowledge	1	2.9

Figure 15, table 11: The open question number seventeen tried to find out what JB subscription offered to the respondents. Most of them (62.9%) said the periodical was for them a source of information not readily available in the Czechoslovakia of the normalisation period. Others mentioned that the JB subscription widened their overall cultural horizons (37.1%) and the specifications to this answer also mentioned well-funded music reviews. Some former members saw the periodical as a source of recordings (14.3%) or foreign language study opportunity (11.4%).

Question 18

VARIANT	FREQUENCY	%
yes	5	14.3
yes, to friends	23	65.7
yes, to my family	4	11.4
no	6	17.1

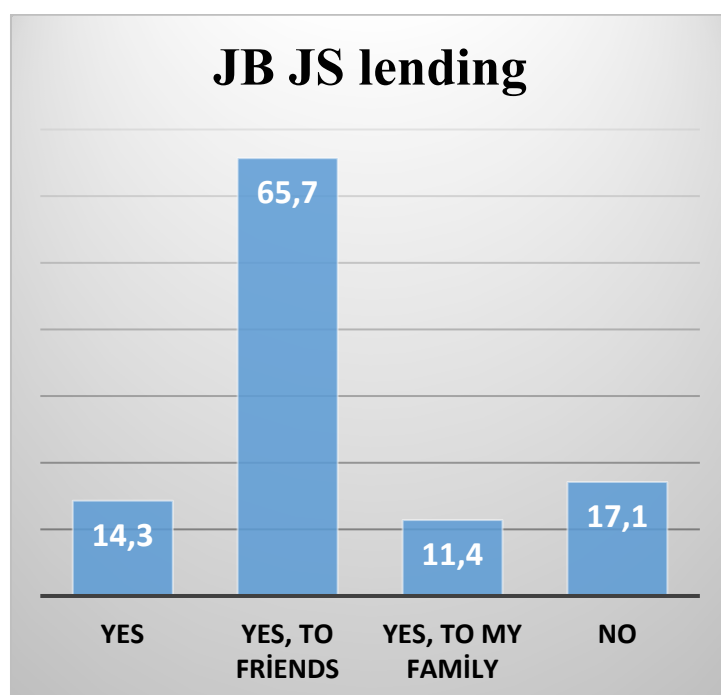


Figure 16, table 12: The subject of the eighteenth open question was to find out whether the respondents lent their copy of JB or not. Only 17.1% of the respondents said that they did not lend their copy of the periodical. The rest loaned the periodical, mostly to friends.

Question 19

VARIANT	FREQUENCY	%
yes, the JS	13	37.1
yes, other	7	20
no	16	45.7

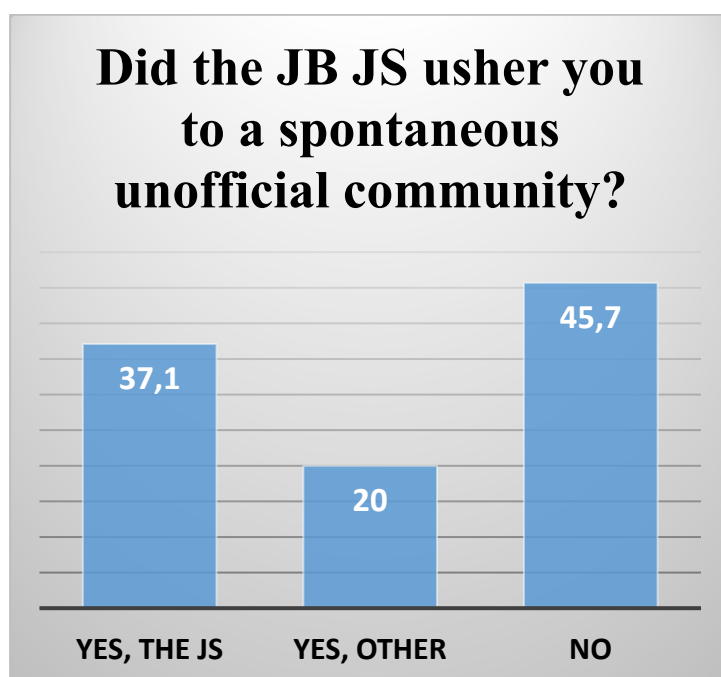
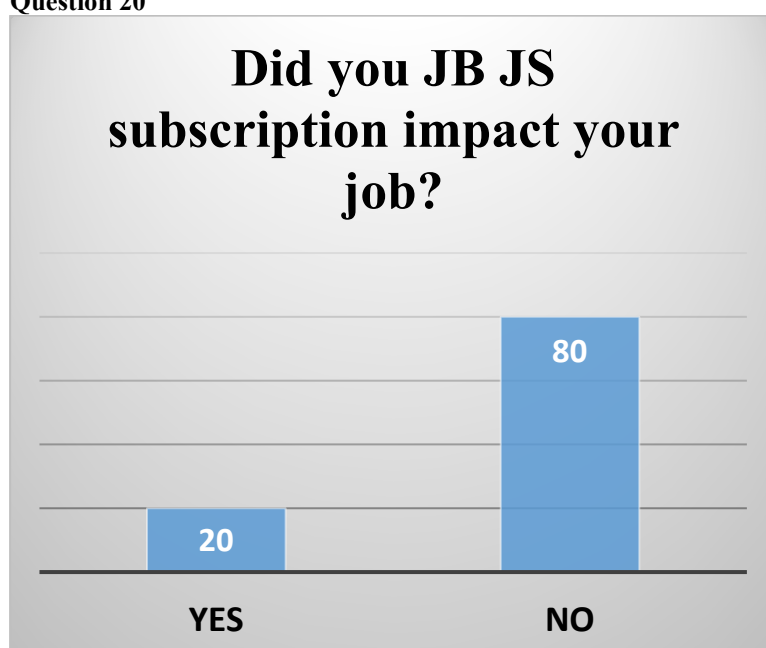


Figure 17, table 13: The nineteenth open question tried to grasp whether JB subscription brought the subscriber to a spontaneous unofficial community. Nearly half of the respondents (45.7%) did not join any community through the periodical subscription. 37.1% of them said that JB ushered them to the JS, and others (20%) mentioned Charter 77, music bands, jazz club memberships or the art scene.

Question 20



VARIANT	FREQUENCY	%
yes	7	20
no	28	80
total	35	100

Figure 18, table 14: This open question mapped the impact of JS membership on the respondents' contemporary job. 80% of the respondents did not see any impact. The remaining 20% reported an impact of their JS activity on their job at the time of their membership in the form of threats, demotion, or even dismissal.

Question 21

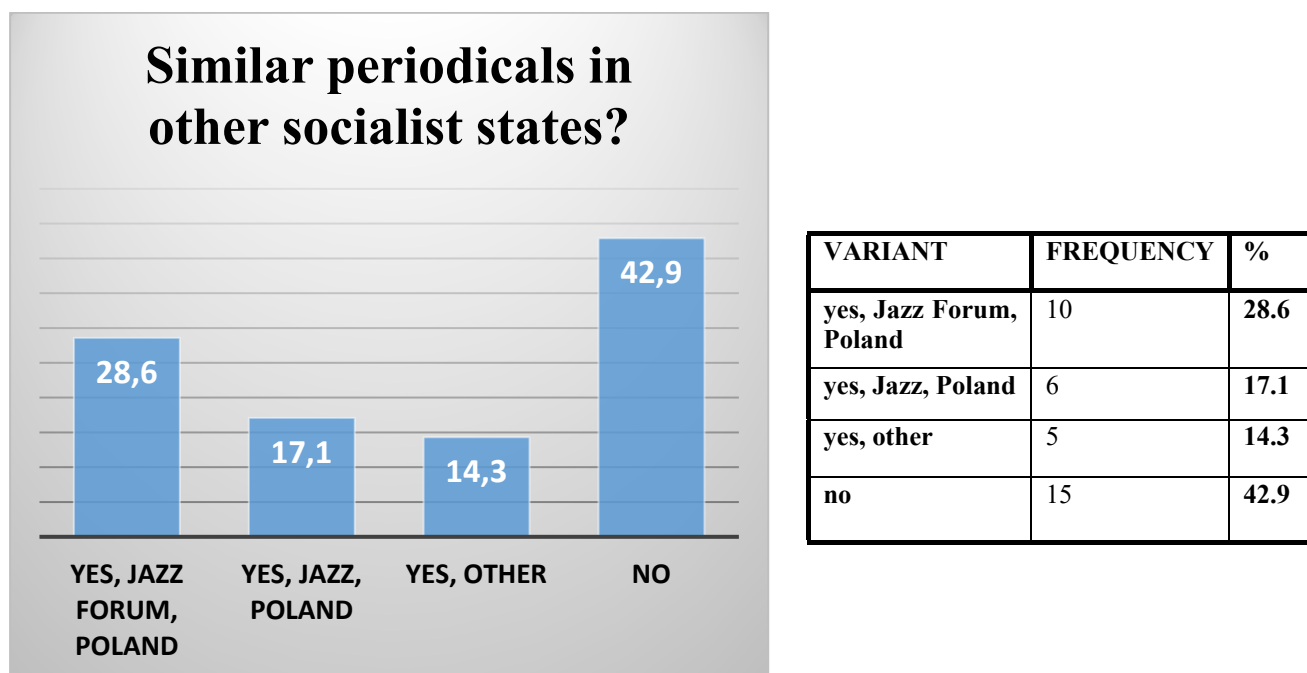


Figure 19, table 15: The last but one (21st) open question tried to find out whether the respondents met with a periodical similar to JB JS in other socialist countries. 42.9% of the respondents did not come across any alternative to JB. The remaining respondents most often mentioned as an alternative to JB the journals Jazz Forum (28.6%) or Jazz (17.1%), issued in Poland.

Question 22

The final open question asked the respondents about their opinion of the JS heritage for the present. The answers to this question were extensive and could not be sensibly categorised.

The answers included:

- Cultural enlightenment despite the totalitarian regime.
- Longing for freedom, courage to stand against the authorities, openness in all directions.
- Use of critical common sense and free thinking.
- In a period of marasmus doing something for oneself and for one's surroundings always makes sense.
- A circle of friends for life and interest in a wide cultural spectrum.
- Doing things from the heart.
- An "Island of Freedom", created by the JS in the period of normalisation slush, did not come automatically and the values it promoted must be actively adhered to in order to prevent them from extinction.
- Music must not be a political instrument.
- The JS, as we know it, would never have come into existence in a liberal society.
- An excellent example of how a handful of enthusiasts managed to be free under very unfavourable conditions - that counts for a lot!

Results, Conclusions And Recommendations

The complex survey of the order of musical preferences of former JS members - JB subscribers, shown in detail in the above frequency tables and bar charts, reveals that out of the eight music categories five are in the same rank of preference as at the time of the JB subscription.

The purpose of this contribution was to introduce the Jazz Section of the Union of Czechoslovak Musicians and its periodical for members called Jazz Bulletin of Jazz Section and to outline the sociological profile of the JB subscribers in sociological categorisation.

The above mentioned results of the first research stage suggest that former members of Jazz Section of the union of Czechoslovak musicians - JB subscribers mostly have not changed their music preferences since the time of their JB subscription.

References

- Burke, V. (1984). *Aféra - myslí si oni - končí*. In: Západ
- Dědek, H. & Vlček, J. (2012). *Zub času: rozhovor*. Praha, Galén.
- Disman, M. (2014). *Jak se vyrábí sociologická znalost*. Praha, Karolinum.
- Dorůžka, L. (2002). *Český jazz mezi tanky a klíči 1968 - 1989*. Praha, Torst.
- Dorůžka, L. (1997). *Panoráma paměti*. Praha, Torst.
- Hendl, J. (2016). *Kvalitativní výzkum*. Praha, Portál.
- Kouřil, V. (2016) *Africké květiny*. Praha, 65. pole.
- Kouřil, V. (2006). *Divná hudba dob nekalých*. Praha, Volvox Globator.
- Kouřil, V. (1999). *Jazzová sekce v čase a nečase 1971 - 1987*. Olomouc, Torst.
- Matzner, A. & Poledňák, I. & I. Wasserberger. (1983). *Encyklopedie jazzu a moderní populární hudby I*. Praha, Supraphon.
- Novak, M. (1983). *Zpráva Jazzové sekce*. In: Západ
- Pelikán, J. (2011). *Základy empirického výzkumu pedagogických jevů*. Praha, Karolinum.
- Sedlecký, P. (1986). *Případ Jazzové sekce*. In: *Svědectví*.
- Srp, K. (1994). *Výjimečné stavy povolání jazzové sekce*. Praha, Pragma.
- Škvorecký, J. & Burke, V. (1992). *Vladimíra v Territorio libre: Spisy IV*. Praha, Společnost Josefa Škvoreckého.
- Švoncevá, V. (2013). *Činnost Jazzové sekce v letech 1969 - 1987 prizmatem bulletinu Jazz*. Univerzita Hradec Králové, Pedagogická fakulta.
- Tomek, O. (2003). *Akce Jazz*. In *Securitas imperii 10. Sborník k problematice vztahu čs. komunistického režimu k „vnitřnímu nepříteli“*. Praha, Úřad pro dokumentaci a vyšetřování zločinu komunismu.

Soft Skills In The School Of Engineers In Morocco

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Abstract

What do our engineers really need? Are hard skills enough for a successful professional insertion of our students engineers? No, they need soft skills. »Soft skills« are behavioural competencies and collection of skills that determine how we interact with others in different environments and different situations. They are the personality traits and interpersonal skills required of engineers to succeed in almost any job. Soft skills are the ability to listen actively, to communicate effectively, to handle conflict positively. Soft skills impact job performance, and professional relationship. They play an important role in the workplace such as communication skills, problem solving skills, critical thinking, creativity, team building, time management and procrastination, solving, cultural awareness, self-esteem and self-confirmation. As teachers we reinforce the soft skills of our students to become successful managers in the future..

Keywords : *soft skills, hard skills, communication, critical thinking, professional behaviour, performance; management, workplace, positive thinking, successful student engineers.*

Introduction

Students unemployment has been the subject of many schools and universities over the last couple of years, and many of the teachers, supervisors and recruiters insist that the reason why young people are struggling to find suitable jobs after graduation is a lack of soft skills. Students care more about hard skills and neglect soft skills whereas Employees today are paying more and more attention to soft skills, and it's referred to as 21st century skills, but students still think about the word differently and underestimate the importance of soft skills.. Soft skills not only empower the new graduated competencies in Communicative skills, Thinking and problem solving skills; Teamwork „dynamics but they also reinforce the Life-long learning, information management Entrepreneurship skills Ethics, professionalism. Leadership skills. When we think about soft skills and hard skills two kinds of questions come to our mind : »What you know« and »How you act« [1] »Soft skills are centrally important for human capital development and workforce success. A growing Skills, and abilities, and traits that pertain to personality, attitude, and behavior rather than to formal or technical knowledge» (Moss and Tilly 2001)

Literature Review

The most important soft skills that are the most needed by student are teamwork and collaboration, decision making, problem solving, time management, and critical thinking skills [2] »The undergraduate degree holder should master these skills. And yet, students should also be able to master new skills because they are players in the labour market (Chen 2016) [3] »Therefore, they should be endowed with meetings skills, negotiation skills and networking Skills» (Hawkins & Winter 1996) [4] »All these competencies should be in everyday life of a university student, in the light of what happens with a professional in an organisation, as recommended by (Chen 2016) .

[5] »According to Goleman (1997) there are many paths to success in life, and many areas where other skills are rewarded. Emotional intelligence provides advantages in a complex society. In fact, and according to this author, it is important to understand the other, both in terms of motivation and work habits [6] Job candidates with skills such as good communication; self-confidence and conscientiousness are more likely to have successful jobs search (Uysal & Pohmeir 2011) the sense of persistence and perseverance helps the students and job seekers to pursue their job search even if they encounter some difficulties. Their social and communication skills help them to have a large networking which allow them to be more informed and learn about job opportunities.

Candidates with good soft skills such as communication, self-marketing and social skills perform well during the interview and have more chance to be hired by the recruiters than the students with only good hard skills. [7] And the market field are looking for candidates with not only academic and/or technical skills such as literacy and numeracy but also soft skills (Burnett & Jyaram, 2012; Cunningham & Vllasenor 2014)

The Study

Soft skills are interpersonal and intrapersonal skills. Oral and written communication Teamwork and respecting work ethics and collaborators and being honest. The most important achievement of soft skills is self-motivation, dependability besides all these critical thinking, sense of leadership and problem solving by acquiring a great ability to work under pressure Creativity/innovation/resourceful Organizational/time management These skills define an individual's 'Emotional Quotient' (EQ) and 'Intelligence Quotient' (IQ). "[8] »According to André Iland, "this is

a ‘package’ of skills related to personality development that including social skills, communication and language skills, interpersonal habits, assertiveness, friendliness and optimism that demonstrate the relationship with the other”. “[9]” Stephen Covey, in his book *The 7th Habit*, describes a poll of 23,000 employees drawn from a number of companies and industries. He reports the poll's findings: • 37 percent said they have a clear understanding of what their organization is trying to achieve and why • One in five was enthusiastic about their team's and their organization's goals • One in five said they had a clear "line of sight" between their tasks and their team's and organization's goals • 15 percent felt that their organization fully enables them to execute key goals • 20 percent fully trusted the organization they work for.” - Chip Heath Infographic published by Neil Beyersdorf [linkedin.com/in/neilbeyersdorf](https://www.linkedin.com/in/neilbeyersdorf).

Hard skills and soft skills are equally important in preparing for college and career. Which one is more important if you want to be viewed as “successful”? Especially, if you want to grow (have more impact, more responsibility). How do I become a successful engineer?



“[10]” (www.agr.org.uk Horton W., Horton K.: www.horton.com)

How to become a better version of yourself. One of the most difficult things to teach and the most common reason for not hiring, not promoting, and also of poor performance is not accepting change.

2nd year students had to choose one of the 7th reinforced skills and nine weeks to work on the chosen skill. One of the most difficult things to teach

The working strategies (ENSIAS ‘Students) To develop one of these skills :

Students chose one of the four dimensions. Fix their objectives analyse the situation establish a schedule of (nine weeks to achieve their target)

Share their experience with experts in this fields and their classmates.

1-Good Communication Skills

2-Time management

3-Acting as a team player

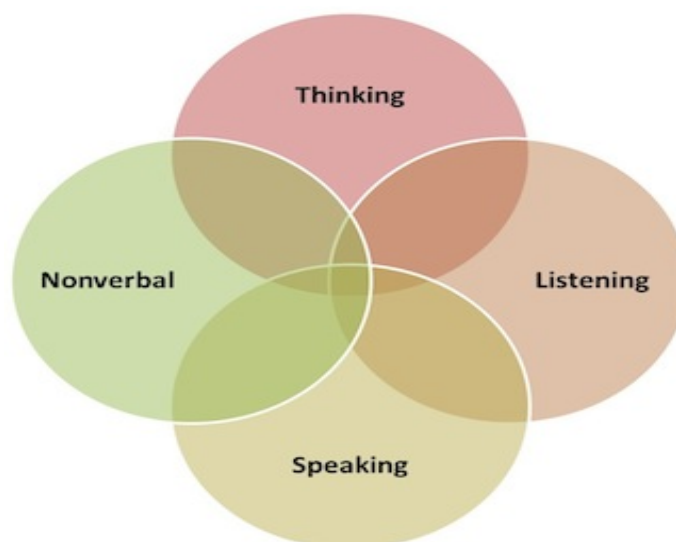
4- Flexibility/Adaptability

5-Self-Confidence

6- Positive Attitude

7- Good Personal Appearance and Common Sense.

1-Good Communication Skills How well one articulates what they speak or write. and understand the other person without having wrong perception. And also body language plays an important role, every gesture has a meaning and also are you a good listener because active listener are successful people in their life.



2-Time management: To what extent you are able to manage your time properly without procrastination; here are some questions to ask one's self

- How well do I prioritize different tasks and projects at one time?
- Are you wise about the way you spend your time, use your time?

3- Acting as a team player: Personal reflection each student must ask himself how well does he work in group and if he has a specific preference and what is the importance of career's choice and to what extent the student understands the value of diverse thought and cultural diversity.

4-Flexibility/Adaptability: To evaluate oneself and try to have open ideas, to be willing to be innovative and creative by adopting new situations and considering other alternatives. Once the person or student does this kind of self-introspection, the student accepts and embraces the changes that help the individual to grow personally and professionally.

5-Self-Confidence: Many students suffer from lack of self-confidence, self-esteem and self-confirmation. The student tried to follow some strategies to gain this self-confidence. The first thing he has to believe in himself, trust his abilities, judgment and network. By doing so the student overcomes some weaknesses as stage fright and stress and gains a kind of self-esteem and charisma.

6-Positive Attitude: *"Attitude is a little thing that makes a big difference."* – Winston Churchill. Negativity is a great monster that haunts people in general and students specially. Teacher tries to think positively, get rid of toxic ideas, spend energy in fruitful things by being optimistic and generate energy and communicate with people around.

7- Good Personal Appearance and Common Sense: To take care of one's visual aspect, taking care of personal cleanliness and neatness of clothing. Having a good sense of judgment based on "experience" rather than on theory. Each student has to fix a specific objective and to bear in mind that the objectives are arrows that help the learner to reach the target and demonstrate his mastery of any procedure. The objective must be SMART; that is Specific, Measurable, Attainable, Realistic and Timely.

Findings

After nine weeks of personal introspection, self-analysis and engagement, the department of communication and language at ENSIAS (Ecole Nationale Supérieure d'Informatique et d'Analyses des Systèmes) has established two techniques of evaluation: a team evaluation and individual evaluation. » Out of **257** Students:

230 students were able to carry on in the innovative process to change their behaviour, gain a new skill and presented their feedback.

12 students found difficulties to go through the process of change.

5 students were absent.

10 students were blocked and couldn't carry on to achieve their target did a great work by trying to develop one of the four human dimensions either mental, psychological, physical or emotional. They share their experience with their classmates.

The most common point among all the students is their resistance to change as they couldn't leave their zone of comfort; but after many negotiation with oneself they went through the process of change and they were able to do the grief hence they developed their soft skills. For instance students who had to develop one aspect of the physical dimension (biological aspect or behavioral aspect) they achieved their target and were satisfied by their realizations which impact their daily life and behavior.

So teachers and coaches have to supervise those students and coach them in order to overcome such weaknesses and to regain self-confidence, self-esteem and self confirmation. After nine weeks the students make an oral presentation in front of their supervisors, experts in soft skills and their classmates.

Presenting the soft skill they wanted to improve, the strategies and the techniques they used and also the difficulties they encountered, the positive and negative points of this procedure.

And then they answered the two following questions

1-« Did I achieved my target? »

2-« What is the percentage of success of this procedure

This experience was successful at both levels personal level and professional level.

Personal level: it has a great impact on the life of our students. They went out of their zone of comfort. They accepted the change and celebrated their victory.

Professional level: Students developed a sense of responsibility and creativity. We got very satisfying feedback from recruiters; human resources and managers who had hired our students.

Conclusion

It's often said that hard skills will get you an interview but you need soft skills to get (and keep!) the job. We live in a society that measures intelligence (IQ) through quantifiable metrics. You complete the assignments, come to class, learn the concepts, and you get an "A". Emotional intelligence is your ability to recognize and understand emotions in yourself and others, and your ability to use this awareness to manage your behavior and relationships. In the workplace, most compliments will deal more with the use of *soft skills* (EI – Emotional Intelligence) than your hard skills. "It is not the strongest or most intelligent who will survive but those who can best manage change." – *Charles Darwin*.

This experience was conducted with 2nd year students of school of computer science engineers, it can be extended at the level of the faculties and schools of the university in Rabat (Morocco). The students' feedback was positive and they were satisfied with the change in their behavior and thinking. They become more open-minded and try to collaborate and help each other. Teachers and academicians must think of changing their pedagogical ways of teaching and search new ways that enhance soft skills without neglecting the hard skills. The self-awareness of oneself and improvement of the student's soft skills is a primordial task as it reflects a positive image of the student and it lets him identify his strengths and areas of improvement. It reinforces his 3 K (Knowledge, Know-how, Know to be). It is also a good tool for teachers to detect students who are in difficulties and help them to overcome some personal difficulties and prepare to be self-confident and a good time management as this procedure awakes the student's sense of responsibility and engagement which he needs in everyday life and especially in the work place.

References

- [1] Philip Moss at University of Massachusetts Lowell. Philip Moss. 12.42; University of Massachusetts Lowell. Chris Tilly at University of California, Los Angeles..
- [2] Chen, P. Y. (2016). Teaching in offshore programmes: an assessment of university faculty's self-efficacy, cultural competence and preparedness. *Journal of Education for Teaching*, 42(2), 188-204.
- [3] Goleman D. (1997). *Inteligência Emocional*. Temas e Debates, Círculo de Leitores, Lisboa.
- [4] Chen, P. Y. (2016). Teaching in offshore programmes: an assessment of university faculty's self-efficacy, cultural competence and preparedness. *Journal of Education for Teaching*, 42(2), 188-204.
- [5] Hawkins, P., & Winter J. (1996). The self-reliant graduate and the SME. *Education + Training*, 38(4), 39
- [6] Burnett & Jayaram, 2012; Cunningham & Villaseñor 2014)
- [7] Burnett, N. & Jayaram, S. (2012). Skills for employability in Africa and Asia ISESE Skills Synthesis Paper: Innovative Secondary Education for Skills Enhancement (ISESE).
- [8] <https://www.amazon.com/Soft-Skills-Be-professionally-proactive/dp/1481895370>
- [9] Stephen Covey "The 7th Habits of successful people" - Chip Heath Infographic published by Neil Beyersdorf [linkedin.com/in/neilbeyersdorf](https://www.linkedin.com/in/neilbeyersdorf).

[10] Internet Resources British Association of Graduate Recruiters (AGR): www.agr.org.uk Horton W., Horton K.: www.horton.com

Iyer, Rukmini: <http://us.rediff.com/getahead/2005/jun/30soft.htm> Phani, Challa Ram:

<http://in.rediff.com/getahead/2007/jan/08soft.htm> PISA: www.pisa.oecd.org

Waggoner, Jaqueline: <http://mountainrise.wcu.edu/html/waggoner.pdf> Wikipedia: www.en.wikipedia.com

The Importance of Soft Skills: Education beyond academic knowledge

Bernd Schulz Polytechnic of Namibia NAWA Journal of Language and Communication, June 2008

Some Ethical Analyses for Vocational School Students

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Abstract

Tenet state honest thinking as a mission that shots to practice goal to riposte count lower brands of ethical hitches. Ethical comportment is one of the core central behaviors of university undergraduates. Bootlegging is a factual non-ethical problem for some students' education life. It is an important research question that some ethical behaviors in conservatory life expectancy can be origin to new non-ethical behaviors in waged life expectancy after school (Nejati, M., Jamali, M. And Nejati, M., 2009). Also, added eloquent interrogations and life-threatening ponderings can help to tell the ethical hitches by questioning students' concepts about the question.

ethics arrangement with public anthropological capacity to ponder about ethical hitches that is not certain to thinking. The swift fluctuations in the high-tech life expectancy have begun various contests in the high-tech all god's creatures. In this marketable all god's creatures, in the family way the future peer group with goodness is a vizor commercial for public. These days all fledgling students are decidedly searching and have a supremacy of thought to their fathers at home-grown, their coaches in school and to their associate in societal life expectancy (Nejati, M., Jamali, M. And Nejati, M., 2009). In this homework, a reckonable feedback forms every day to a trial of 126 accounting branch students at a vocational school in Turkey.

Key words: *ethics, ethical behavior, vocational school student*

Introduction

Moral awareness in the education program is a progression where a student has the capacity to diagnose and construe that a circumstance comprehends an honest topic. It requires the students to aware of identifying how one's action will harm to the other persons and could reason reason-act relations of the ethical condition in his/her social environment (Nejati, M., Jamali, M. And Nejati, M., 2009; Sahnkaran & Bui, 2003). The student should recognize the presence of ethical problem mean which he/she could do properly and duck to non-ethical achievement. It is important point that the students are cognizant to ethical circumstances, it does not always signpost the conclusion of the verdict progression.

As well, non-ethical actions is not outward. The existence of non-ethical activities among students can be meticulous by their coach. A sentient bid of trainers to fashion ether that reassure ethical student actions is can be efficacious in the school milieu. In past donkey's years, alertness to societal values and its inclusive upshot on ethical ideals is upward. Societal values of realms can mark all happenings such as sportive and professional happenings. This take in ethical parts of this expanses. The insolence on the way to ethics may be unreliable from one realm to another unfluctuating if they are very adjacent separately added organically (Aydin at all, 2017c; Singhapakdi & Marta, 2005).

Students' ethical behavior depend on genders

Nejati et all. (2009) in their study of unprincipled actions of a student group determined that professional students keep a tally pointedly minor on honest advance and honest cerebral gauges than the other study areas. According to another study of this team, they noted that most of all students (65.1%) conveyed which students have angry in high school, vocational school, and university life (Nejati, M., Jamali, M. And Nejati, M., 2009). Ferrer and Skinner (1988) stressed that when the much of commercial actors reflected to be non-ethical to transfer from net a non-paid music's, more students on or after composition departments had the equivalent understanding than the professional students. Additionally, students ponder photocopying marketable program and taking composition data on or after the internet to be tolerable during the education life.

The system of gender socialization has been searched by unlike examinations from unlike realms (Nonis & Swift, 2001). A study group proved that female participants were more connected with economic and commercial issues, when female participants were more concerned with social relations (Nejati, M., Jamali, M. And Nejati, M., 2009; Ruegger & King, 1992).

Method

There have be situated unlike bids for computing ethics mid count lower scholarships on all neck and neck of students' ethics. Roughly edifying scientists have leisurely the brashness on the way to ethics via feedback form, a uncommon of them have sightsaw plaintiffs' behavior of ethical conditions.

The trial for this homework emanates on or after one vocational school in turkey. The system castoff to accumulate figures for this broadside was passed purchasable in justification branch per 2 first class assemblages and 2 subsequent class groups 126 students be situated joined to the pursuit. This was abundant number to fix students' inkling round ethical actions and modifications flanked by genders. Table 1 elasticities the gender cut of the homework trial. As shown 55% of the plaintiffs be situated men. In addition, plaintiffs' time of life assortments from 18 to 25 years old.

Table 1 gender of study sample

Category	Frequency	Percent	
Feminine	57	45.2	
Female participant	69	54.8	
In this study we search for the undergraduates are pointedly	Total	126	100.0
			suppositions; masculine lower way on the way to

“ruins” than feminine students, masculine students are pointedly lower way to “egoism” than feminine students, masculine students are pointedly lower way on the way to “unprincipled” than feminine students and finally, female participant students are meaningfully lower way to “computer ethics” than feminine students. For the aim of computing students’ ethical activities, a form was improved by Muncy and Vitell (1992).

Findings

We presented the discoveries in table 2. The grades illustration that masculine plaintiffs have a bigger callous in very four groupings of ruin of school protocols, egoism, academic unprincipled, and supercomputer ethics, import. It is clear that students lean toss to illustration a lowered amount of ethical actions for twofold genders.

Table 2 students’ ethical behavior.

Category	Gender	Mean	Standard deviation
Violation of school regulations	Feminine	1.784	0.351
	Female participant	1.654	0.257
Selfishness	Feminine	1.443	0.778
	Female participant	1.359	0.403
Academic cheating	Feminine	2.315	0.578
	Female participant	1.782	0.683
Computer ethics	Feminine	2.582	0.680
	Female participant	1.593	0.486

We can say that, according to above table, the female participant students have a pointedly lower way insolence on the way to ethics. In order to test the trustworthiness of the homework, we applied Cronbach’s alpha in cooperation discretely and organized for all the aspects. The Cronbach’s alpha for all the 19 items was 0.726. In order to test whether these modifications are substantial, we everyday t-trial. Even if both feminine and female participant plaintiffs get a mean value as lower than the mean value in the groups, the presentation of t-test shows that female participant respondents have a pointedly lower way actions on the way to all the groupings than feminine students (table 3). (Nejati, M., Jamali, M. And Nejati, M., 2009).

Results

Focusing on the findings, that is significant for vocational school to make students with ethical information, abilities and beliefs to respond with ethical impasses and level to do ethical resolution. Therefore, we recommend that vocational schools or other education society should promote the ethics values through training (Nejati, M., Jamali, M. And Nejati, M., 2009).

It is same central to cognizant of that one of the prime penalty area of any edifying the social order is to advance students’ in cooperation in my view and for money in the instruction life expectancy. It has two imports that first, if students with essential assistances and academic evidence, second, style them aware with the social order and professional ethical ideals for their ensuing life expectancy. This homework’s discoveries are central because of its presence firs in this expanse directed in turkey.

References

- Ferrell, O. C., & Skinner, S. J. (1988). Ethical Behavior And Bureaucratic Structure In Marketing Research Organizations. *Journal Of Business Ethics*, 25, 103–109.
- Kohlberg, L. (1981). *Essays On Moral Development. The Philosophy Of Moral Development. Moral Stages And*
- Lozano, J. M. (2000). *Ethics And Organizations*. London: Kluwer Academic.
- O’leary, C. (2008). An Empirical Analysis Of The Positive Impact Of Ethics Teaching On Accounting Students. *Accounting Education*, Vol. 18, No. 4-5, Pp. 505-520.
- Muncy, J. A., & Vitell, S. J. (1992). Consumer Ethics: An Investigation Of The Ethical Beliefs Of The Final Consumer. *Journal Of Business Research*, 24(3), 297–312.
- Nejati, M., Jamali, M. And Nejati, M., (2009). Students’ Ethical Behavior In Iran. *Journal Of Academic Ethics*, 4, Pp. 277-285.
- Nonis, S., & Swift, C. O. (2001). An Examination Of The Relationship Between Academic Dishonesty And Workplace Dishonesty: A Multicampus Investigation. *Journal Of Education For Business*, 69–76.
- Pass, S., & Willingham, W. (2009). Teaching Ethics To High School Students. *The Social Studies*, January/ February.
- Ruegger, D., & King, E. W. (1992). A Study Of The Effect Of Age And Gender Upon Student Business Ethics. *Journal Of Business Ethics*, 11, 179–186.
- Sankaran, T. & Bui, T. (2003). Relationship Between Student Characteristics And Ethics: Implications For Educators. *Journal Of Instructional Psychology*, Vol. 30, No. 3, Pp. 240-253.
- Singhapakdi, A., & Marta, J. K. M. (2005). Comparing Marketing Students With Practitioners On Some Key Variables Of Ethical Decisions. *Marketing Education Review*, 15(3), 13–25.

Sosyal Medyanın Seçmen Tercihleri Üzerindeki Etkisi: Kocaeli İli Örneği

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Özet

Sosyal medya, günümüz bilgi ve iletişim teknolojileri kapsamında artık vazgeçilmez bir platform haline gelmiştir. Bu platform seçim zamanlarında kendini siyasi arenada daha çok göstermektedir. Sosyal medyanın son zamanlarda siyasi arenada artan popülaritesine rağmen konseptinin yeni olduğu söylenemez. Son birkaç yılda dijital medyada görülen en önemli gelişmelerden birisi sosyal paylaşım ağ kullanımlarının siyasi partiler tarafından gün geçtikçe artmasıdır.

Sosyal medya uygulamalarının ortaya çıkmasından beri web siteleri milyarlarca aktif kullanıcıları da beraberinde getirmiştir. Çok az sayıda kişi böyle bir gelişmenin gerisinde kalmıştır. Sosyal medya geleneksel pazar alanlarını bile etkilemiştir. İnternet tabanlı uygulamalara bağlı olarak güvenlik sistemi içinde kullanıcılara profiller oluşturma imkânı tanımıştır. Farklı kullanım alanları ile genişleyen sosyal medya politika alanında özellikle seçmen profillerine ulaşma konusunda ayrı bir öneme sahiptir. Seçmenlerin oylarını etkileyen dijital ortamlar siyasi partilerin dikkatini çekmiştir. Artık günümüzde politikacılar çok kısa bir sürede daha fazla kitleye ulaşmak için çaba göstermektedir.

Bu araştırma sosyal medyanın seçmen tercihleri üzerindeki etkisini Kocaeli ili örneğine dayalı olarak tespit etmek amacıyla yapılmıştır. Nicel araştırma yönteminden faydalanılmıştır. Rastgele örneklem ile 100 sosyal medya kullanıcısına anket uygulanmıştır. Yoğun politik bilgi paylaşımlar ve seçmen yaşı dikkate alınarak yaşı on sekizden fazla olan bireyler tercih edilmiştir. Tüm geçerlik ve güvenilirlik analizleri için Akman ve Cumaberk Kızı'nın sosyal medya anket çalışmasına yer verilmiş ve çalışmada SPSS 20 (Statistical Package for the Social Sciences) istatistik programı uygulanmıştır.

Anahtar Kelimeler: Sosyal medya, yeni medya, seçmen tercihleri

Giriş

Geleneksel kültürde sözlü olarak sağlanan iletişim, insanların paylaşımlarını farklı boyutlara taşımıştır. Paylaşımlar sonucunda ortaya çıkan haberleşme ile medyanın zaman ilerledikçe önem kazanması toplumların yaşam tarzlarını da etkilemiştir. Medya; Türkçe 'de kitle iletişim araçları olarak adlandırılmakla birlikte geniş bir kitleye seslenerek bilgi, haber, düşünce ve görüş alışverişini kapsamaktadır (Cereci & Özdemir, 2015).

Medya, kitle iletişim araçlarını kapsayan gazete, dergi, radyo istasyonu, televizyon kanalları gibi farklı şekil, aygıt ve sistemlerin bütünüdür (Danesi, 2009). Haberleşme ile birlikte daha çok medyaya bağımlı hale gelen kitleler herhangi bir konuda karar verme aşamasında dahi medyanın etkisinde kalmıştır. Hangi ürünü alacaklarından tutun da hangi partiye oy vereceklerini bile artık medyanın etkisinde kalarak insanlar karar vermektedirler. Zaman geçtikçe geleneksel medya ile birlikte internetin ortaya çıkması ile birlikte artık yeni medya popüler hale gelmiştir. Yeni medya ise geleneksel medyadan farklı bir biçimde dijital kodlama sisteminde temellenen multimedya vasıtası ile çok katmanlı etkileşimin gerçekleştiği yüksek hızda karşılık bulan iletişim araçları olarak tanımlanmaktadır (van Dijk, 2004). Yeni medya kavramına farklı şekillerde bakış açıları da getirilmeye çalışılmıştır. Bunlar özellikle de bilginin dağıtılmasıyla konusuna yöneliktir. Fakat yeni medya kullanımı ile kullanıcı aktif bir pozisyon taşımaktadır.

Yeni çıkan teknolojiler ile internetin kullanımını, aynı zamanda eski teknolojiler için geliştirilen yeni yöntemler yeni medya ile karşımıza çıkmaktadır. Örnek verilecek olursa bunlar için; internet gazeteleri, e book, dijital animasyon ve 3D filmlerden bahsedilebilir (Bulunmaz, 2011). Benzer şekilde İpodlar, akıllı telefonlar, bilgisayar, internet ortamı, dijital oyunlar ve iletişimciler başka bir deyişle bütün bu dijital teknolojiler, yeni medya başlığı altında toplanmaktadır.

İnsanlar artık çok kısa bir sürede hatta anlık bir şekilde taleplerine ulaşmaya çalışmaktadır. Bunun için de sosyal medya vazgeçilmez olmuştur. Sosyal medya kavramı; kurumsal medyanın gözdesi, kullanıcı tarafından üretilen içerik, medya odaklı endüstriler, yakınsama kültürü, Jay Rosen'in eskiden izleyici olarak bilinen insanlar, siyasi açıdan beslenen katılımcı medya, Yochai Benkler'in süreç odaklı üretimi ve Tim O'Reilly'nin bilgisayar programlama odaklı Web 2.0 ifadeleri ile ilişkilendirilebilmektedir (Mandiberg 2012, 2). 90'lı yılların ortalarında, kişisel bilgisayarların yaygın olarak uyarlanmasıyla kullanıcılar sohbet odaları, haber grupları ve anlık mesajlar gibi hizmetlere de ilgi duymaktaydı. Yeni olan, sosyal medyanın genişlemesi (YouTube, Facebook, Twitter Instagram) ile internette yalnızca sosyalleşmekten çok daha fazlası için kullanılmasıdır (Malik, 2014).

Yıllar boyunca alanda uzman ve araştırmacı birçok yazar sosyal medyayı ve sosyal medyanın insanlar üzerinde bıraktığı etkileri incelemiştir. İnceleme yapanlardan çok azı yeni medyanın tanımını belirgin bir biçimde ifade etmiştir. Temel anlamda yeni medya, sürekli gelişen ve gelişmekte olan ve kullanımları olan dijital iletişim teknolojisidir (Peters, 2009). Yeni medya, internet ile ilgili teknolojiyle ilişkilendirilmiştir. Sosyal medya, bir tür yeni medya olarak düşünülebilir. Bununla birlikte, sosyal medyanın bir takım yeni medya olarak nitelendirilebileceğini unutmamak gerekir; sosyal medya kendi özgün özelliklerine sahiptir.

Aslında, sosyal medyanın gerçek olup olmadığı ve sosyal olarak nasıl algılandığına karar vermek basit bir soru değildir. Dolayısıyla, sosyal medya kavramını açıklığa kavuşturma amaçlı bir sosyal teori yaklaşımı, üç sosyalite biçimini oluşturan üç sosyal bilgi sürecini tanımlayarak ilerletilebilir. Bunlar; biliş, iletişim ve işbirliğidir (Troitter & Fuchs, 2014). Bu görüşe göre, bireyler başkalarıyla etkileşim kurmak için kullandıkları belli bilişsel özelliklere sahiptir. Buna göre paylaşılan paylaşım alanları ortaya çıkmaktadır. Bazı durumlarda, bu alanlar yalnızca iletişim için değil aynı zamanda genel sosyal sistemlerin yeni niteliklerinin birlikte üretilmesi ve toplumun oluşturulması için de kullanılmaktadır.

Üç sosyalite biçimini oluşturan düşünce, farklı toplumsallık biçimleriyle ilgilidir. Örneğin biliş kavramı, Emile Durkheim'in sosyal gerçekler konseptiyle ilgilidir. İletişim konseptini, Max Weber'in sosyal eylemler ve sosyal ilişkiler kavramları oluşturmaktadır. İşbirliği konsepti ve işbirlikçi çalışma modeline göre, medyayı ve temelde bilişimi destekleyen çevrimiçi platformları (gazetelerin web siteleri) sosyal medyadır. Öncelikle iletişimi destekleyen medya (e-posta gibi) sosyal medya ve öncelikle topluluğu destekleyen yapı ve ortak çalışma (Wikipedia, Facebook gibi) yine sosyal medyadır (Troitter & Fuchs, 2014).

Bu, sosyal medyanın karmaşık bir kavram ve farklı sosyal medya türlerinin olduğu anlamına gelmektedir. Ampirik çalışmalar, en güncel gelişmenin, özellikle Facebook gibi sosyal ağ sitelerinin ve Wikipedia gibi wikilerin ve Twitter gibi mikroblogların yükselişinden kaynaklanan sosyal medyanın İnternet üzerindeki önemine vurgu yapmaktadır. Sosyal medya, sosyal paylaşım ağlarını birincil iletişim biçiminde kullanmaktadır.

Sosyal ağ siteleri, bireylerin sınırlayıcı bir sistem içerisinde kamuya açık veya kamuya yarı açık bir profil oluşturmaya, bağlantı paylaştıkları diğer kullanıcıların bir listesini ortaya çıkarmasına ve bağlantı listelerini ve başkaları tarafından sistem içinde yapılanları görüntülenmesine izin vermektedir. Sosyal medya, insanların seçtikleri farklı kişi ve arkadaşlarıyla veya yeni insanlarla bilgi paylaşımlarını sağlayan çevrimiçi bir sistemdir. Teknolojik gelişmelerin gerisinde kalmak istemeyen politikacılar amaçlarına ulaşmak için geleneksel medya araçları ile de bağlantı kurmaktadır. Yeni medyayı milyonlarca kişiye anlık olarak ulaşabilmek için kullanılmaktadır.

Sosyal medyanın gelişmesi ile birlikte politikacıların vatandaşa karşı sorumlu olma ve hesap verme olasılığı da artmaktadır. Seçmenler kısa sürede oy vermek istediği politikacıya ulaşmak istemekle birlikte politikacının da bunun bilincinde hareket etmesi ve sorumluluğunun arttığını bilmesi gerekmektedir. Aslında demokratik ülkelerde zaten vatandaşa karşı sorumlu olma ve hesap verme söz konusu olmasına rağmen gelişen yeni medya ile birlikte bu durum daha kolay bir hale geldi (Albayrak, 2012).

Bilgi ve iletişim teknolojileri sayesinde artık her bir politikacı çağın gereklerine uyarak sosyal medyayı en iyi şekilde kullanmaya çalışmaktadır. Seçmenlerin her bir oyunu alabilmek adına siyasi partiler de internet üzerinden kendi web sitelerini güncellemektedir. Yapılan her bir çalışma siyasi platformda yeni medyayı daha fazla ön plana çıkartmaktadır. Artık yeni kurulmakta olan partiler dahi planları arasında yeni medyaya yer vermektedir. Bunun içinde ayrıca maddi kaynaklar ayrılmaktadır. Özellikle ABD seçimlerinden sonra Obama'nın zaferi politikacılara farklı bir bakış açısı kazandırmıştır. Sadece kullanılan e maillerin dahi ne kadar ön plana çıktığı aşikardır.

Araştırmada sosyal medya kullanıcılarının hangi sosyal medyayı ne sıklıkta kullandıkları, sosyal medyada ne kadar süre geçirdikleri, siyasi tercihleri üzerindeki etkisi, siyasal gelişmeler karşısındaki pozisyonları tespit edilmektedir. Yeni medyada en çok tercih edilen sosyal medya araçların kullandıkları oylarda ne kadar etkili olduğu bu araştırma ile ortaya çıkarılmaktadır.

Araştırmanın Amacı

Sosyal medya, bireylerin kitle ile yazar rolü arasında akıcı ve esnek bir şekilde geçiş yaptığı çevrimiçi iletişimler olarak algılanmaktadır (Thornley 2008'den aktaran, Gromark ve Schliesmann, 2010, s.5). Bunu için, kodlama, içerik paylaşma, yorum yazma, paylaşma veya ortaklaşa ilgi alanları etrafında toplum oluşturma gibi konularda bilgi sahibi olmayan herkesin yararlanabileceği sosyal yazılımlar kullanılmaktadır.

Sosyal medya geleneksel medyadan farklıdır çünkü nispeten ucuzdur. İnteraktif olmak isteyen herkese erişilebilir bilgi elinin altındadır. Sosyal medyanın bir sürümü onlarca yıldır var olmakla birlikte, 2003'te myspace.com ve 2004'te facebook.com olan sosyal paylaşım sitelerinin oluşturulmasıyla büyük bir gelişme kaydedilmiştir. Bu siteler, bireylerin arkadaşlarını ve ailelerini kendi ortak bir platformda profil oluşturduğu ve buldukları bilgileri yayınlamasına izin verdiği için önem arz etmektedir. 2004'ten beri bu siteler hızlı bir büyüme göstermiştir (Gromark ve Schliesmann, 2010).

Sosyal medyada en çok tercih edilen sitelerden birisi Twitter'dır. Twitter bir mikroblog sitesidir. Bu websitesi, kullanıcıların bilgilerini takip eden diğer kullanıcılara tweet atmasına olanak tanımaktadır. Bir tweet, takipçilerin zaman çizelgesinde görünen kısa bir mesaj, 140 karakter veya daha az olabilmektedir. Twitter, politikacılar için

en sevilen bir platform haline gelmiştir (Dugan, 2010'dan aktaran Gromark ve Schliesmann, 2010, s.6). Politikacılar diğer web sayfalarındaki bağlantıları sık sık paylaşmaktadır. Twitter, siyasetçilerin kendi seçim bölgelerindeki belirli soruları cevaplamının hızlı ve kolay bir yoludur. Tahmini olarak 225 milyon Twitter kullanıcısı bulunmaktadır (Bullas, 2011).

Seçmenler üzerinde sosyal medya kullanımı etkili olduğu gibi bulundukları yer de önem taşımaktadır. Seçim kurallarının etkileri, seçmenlerin ortak, sınırlı bir ilgi alanıyla coğrafi dağılıma eleştirel biçimde bağlıdır. Sınırlı çıkarlar, oylama yapan nüfusun nispeten küçük bir yüzdesi tarafından paylaşılan ekonomik çıkarlar olarak tanımlanır. Sınırlı ilgi alanlarını paylaşan seçmenler coğrafi olarak bir seçmen ilinde yoğunlaşabilirler. Bu durumda, sınırlı ilgi alanlarını paylaşan seçmenler çoğul sistemlerde nispeten daha fazla siyasi etkiye sahip olacaklar. Bu noktayı açıklamak için, çalışanlarının coğrafi olarak bir seçim bölgesinde yoğunlaştığı ülke toplam nüfusunun yüzde 2'sinden daha fazlasını kullanan bir sanayi olduğunu düşünün. Bu endüstride istihdam edilen seçmenlerin endüstrinin ekonomik performansı hakkında ortak bir sınırlı ilgi vardır. Bu seçmenler, endüstrisinin ekonomik kaderini iyileştiren hükümet programlarını desteklemektedir (Hiscox, 2002).

Çeşitli hükümet programları zorunlu olabilmektedir. Örneğin sübvansiyonlar, endüstriyi daha düşük maliyetli dış ithalat ile rekabete karşı koruyabilmekte, ücret ve istihdamı rekabetçi piyasa düzeyinin üstünde tutabilmektedir. İngiliz tekstil endüstrisine yapılan destekler tam olarak bu sebeplerden ötürü finanse edilmiştir. İthalat rekabetindeki hızlı bir artış, coğrafi olarak yoğunlaşan tekstil endüstrisi, hükümet tarafından endüstride istihdam ve ücret seviyelerini korumak için ortaya çıkarılmış bilinçli bir yardım programı ile sübvansiyonlanmaktadır (Rickard, 2012).

Devletin yardımına ilgi duyan seçmenlerin coğrafi olarak dağınık olması durumunda, sübvansiyonlar çoklu sistemlerde politikacılar için verimsiz bir seçim aracıdır. Seçmen oylarında yalnızca coğrafi olarak tanımlanan unsurlarından destek alan politikacılar, coğrafi olarak dağınık çıkarlara hitap edebilecek az sayıda teşvikte sahiptir. Bunu yapmak aslında görevdeki kişilerin yeniden seçilme şansını en üst düzeye çıkarır çünkü yaygın çıkarlara hitap eden seçmen ödülleri ilçelere dağılmaktadır. Örneğin, istihdamı coğrafi olarak bütün bir ülkeyi kapsayan bir endüstride, sanayiye özgü sübvansiyonların faydaları tüm seçmen bölgelerinde seçmenlere tahakkuk eder. Bu durumda sübvansiyonları teşvik etmek, çoklu sistemlerde oy kazanmak için verimsiz bir yol olur. Hükümet harcamalarını bu tür programlara tahsis etmek çoğul sistemlerde, bir seçim perspektifinde değerlendirilirse, yetersizdir.

Türkiye'deki seçmen tercihlerine bakıldığında zaman seçmenlerin siyasi partilere göre tercih farklılıkları genel olarak ideolojik akrabalığı olan partiler arasında gerçekleşmiş olduğu görülmektedir. Seçmen tercihleri, merkez sağ ve aşırı sağ veya merkez sol ve aşırı sol kümelenmelerinde farklılık arz etmektedir. 1961'den itibaren yapılan on parlamento seçiminde merkez-sağ veya aşırı sağ partiler seçmenlerin üçte ikisinin desteğini almıştır. Yine aynı dönemde merkez-sol ve aşırı sol partiler ise yaklaşık olarak üçte bir oranında seçmenlerden oy almıştır (Temizel, 2012).

Göze çarpan bir diğer nokta ise, seçim davranışları ile parti sistemi arasındaki karşılıklı ilişkidir. Parti sisteminde, ayrıntılı anket verileri ile kritik seçimler ve yeniden düzenlemeler üzerine odaklanmalar söz konusudur. Parti sistemi ile birlikte parti koalisyonlarının siyasal ve toplumsal temellerindeki değişiklikler, daha bilimsel olarak daha fazla dikkat gerektiren konulardır (Bartels, 2008).

Seçmenlerin sosyal medya dışında değişik faktörlerden etkilenecek partilere oy verdikleri bir gerçektir. Ancak günümüzde sosyal medya kullanıcıların yeni medyadan ne kadar çok etkilendiği çalışmanın önemli noktalarından birisidir. Özellikle Türkiye'de sosyal medya kullanıcılarının nasıl bir yol izledikleri merak konusudur. Seçmen tercihleri üzerine yapılan birçok araştırma ve farklı çalışmalar görmek mümkündür. Fakat seçmenlerin hangi dönemde hangi medya aracını kullanarak oy kullanmaya karar verdikleri siyasi partilerin de merak ettiği en önemli konulardan bir tanesidir.

Bu çalışmanın amacı da yeni medyanın seçmen üzerindeki etkisini ortaya çıkarmaktır. Seçmenlerin oy kullanırken nelere dikkat ettiği, yeni medyanın kendilerini ne kadar etkilediği ve seçim zamanlarındaki tercih farklılıklarını tespit etmek, sosyal medyayı kullanım amaçlarını kullanım sıklığına göre belirlemek, siyasi alanlardaki gelişmelerin tercih düzeylerini ne kadar çok etkilediğini ortaya çıkarmak araştırmanın amacını oluşturmaktadır.

Araştırmanın Önemi

Yeni medyanın ABD'de Devlet Başkanlığı seçimlerinde siyasal kampanyalarda aktif bir biçimde kullanılması Obama'nın seçimi kazanmasında sosyal medyanın önemini arttırmıştır. Yine 2011 yılında Arap Baharı ismiyle anılan, Orta Doğudan Kuzey Afrika'ya kadar uzanan ve birkaç devleti içine alan siyasal iktidara karşı olan örgütlenmeler sosyal medya çerçevesinde gerçekleşmiştir. Bu durum sosyal medyanın kitleler üzerindeki etkisinin oldukça büyük olduğunu göstermektedir (Kızı, 2016).

Facebook, YouTube ve özellikle Twitter, Obama taraftarlarına önemli konular hakkında Obama'nın neler hissettiğini, neye inandığını ve nasıl bir strateji izlediğini bildirmiştir. Bu sosyal paylaşım ağı siteleri siyasi platformda önemli sanal topluluklar haline gelmiş, sıklıkla kullanılmış ve siyasi arenada nüfuzlarına meşruiyet sağlamıştır. Barack Obama'nın zaferi ile Hindistan'daki sosyal medya kullanımı genişledi ve ilk kez 2011 yılında sosyal medya yolsuzluğa karşı Hindistan'da yapılan hareketlerde kullanıldı (Biswas, Ingle ve Roy, 2014).

Her türlü yaşanan yolsuzluk veya güncel olaylara karşı dahi hızlı bir şekilde bilgi yayınlamak ve protesto düzenlemek için sosyal medya kullanılmıştır. Hintliler, Hindistan'da yolsuzluğa karşı desteğini göstermek için sosyal medyada yer almışlardır. Ancak, sosyal medyayı bu harekette kullanmanın ana amacı, insanlar arasında düşük maliyetle farkındalık yaratmak için insanları bu harekete çekmek ve dâhil etmektir.

Sosyal medya, etkileşimli ve kullanıcı tarafından üretilen içeriği kullanan bir iletişim biçimini ortaya çıkarmaktadır. Yeni bilgi ağı ve bilgi teknolojisi ön plana çıkmaktadır. Burada kişilerarası ilişkiler sürdürülmektedir. Tipik sosyal medya ağı hizmetleri, içerik paylaşımı, web toplulukları ve internet forumları ile insanlar artık daha hızlı bir biçimde gündemi takip etmektedirler.

Sosyal ağ siteleri, hem boş zamanlarında hem de iş yerinde milyonlarca internet kullanıcısının katıldığı kitlesel bir çevrimiçi etkinliğe doğru büyümektedir. Bununla birlikte, bu alanların sosyo-ekonomik etkileri üzerine araştırmalar yapılmıştır. Bu sosyal ağ sitelerinin seçmenler üzerindeki etkileri, hem olumlu hem de olumsuz bir aşamadır. Sosyal ağlar, toplum başladığından beri var olan bir olgudur. İnsanlar daima sosyal ortamlarda yaşamaya çalışmışlardır.

Sosyal ağ sitelerinin yaygınlaştırılması ve bunların gündelik uygulamalara duyurulması, modern toplumlarının sosyal ağlarını nasıl yönettiklerini ortaya çıkarmaktadır. Önemli ölçüde, insanlar sosyal paylaşım sitelerinden etkilenerek siyasi tercihlerine karar vermektedirler. Sosyal paylaşım siteleri bir çevrimiçi etkinlikten milyonlarca internet kullanıcısının hem boş zamanlarında hem de işyerinde bağlantı kurduğu bir fenomen haline gelmiştir. Böyle bir gerçeklik yeni medyanın politika ve insanlar üzerinde ne kadar çok etki uyandırdığını görmek açısından oldukça önemlidir.

Bilgi ve iletişim teknolojileri dikkate alınarak politikalar geliştirilmektedir. Bunun sebeplerinden birisi seçmenlerin günlük hayatta iletişim ve sosyal paylaşım aracı olarak sosyal ağ sitelerini benimseme isteğidir. Temel iletişim için teknolojiye artan bağımlılık, sosyal ağ sitelerinin günlük süreçleri nasıl etkilediğini analiz etmemiz açısından önem arz etmektedir. Facebook, Twitter ve LinkedIn gibi siteler, kullanıcıların sıradan arkadaşları olan yakın arkadaşlıklarından bir dizi sosyal ilişki kurma, sürdürme ve hayata geçirme biçimini ciddi bir düzeyde etkilemektedir.

Politikacılar seçmenlerden çok daha fazla oy toplamak istemektedir. Bunun için sosyal medya vazgeçilmeler arasındadır. Sosyal medya; insanların düşünme, yazma ve tepki verme biçimini değiştirdi ancak siyasi uzmanlar, insanların oy kullanma biçimini de etkilediğine inanmaktadır.

Siyasi partilerin çoğu, sosyal medya zaman çizelgelerinde halkın nabzını yoklamaktadır. Bu nedenle, gittikçe daha fazla siyasetçi bir seçim aracı olarak sosyal medyanın önemini anlamıştır. Sonuç olarak, genel seçimler için dijital stratejiler siyasi gösterilerin planlanmasında siyasi partiler için odak noktası haline gelmiştir. Twitter, Facebook, YouTube, Google Plus gibi sosyal platformlarda interaktif iletişimi kullanarak artık halkın düşüncelerini okuyabilirsiniz.

Ancak sosyal medya, adaylarla seçmen arasındaki bölünmeyi gerçekten ortadan kaldırmakta mıdır? Dijital demokrasinin politik şansları değiştirebilme gücü var mı? Kazanan bir siyasi parti daha sonra strateji oluşturmak için ne yapmakta ve sosyal medyanın sosyal pazarlamaya alan etkisi hangi seviyededir? Dolayısıyla, bu tür soruların analizi ve yorumu bu araştırma ile daha fazla önem kazanmaktadır.

Sosyal medya ve siyaset arasındaki ilişki, değişim isteğinde yatmaktadır. Bugün halk, çözüm bulmak için çevrimiçi bilgi ve ağ erişimini kullanmaktadır. Her geçen gün siyasetten daha fazla soğuyan sivil toplum, sosyal medyayı bir değişim aracı olarak kullanmaya çalışmaktadır (Biswas, Ingle ve Roy, 2014). Bu durum sosyal medyanın sivil toplumun davranışlarını ne kadar çok etkileyebileceğini siyasilerin öğrenmesi açısından ayrıca önemlidir.

Bu çalışma ile Kocaeli ilinde bulunan seçmenlerin demografik bilgilerinin yanında;

1. Siyasi gündemi takip etmek için hangi sosyal medya araçlarını kullandıkları
2. Sosyal medyayı ne sıklıkta kullandıkları
3. Sosyal medyayı kullanım amaçları
4. Ne kadar süredir sosyal medya hesaplarının olduğu
5. Sosyal medyayı günde ortalama ne kadar ve ne tür cihazlar ile kullandıkları
6. Oy verme aşamasında sosyal medyada yer alan siyasi partiler ile ilgili faktörlerin ne derece önemli olduğu tespit edilecektir.

Kuram

Medya türlerine göre izleyicilerin sosyal ve psikolojik ihtiyaçlarını karşılamak için içerik türleri dikkate alınarak kullanımlar ve doyumlar yaklaşımı geliştirilmiştir (Cantril, 1942). Bazı araştırmacılar kullanımlar ve doyumlar yaklaşımının kitle iletişim araçları kapsamında sonuçlarını, izleyicilerin öncelik ve aktivitelerini dikkate alarak incelemişlerdir (Rubin, 1994). Bununla birlikte, kullanımlar ve doyumlar yaklaşımı ile ilgili araştırma yapanlar için teorik ve uygulamalı olarak temel sorular aynı kalmaktadır.

İnsanlar neden belirli bir arabuluculuk iletişimine ihtiyaç duymakta ya da başka bir iletişim türünde yer almakta ve onlardan hangi doyumları almaktadır gibi soruları cevaplamak için geleneksel araçları ve tipolojileri

kullanmaya devam etmekle birlikte; etkileşim, medya parçalanması (demassification), hipermetinsellik (hypertextuality), eş zamansızlık (asynchronicity) ve etkileşimli iletişimin kişilerarası yönleri gibi kavramları da içeren kullanımlar ve doyumlar yaklaşımının mevcut teorik modellerinin genişletilmesi gerekmektedir (Ruggiero, 2000). Sonrasında ise, yeni medya çerçevesinde, gelişmekte olan psikolojik, sosyolojik ve kültürel bağlamda modernize edilmiş bu yaklaşım teorisi sosyal medyaya uyarlanabilirse, 21. yüzyıl için son derece uygulanabilir bir yaklaşım olduğu iddia edilebilir.

İzleyiciler yayınları, farklı biçimlerde yorumlayıp verilmek istenen mesajın dışında kendisine göre yorum katabilmektedir (Yaylagül, 2016). Buna göre, izleyicilerin kendi yorum ve özneliği önem arz etmektedir. O halde medya; izleyicilerin bireysel ihtiyaçlarını gidermelerini sağlayan kaynaktır. Aslında kitle iletişim araçları tarafından yayılan birtakım mesajları algılamak özgür bir biçimde ve sonsuz bir seçenek halinde değil, izleyicilere medya tarafından ne sunuluyorsa onu tüketme şeklinde gerçekleşmektedir. Sonuç olarak izleyiciler medyadan aldıkları mesajları üyesi oldukları bazı grupların üyeleri ile paylaştıkları ortak kültürel kodlar çerçevesinde çözümlemeye çalışmaktadırlar.

Kullanımlar ve doyumlar yaklaşımında yeni medyanın insanlara ne yaptığından çok insanların yeni medya ile ne yaptıkları ön plana çıkmaktadır. Toplumun psikolojik ihtiyaçları da dikkate alınmaktadır. İhtiyaçlara göre insanlar birtakım beklentiler içerisine girebilmektedirler. Yeni medya sayesinde bu ihtiyaçlardan bazıları giderilmektedir. Ancak bazı durumlarda yeni medyanın etkisi ile birtakım istenmeyen veya niyet edilmeyen sonuçlarla karşılaşmak da söz konusu olmaktadır.

Sosyal medyanın seçmenler üzerinde bıraktığı etkiden çok, seçmenlerin sosyal medyayı nasıl anlamlandırdıkları önem taşımaktadır. Hangi paylaşım platformu üzerinden ne tür paylaşımlarda bulundukları ve sosyal medyanın kendileri için ne anlama ifade ettiği araştırmanın odak noktası çerçevesinde yer almaktadır. Betimsel çözümleme ile seçmenlerin sosyal medya araçlarını kullanarak ne yaptıkları ortaya çıkarılmaktadır. Aslında bireysel bir çözümlemenin yanı sıra grup etkileşimleri ile nasıl bir iletişime geçtikleri kullanımlar ve doyumlar yaklaşımı ile ele alınmaktadır.

Blumler, McQuail ve Brown'un 1972 yılında İngiltere'deki televizyon izleyicileriyle ilgili çalışmaları kullanımlar ve doyumlar yaklaşımının daha iyi anlaşılabilmesi açısından değerlendirilebilir. Yaptıkları çalışmada, daha çok eğlenceye yönelik oyalanma; bireysel ilişkiler, kişisel kimlik ve gözetim üzerinde durularak, incelenen kitlenin bunlardan hangisini daha çok doyurma yoluna gittikleri incelenmektedir (Severin ve Tankard 1994'den aktaran: Küçük Kurt vd. 2009). Medya bize günlük aktivitelerden kaçmak, problemlerden kurtulmak, endişeler veya gerilimlerden çıkmak, kitle iletişim araçları ile komşularımızdan daha çok birlikte olarak kişisel ilişkilerde para ve sosyal etkileşim sürecine girmek, enformasyon ve tartışmalara katılmak, medya karakterlerini ve yaşadıklarını kendi problemlerimizi çözmek için kullanmak vb. şekillerde etki altına almaktadır (McQuail, 1989).

Daha belirlenimci etki araştırmaları geleneğine karşıt olarak, kullanımlar ve doyumlar yaklaşımına yönelik araştırmalar, bireylerin bilinçli ve gönüllü bir biçimde kendi gereksinimleri, talepleri doğrultusunda medya içeriklerini araştırmaları, bulmaları ve kullanmaları üzerinde durmaktadır. Ancak bu yaklaşımda bireylerin ihtiyaçları ve bunları doyurma veya tatmin etme yöntemlerini şartlandıran ekonomik-politik alanı oluşturan sınıfsal şartlar ve bakış açısı farklı bir biçimde ele alınmaktadır (Yaylagül, 2016).

Medyanın doyuma ulaştırdığı ihtiyaçların, toplumsal kökenlerinin bulunduğunu öne süren araştırmalar vardır. Yapılan araştırmalarda kullanımlar ve doyumlar çalışmalarının temellerini oluşturabilecek bazı özellikler bulunmaktadır (Akçay, 2011). Bu özellikler izleyicilerin durumlarına göre belirlenmektedir. Örneğin izleyici etkin bir haldedir. Medyanın yayınladıklarına karşı edilgen bir durumda değildir. Verilen içerikleri seçerek almaktadır. Kendi gereksinimlerine en iyi doyumunu sağlayacak medyayı ve programı izleyici özgürce seçmektedir. Bazen medya yapımcısı programın kullanım biçimlerinin farkında değildir. Farklı izleyiciler aynı programı farklı gereksinimleri gidermek amacıyla kullanabilmektedir.

Kitle iletişim alanı üzerine yapılan araştırmalarda, kullanım ve doyumlar yaklaşımının titiz bir sosyal bilim teorisi olmadığını iddia edenler vardır. Ancak bunun tam tersi bir durumdan bahsetmek de mümkündür. Kitle iletişim hakkında kuramlar ortaya atmak yine kullanımlar ve doyumlar yaklaşımı çerçevesinde gerçekleşebilmektedir. Bilgi ve iletişim teknolojileri bu yaklaşımın önemini arttırmaktadır. Gerçekte, kullanımlar ve doyumlar yaklaşımı gazete, radyo, televizyon ve şimdi internet gibi yeni kitlesel iletişim aracının başlangıç aşamalarında her zaman bir üstünlük sağlamıştır.

Seçmenlerin dijital paylaşım modellerine göre, anlık paylaşımların yapıldığı sosyal medya ortamlarında, sosyal medyaya karşı tutumları siyasi partiler açısından oldukça önemlidir. Yüz yüze iletişimin yanında dijital ortamlarda etkileşim halinde bulunan seçmenlerin birbirleriyle nasıl bir iletişim halinde bulundukları araştırmanın kullanımlar ve doyumlar yaklaşımı ile ele alınması bakımından ayrıca önem taşımaktadır. Seçmenlerin yeni medya ortamlarında hangi siyasi partiye veya lidere hangi kriterlere göre karar verdikleri politik bağlamda araştırmanın hangi tür teoriyi dikkate alması ve incelemesi yönünden belirleyici hale gelmiştir. Araştırmada sosyal medyanın seçmenler üzerindeki bıraktığı etki ve seçmenlerin buna göre nasıl bir tavır takındıkları kullanımlar ve doyumlar yaklaşımının kullanılmasında etkili olmuştur.

Literatür Taraması

Yapılan araştırma konusu ile ilgili çeşitli çalışmalar bulunmaktadır. Bunlardan ilki oy kullanmada sosyal medyanın etkileri ile ilgilidir (Biswas, Ingle ve Roy, 2014). Sosyal medyanın seçmen kararı üzerindeki en önemli etkilerinden birisi 2008 Amerika Başkanlık Seçimleridir. Çünkü bu seçimde Barack Obama'nın seçim sürecinde reklam, 50 eyalette organize olma ve fon sağlama gibi neredeyse yeni medyanın bütün özelliklerini kullanması oldukça önemlidir.

Sosyal paylaşım ağı siteleri siyasi kampanyalarda önemli sanal topluluklar haline gelmiştir. Amerika başkanlık seçimlerinde bunlar sıklıkla kullanılmış ve siyasi arenada nüfuzlarına meşruiyet sağlamıştır. Obama'nın zaferi ile Hindistan'daki sosyal medya kullanımı da genişlemiştir. Sosyal medya 2011 yılında Hindistan'da yolsuzluğa karşı yapılan hareketlerde kullanılmıştır (Biswas, Ingle ve Roy, 2014).

Temel iletişim için teknolojiye artan bağımlılık, sosyal medya ağlarının günlük süreçleri nasıl etkilediğini analiz etmenin önemini vurgulamaktadır. Facebook, Friendster ve LinkedIn gibi siteler, kullanıcıların sıradan arkadaşları olan yakın arkadaşlıklarından bir dizi sosyal ilişki kurma, sürdürme ve hayata geçirme biçimini etkilemektedir. Politikacılar için sosyal medya kullanıcılarının özellikle de seçmenlerin sadece tek bir seçimin yanı sıra sonraki seçimlerde de verdikleri kararlar önemlidir.

Sosyal medya; insanların düşünme, yazma ve tepki verme biçimini değiştirdi ancak siyasi uzmanlar, sosyal medyanın insanların oy kullanma biçimini de etkilediğine inanmaktadır. Siyasi partilerin çoğu, halkın sosyal medya zaman çizelgeleri üzerindeki gündemi nasıl takip ettiklerinin farkındadır; bu yüzden, daha fazla siyasetçi seçim medyası olarak sosyal medyanın önemini fark etmiştir. Sonuç olarak, genel seçimler için dijital stratejiler siyasi gösterilerin planlanmasında merkezileşmiştir. Bir partinin, Twitter, Facebook, Youtube, Google Plus gibi sosyal platformlarda interaktif varlığı rahatlıkla takip edilebilmektedir. Halkın düşüncelerini okumak isteyen herkes için, günümüz dijital medya kullanımı her geçen gün artmaktadır.

Sosyal medya ve siyaset arasındaki ilişki, değişimin talebinde yatmaktadır. Bugün halk, çözüm bulmak için çevrimiçi bilgi ve ağ erişimini kullanmaktadır. Araştırmada siyasi ilgisizlik karşısında artan hüsrana sivil toplumun, sosyal medyayı bir değişim için kullanmaya çalıştığı ileri sürülmektedir. Bu çevrimiçi devrim teknolojiyle ve insan davranışlarının değişmesi hakkında daha fazla araştırma yapabilmektedir. Sosyal medya, tüketici davranışını, bilgi ediniminden, memnuniyetsizlik ifadeleri veya davranışları gibi satın alma sonrası davranışa da yansıtmıştır (Mangold & Faulds, 2009'dan aktaran Biswas, 2014, s.131).

Araştırmalarla ilgili bir diğer çalışma coğrafi olarak ele alınan seçim sistemleridir (Rickard, 2012). Coğrafya, seçim kurallarının etkileri hakkında siyasi rakiplerin beklentilerini açıklamaya yardımcı olmaktadır. Ortak bir menfaate sahip olan seçmenler coğrafi olarak bir seçim bölgesinde yoğunlaşmış olabilir. Alternatif olarak, paylaşılan belirli bir ilgi alanına sahip seçmenler tüm ülkeye yayılabilmektedir. Seçim kurallarının siyasetçilerin belirli çıkarlara örneğin, seçmenlerin küçük bir bölümünün paylaştığı menfaatlere yönelik teşviklere etkisi, seçmenlerin dar bir ilgi alanını paylaşan coğrafik dağılımına bağlı olduğunu ortaya koymaktadır.

Demokratik kurumlar, çoğunluğa hizmet etmek için bir takım faaliyetleri görünür hale getirmektedirler. Ancak bazı demokrasilerde politikacılar, çoğu kişinin menfaatinden ziyade birkaçının çıkarlarına hizmet etmektedir. Bazı ülkelerde demokratik olarak seçilen liderlerin, sadece belirli görüşlere diğerlerinden daha duyarlı olma sebebi sorgulanmaktadır. Geniş çaplı ve büyüyen araştırma grupları, seçim kurallarının siyasetçilerin bazı seçim bölgelerine hitap etmeye yönelik teşviklerini şekillendirmedeki önemine işaret etmektedir. Bununla birlikte, seçim sisteminin politikacıları belirli menfaate en çok tepki verici hale getirdiği konusunda net bir görüş birliği mevcut değildir. Bazı araştırmacılar, seçim kurallarının çoğulculuğunun politikacıların azınlığın çıkarlarını karşılamaya yönelik en büyük teşvikleri sağladığını ileri sürmektedir. Bazıları ise, orantısız seçim kurallarının politikacıların belirli çıkarlara nispeten daha tepkisel olmasını sağladığını ileri sürmektedir (Jude, 2009'dan aktaran Rickard, 2012, s.855).

Orantılı sistemlerde rekabet eden politikacılar ve partiler, seçmenler coğrafi olarak dağınık olsalar bile, oy verme konusunda teşvikte bulunmaktadır. Orantılı seçim sistemlerinde, yasama koltukları partilerin ulusal oy paylarına göre verilmektedir. Potansiyel seçmenlerin coğrafi konumu orantılı sistemlerde çoklu sistemlere göre daha az önemlidir. Bu, coğrafi olarak yaygın sanayilere yönelik sübvansiyonların niçin orantılı sistemlerde çoğul sistemlere göre daha cömert olduğunu açıklamaktadır. Örneğin, coğrafi olarak dağınık orman sektörüne yapılan sübvansiyonlar, klasik çoğul sistem olan Birleşik Krallık'tan çok, Avusturya'da prototipik orantılı bir sistem olan sekiz ila on kat daha fazladır (Nelson, 2001'den aktaran, Rickard, 2012, s.856).

Araştırmalarla ilgili bir diğer çalışma sosyal medya ve politikanın sosyal teori yaklaşımı ile ele alınmasıdır (Troitter ve Fuchs, 2014). Tüm bilgi işletim sistemleri, web uygulamaları ve ayrıca tüm medya biçimleri, toplumsal ilişkilerden kaynaklanan kişiye ait veriyi saklamakta ve iletmektedir. Bunlar toplumsal ilişkilerde önemlidir. Herhangi bir kişi bir bilgi işletim sistemini ya da sosyal medyayı kullandığında kendi odasında tek başına olursa o zaman o kişinin toplumsal ilişkilerin ortaya çıkardığı nesnelleştirilmiş bilgiye dayandığını söylemek mümkündür.

Ancak tüm bilgi işlem sistemleri ve web uygulamaları, en az iki insanın karşılıklı olarak, anlamlı olduğu düşünülen sembollerini değiştirdikleri ve bunun insanlar arasındaki doğrudan ilişkiyi etkilediği söylenemez. Amazon başta bir kitap ve satın alınabilecek diğer ürünler hakkında bilgi sağlar; Facebook'un dahili iletişim özellikleri (posta sistemi,

yorumlar için duvarlar, forumlar vb.) olduğu halde Facebook öncelikle bir iletişim aracı değil, daha çok bilgi kaynağıdır.

İnternetin gerçek olup olmadığı ve sosyal olarak nasıl algılandığına karar vermek açıklanması gereken konulardır. Bundan dolayı, sosyal medya kavramını açıklığa kavuşturma amaçlı bir sosyal teori yaklaşımı, üç sosyalite biçimi olan *biliş*, *iletişim* ve *işbirliği* ile sosyal bilgi sürecini tanımlayarak ortaya çıkarılabilmektedir.

Araştırmalarla ilgili bir diğer çalışma politikada sosyal medya kampanyalarının seçmenlerin kararlarındaki rolüdür (Gromark, Schliesmann ve Johannesson, 2011). Oy verme davranışına ilişkin kuramlar, insanların oylarını nedenini açıklayamayabilir. Konuya ilişkin literatür, oy kullanma davranışının etkileneceği birkaç farklı yolu vurgulamaktadır. Bilgiye erişilebilirlik, sosyal ortam, gerçeklik payı ve bir kişinin belirli bir konu için hissettiği duygunun gücü, teorisyenlerin oy verme davranışını açıklamakta önemli olduğunu vurgulayan faktörlerdir. Oylama davranışını açıklayan başka teoriler olabilir ancak çalışma, sosyal medyanın oy verme davranışını ne şekilde etkileyebileceğini açıklamaktadır.

Sosyal medya araçlarından Twitter, diğer medya türlerinden daha kişisel davranarak oylama davranışını etkileyebilmektedir. Bazı araştırmalar, kişisel etkileşimde önemli ölçüde yer alan kampanya araçlarının daha etkili olduğunu göstermektedir. Twitter, kullanıcıların politikacılarla diyalog kurmalarını sağlamaktadır. Bu, sosyal medyayı televizyon reklamlarını izlemekten veya doğrudan posta almaktan daha kişisel hale getirmektedir. Böylece, sosyal medya, bir kullanıcının daha yoğun duygular yaşamasına ve belki de potansiyel bir seçmenin görüşünü etkilemesine neden olabilmektedir.

Bir siyasetçi potansiyel seçmenlere kişisel olarak yanıt vermek için zaman ayırdığında, seçmen adaya karşı bir miktar zorunluluk hissedebilmektedir. Televizyon reklamları, etkileşim duygusunu doğurmaz çünkü bireyden bilgiler istenmemektedir. Seçmen, diyalog kurarak örneğin bir sorunun cevabını verdiği için konunun önemli olduğunu düşünebilmektedir. Twitter, seçmenlerin ve siyasetçilerin bilgi alışverişini kolaylaştırarak seçmen yakınlarının görüşlerini etkilemesini kolaylaştırmaktadır. Sosyal medya platformları, insanların birçok arkadaşıyla iletişim kurmalarını ve onlarla ilgili bilgi ve görüşleri verimli şekilde yeniden yaymalarını sağlamaktadır.

Johannesson (2017), 2010 Amerika Temsilciler Meclis Seçiminde Cumhuriyetçi adayların sosyal medya faaliyetlerinin oy kullanma tercihleri üzerinde olumlu ve belirgin bir etkisi olduğunu; Demokrat adayların sosyal medya faaliyetlerinin ise etkisiz olduğunu ve net bir sonuç alınmadığını ileri sürmektedir. Buna göre toplam sosyal medya kampanyası ile seçmen katılımı arasında pozitif bir korelasyon bulunmaktadır.

Araştırmalarla ilgili bir diğer çalışma 2015 Kırgızistan seçimlerinde sosyal medyayı kullanan seçmenlerin siyasi adaylara karşı görüşleridir (Kızı, 2016). Sosyal medya sadece seçmenler üzerinde değil birçok alanda çok geniş bir etkiye sahiptir. Bilgi ve iletişim teknolojileri ile yayımlanan ağlar ile her yere ulaşmayı başaran sosyal medya, internetin gücü ile çok kısa zamanda gelişme kaydetmiştir. Geleneksel medyaya göre interaktiftir. Geleneksel medya unsurları dediğimiz yazılı ve görsel basın, yani gazete, televizyon ve diğer araçlarda iletişim daha çok tek taraflı ve tek yönlü iken sosyal medyada etkileşim söz konusudur.

Politik iletişimde değişimleri ve gelişimleri yaşamakta olduğumuz bir dönemdeyiz. Bu değişim ve gelişimler, tek yönlü doğrusal iletişimden çok yönlü iletişime doğru yaşanmaktadır. Artık monolog döneminden çok az bahsedilebilir. Mesajı hazırladıktan sonra, kitleye bu bilgiyi almasını ve gereken tepkileri vermesini beklemek yerine bugünlerde çift yönlü ve etkileşimli bir diyalog halindeki iletişim tercih edilmektedir. Doğrusal tek yönlü iletişimin yerini çok yönlü, döngüsel iletişim almaktadır. Artık tüketicilerle bilgi alış verişini yapmakla anlatmanın karşılıklı olmasını sağlayan iletişim tarzı gerçekleşmektedir (Kızı, 2016).

Seçmenler siyasal faaliyetleri ile ilgili pozisyonlarını farklı biçimlerde göstermektedir. Onların çoğu sosyal medyadaki olumlu ve olumsuz bilgilerden etkilenmekte siyasi adayların sosyal medyada etkili ve iletişime açık olmalarını ifade etmektedirler. Aslında seçmenler kendi görüşleri ile aynı görüşteki siyasi partilere özen göstermektedirler.

Seçmenlerin çoğu kendi tercihlerine yakın siyasi partileri sosyal medya üzerinden takip etmektedirler. Siyasi bilgileri almakta sosyal medyayı daha etkili olduğuna ait görüşlerini mevcuttur. Bununla birlikte geleneksel medya üzerinden siyasi olaylar takip edilmektedir. Bıkkın şehirde geleneksel medya unsurlarının aktif bir şekilde kullanılmakta olduğu ileri sürülmektedir (Kızı, 2016). Siyasi partilerin sayfaları, liderlerin fotoğrafları, onlarla ilgili videolar seçmenleri etkileyebilmektedir.

Araştırmalarla ilgili bir diğer çalışma genel seçim kampanyalarında sosyal medyanın rolüdür (Morain, 2016). Bu konu, iki alan üzerinde yoğunlaşmaktadır: Önce siyasal katılım ve sosyal medyanın vatandaşlar arasındaki siyasi ve seçim sürecindeki katılımını arttırmak için nasıl kullanıldığı ile ilgilidir. İkincisi, seçim kampanyaları ve sosyal medya araçlarının bir partiye veya bir adayın kampanyasına dâhil edilmesine yöneliktir. Başlangıç olarak, bu literatür taraması sosyal medya bağlamında siyasi katılımı anlamının bir çerçevesini sağlamaya yönelik siyasal katılım kavramını tartışmaktadır. Teorik bir çerçeve oluşturduktan sonraki bölüm sosyal medya ve siyasi katılım arasındaki bağlantılara bakmaktadır.

Bu noktada iki ana tema ortaya çıkmaktadır. Birinci tema yayın ve tüketim aracı olarak sosyal medyadır. İkinci tema ise katılım ve etki aracı olarak sosyal medyadır. Bu iki tema göz önüne alındığında, araştırma siyasi katılım ve sosyal medya üzerinde yapılan çalışmaları incelemektedir. Farklı bölümlerde seçim kampanyalarına, partilerin ve adayların diğer ülkelerdeki kampanyalarında sosyal medyayı nasıl kullandıklarına bakılmaktadır.

Araştırma genel seçim kampanyaları için sosyal medyanın önemini arttırdığını vurgulamaktadır. Haber raporlarının ve blogların içerik analizinde de bu durum görülmektedir. Seçim boyunca bu konu hakkında yorum yapan çoğu kişi, sosyal medyanın seçim için önemli bir unsur olduğunu belirtmiştir. Bununla birlikte, bu artan önemine rağmen, televizyon gibi geleneksel medya organları ve kapıdan kapıya açılmak gibi geleneksel kampanya biçimleri, seçim kazanmak için halen anahtar konumdadır ancak sosyal medya bunları önemsememektedir.

Bu, özellikle sosyal medyayı kullanan tarafların en az oy aldığını gösteren blogların analizinden elde edilen çalışmadaki istatistiklerde belirgindir. Bununla birlikte, ortaya çıkan sonuç sosyal medyanın önemli bir araştırma alanı olmadığını göstermez. Aslında seçimlerin görüşülmesi için çok sayıda insanın sosyal medyayı kullandığı ve tüm siyasi partilerin bazı sosyal medya stratejilerini kullandığı gerçeğini ortaya koymaktadır.

Araştırmalarla ilgili bir diğer çalışma Hindistan'da sosyal medyanın oy kullananlardaki etkisi üzerinedir (Malik, 2014). Araştırmaya göre başlangıçta sosyal medya platformlarındaki mesajlar önemsiz olarak kabul edilmiştir. Bunlar, yalnızca hedef kitleye pazarlama veya düzenli kişisel faaliyetleri ağda listelenen arkadaşlara açıklayan ifadeleri göndermenin bir aracıydı. 2006 yılının sonlarında, Twitter başlatıldığında, tweet'lerin amacının takipçilerine ne yaptıklarını anlatmak olduğu belirtildi (Jackson & Lilleker, 2011'den aktaran Malik, 2014, s.6). Bununla birlikte, 21. yüzyıldaki sosyal medya, eğlence için değil aynı zamanda hedef kitleye ciddi sosyal ve siyasi mesajlar dağıtmak için de kullanılmaktadır.

Sosyal medya sitelerinin, Hindistan'daki siyasi konulardaki vatandaşların davranışı üzerindeki etkileri son zamanlarda daha fazla önem kazanmaktadır. Eylül 2013'te göreceli olarak küçük bir BJP siyasi partisinin lideri olan Narendra Modi, Hindistan Başbakanlığına adaylığını açıkladı. Neredeyse 9 ay sonra, kazanılmayacağı tahmin edilen politikacı Hindistan Başbakanı oldu (Malik, 2014).

Modi'nin partisi, ağırlıklı olarak tüm politikacılar ortaya çıkan sosyal medya araçlarını zaman kaybı ve kitleyle bağlantı kurmak için kişisel olmayan bir yol olarak vurgulamakta iken, aktif medyayla etkileşime geçerek kitlelerin ilgisini çekmiştir. Bu nedenle, Modi'nin siyasi kampanyası alışılmışın dışındaydı; onun kampanya başarısı, halka konuşma ile birlikte halka ilham verme becerisine dayanmaktaydı.

Bununla birlikte, Modi'nin Hindistan'daki bireysel seçmenlerle meşgul olmak için internet ve sosyal medyayı kullanması, ona adayların hiçbir zaman göremeyecekleri düzeyde destek sağladı. O, Hindistan'ın ilk sosyal medya başbakanı olarak değerlendirilmektedir (Financial Times, 2014'den aktaran Malik, 2014, s.6). Araştırmaya göre çeşitli siyasi konularda ve bakış açılarındaki sosyal medya kullanım analizi çerçevesinde, politikacıların seçimlerde yeni medyayı göz ardı etmemeleri gerektiği sonucuna ulaşılmıştır.

Araştırmalarla ilgili bir diğer çalışma yeni medya ve siyasi kampanyalardır (Owen, 2011). Seçim kampanyaları için çok katmanlı bir iletişim ortamı vardır. Medya sistemi, genel ilgi haberlerinin halka yayılmış olduğu geleneksel medyayla ilişkili bir yayın modelinden dikkatli bir şekilde hazırlanmış mesajların ayrı bir kitle segmenti hedefleyen dar yayın modeline geçişi gerçekleştirmektedir. Finansal baskılar basındaki kurum sayılarını önemli ölçüde azaltmaya zorlamış olsa bile, orijinal siyasi seçim kampanya analizleri mesleki gazeteciler tarafından yürütülmektedir.

Ana akım medya, bloglar ve Twitter özet akışları gibi yeni medya platformlarıyla dağıtılan bilgileri hala onaylamaktadır. Aynı zamanda, yeni medyanın yaygınlaşması, iletişim ortamının çeşitlenmesini ve parçalanmasını arttırmıştır. Medya daha çok politik olarak kutuplaşmıştır. Zira aşırı ideolojik konularla ilişkili niş kaynaklar izleyicilerin büyüyen bölümlerine hitap etmektedir. Yeni kaynakların bolluğu, seçmenlerin medya tüketimlerini kişisel zevklerine uygun hale getirmelerini mümkün kılmaktadır (Owen, 2011).

Yeni medyanın seçimler üzerindeki etkisi büyüktür. Yeni medya siyasi kampanyaları, seçim sonrası ön plana çıkaran ve sonraki seçimlerde medya politikaları için yeni normlar oluşturan politik başvuruların geliştirilmesi için bir ortam oluşturmaktadır. Standart metodolojik yaklaşımlar yeni medya çağına göre güncellenmekte veya en yeni yöntemlerle birlikte kullanılmaktadır.

Dijital medya kullanıcıları tarafından kullanılan araçlardan bazıları bilim adamları tarafından veri toplamak ve analiz etmek için kullanılabilir. Bloglar, tartışma forumları ve e-posta gibi elektronik kaynaklar, bilgi paylaşımı açısından oldukça önemlidir. Ayrıca dijital araçlar incelenen bir malzeme arşivi görevi görmektedir. Bütün bu özellikler yeni medyanın siyasi kampanyalarda vazgeçilmez olduğunu göstermekte ve artık bütün siyasi partilerin yeni medyadan bağımsız hareket etmelerinin imkânsız olduğunu göstermektedir.

Araştırmalarla ilgili bir diğer çalışma seçim kampanyalarında yeni medya iletişim stratejileridir (Arulchelvan, 2014). Yeni medya teknolojileri, siyasi kampanyaya yeni bir boyut kazandırmıştır. Birçok siyasi parti kendi web sitelerini, blog'larını ve Facebook / twitter hesaplarını oluşturdu. Bu siyasi partiler yeni medya içeriğini düzenli olarak takip etmektedirler. İçerikler sürekli güncellenmektedir. Siyasi liderlerden bazıları halkın ve kadroların sorgularına tepki göstermektedir. Seçim kampanyaları için çok büyük bir istekle bu araçları kullanmaktadırlar. Siyasi partilerin bu tür paradigmaları, seçmenlere ulaşmalarında onlara önemli ölçüde yardımcı olmaktadır.

Siyasi partiler, özellikle de seçimlerde kitlelere ulaşmada teknolojileri kullanmaya gayret sarf etmektedir. Fakat seçim kampanyaları için teknoloji ve yapılandırılmaları istismar edilebilmektedirler. Bu eğilim her geçen yıl artmaktadır. Seçim kampanyası için yeni medyanın kullanımı, erişimi ve etkinliği çalışma ile analiz edilmiştir.

Genel olarak çalışma, yeni medya teknolojilerinin, özellikle de internet ve akıllı cep telefonları ile siyasi partilerin seçmenlere daha rahat ulaşabilmelerine imkân tanıdığını ortaya çıkarmıştır. Siyasi partiler, cep telefonlarının

kullanımının insanlara ulaşmanın ucuz ve etkili yol olduğunu düşünmektedir. Siyasi partiler; internet sayesinde, ki internet gelecekte kırsal kitleler arasında popüler hale gelecektir, daha başarılı olabilirler. İnternet kampanyalarında kullanılan yöntemler arasında arama motorları, afişler, reklam panoları, video klipler, etkileşimli oyunlar, e-postalar ve mobil telefon reklamları bulunmaktadır.

Araştırmada yeni teknolojilerin toplumsal değişim ve ilerleme koşullarını belirlemede teknolojik determinizm teorisine destek sağladığı vurgulanmaktadır. Belirleyici etkiye sahip olan teknoloji toplumu sosyal ve bireysel seviyelere dönüştürmede çok önemli bir rol oynamaktadır. İletişimdeki teknolojik gelişmeler sosyal, politik ve ekonomik çözümlere yol açmaktadır. Yeni medya iletişim araçları ve stratejilerinin kullanılması böylelikle yeni bir boyut kazanmıştır.

Araştırmalarla ilgili son çalışma sosyal medyanın politik katılım ve hareketlerdeki rolü ile ilgilidir (Albayrak, 2012). Araştırmada Türkiye ve farklı ülkelerdeki siyasi liderlerin sosyal medya kullanımları incelenmiştir. Bilgi ve iletişim teknolojilerinin hızla büyümesi ile birlikte artık siyasi liderler yeni medyanın her türlü imkânından faydalanma yollarına gitmişlerdir. Aslında siyasi perspektif ile değerlendirildiğinde hiçbir siyasi parti veya siyasi lider seçmenlerin oylarını kazanma adına bu tür gelişmelerin gerisinde kalmayı düşünmemektedir.

Sosyal medya, geleneksel medya ile karşılaştırıldığında siyasi iletişimde daha nesnel bir ortam sunmaktadır. Bazı ülkelerdeki geleneksel medya araçlarına kısıtlama getirilme ihtimalinden dolayı, bu araçların tarafı yayın yapmak zorunda kalması sorununu da beraberinde getirmektedir. Araştırmada bir milletvekili ile görüşme gerçekleştirilmiştir. Yapılan görüşmeye göre, geleneksel medya özellikle görsel medya olarak televizyon, yazılı basındaki medya araçları zorunlu olarak kendilerine göre tarafı olmak zorunda olduklarını ifade etmiştir.

Araştırma ile tarafı bir medya anlayışının siyasete ne denli etkisi olacağı veya olumlu katkıda bulunup bulunamayacağı tartışılmaktadır. Bundan dolayı geleneksel medyadaki tarafı yayının öne çıktığı dikkate alındığında internet aracılığıyla sosyal medyanın daha fazla etkin rol oynadığı görüşü hâkimdir. Yine araştırma ile siyasette yer alan adayların dijital medya aracılığıyla vatandaşlara daha kolay ulaşabildiği ve seçmenlerin daha nesnel bir siyaset fırsatı yakaladıkları öne sürülmektedir. Sosyal medyanın sadece Türkiye’de değil tüm dünyada bireyler arasındaki demokrasi ve özgürlük isteğinin yayılmasında ve artmasında önemli bir iletişim aracı olarak kullanıldığı belirtilmektedir (Albayrak, 2012). Sosyal ağların kullanıcı sayıları ile artması sadece dijital ortamda değil siyasi ortamda da önemli gelişmeleri de beraberinde getirmiştir. Seçmenlerin bakış açıları da sosyal medya kullanımı ile değişebilmekte veya seçmenler savundukları siyasi partilere daha fazla bağlanabilmektedir.

Literatür taraması neticesinde çalışmayı diğer araştırmalarından farklı kılan birtakım özellikler bulunmaktadır. Seçmenlerin oy kullanırken yeni medya ekseninde sosyal medyadan ne kadar etkilendikleri bu çalışma ile incelenmektedir. Ayrıca sosyal medyanın seçmenlerin politik bakış açılarını nasıl etkilediği, sosyal medyayı politik bağlamda niçin kullandıkları, sosyal medya ile ne kadar etkileşim halinde oldukları ve sosyal medyanın oy vermede seçmenlerin kararlarını ne ölçüde değiştirdiği Kocaeli ili örneğine bağlı olarak tespit edilmektedir.

Araştırmanın Yöntemi

Araştırmada sosyal medyanın seçmen tercihleri üzerindeki etkilerini tespit etmek için niceliksel araştırma yöntemi kullanılmıştır. Niceliksel araştırma, ampirik yöntemler ve ifadeler kullanan bir sosyal araştırma olarak tanımlanmaktadır. Ampirik bir ifade, gerçek dünya araştırmalarında olabilirlikten ziyade araştırmanın ne olduğunu ortaya koymaktadır (Cohen, 1980). Genellikle bu ifadeler sayısal terimlerle ifade edilir. Nicel araştırmalarda önemli faktörlerden birisi ampirik değerlendirmelerin uygulanmasıdır. Söz konusu değerlendirmeler, belirli bir programın veya metodun deneysel olarak ne derece uygulandığını veya belirli bir standardı veya normu yerine getirip getirmediğini belirlemek isteyen bir form olarak ifade edilmektedir.

Nicel araştırmalarda sayısal veriler toplanmaktadır. Matematiksel yöntemler kullanılarak veriler analiz edilmektedir. Matematik temelli yöntemleri kullanabilmek için veriler sayısal formda olmalıdır. Nitel araştırma için durum böyle değildir. Nitel veriler genellikle sayısal değildir ve bu nedenle istatistikler kullanılarak analiz edilemez. Nicel araştırmalara temel oluşturan pozitivist bilim anlayışı ile yürütülen her araştırmanın temelinde genelleme kaygısı görülmektedir. Data ile elde edilen sonuç çerçevesinde, değişkenler arasında elde edilen ilişkilerin genele yani evrene yayılması düşünülmektedir (Delice, 2010). Genellikle nicel yöntemler, bilgi ve iletişim teknolojileri alanında bilimsel bir yaklaşımla sonuç hesaplaması ve sistem analizi ile ilgilidir. Araştırmalarda kullanılan nicel yöntemin amacı, bilgi ve iletişim teknolojileri olgusunun doğasına ilişkin sayısal yaklaşım, hipotezler ve teorilere dayanan modeller geliştirmek ve bunları kullanmaktır.

Çalışmada sosyal medyanın seçmen tercihleri üzerindeki etkilerini tespit etmek için, geçerlik ve güvenilirliği bulunan anket soruları dikkate alınarak nicel araştırma yöntemi kullanılmıştır (Kızı&Akman, 2016). Kocaeli iline bağlı olarak 100 kişiye anket uygulanmıştır. Tüm geçerlik ve güvenilirlik analizleri için SPSS 20 (Statistical Package for the Social Sciences) istatistik programı ve veri analizinde cinsiyete göre T Testi ve Anova kullanılmıştır.

Problem Cümlesi

Sosyal medyanın seçmen tercihleri üzerindeki etkileri nelerdir?

Alt Problemler

1. Seçmenlerin sosyal medyayı kullanım amaçlarına göre verdikleri cevaplarda cinsiyete göre anlamlı bir farklılık var mıdır?
2. Seçmenlerin sosyal medyayı kullanım amaçlarına göre verdikleri cevaplarda yaşa göre anlamlı bir farklılık var mıdır?
3. Seçmenlerin sosyal medyayı kullanım amaçlarına göre verdikleri cevaplarda eğitim durumuna göre anlamlı bir farklılık var mıdır?
4. Seçmenlerin sosyal medyayı kullanım amaçlarına göre verdikleri cevaplarda mesleğe göre anlamlı bir farklılık var mıdır?
5. Seçmenlerin sosyal medyayı kullanım amaçlarına göre verdikleri cevaplarda aylık ortalama gelir düzeyine göre anlamlı bir farklılık var mıdır?
- 6.

Araştırma Modeli

Bu çalışma ile sosyal medyanın seçmen tercihleri üzerindeki etkilerini tespit etmeye yönelik betimsel tarama modeli kullanılmıştır. Seçmenlerin sosyal medyayı kullanım amaçları, siyasi gündemi takip etmek için hangi araçları kullandıkları ve oy verme kararlarında sosyal medyada yer alan siyasi partilerin ne tür özelliklerinin etkili olduğunu ortaya çıkarmak için Kızı ve Akman'ın (2016) anket soruları dikkate alınmıştır.

Olayların, nesnelerin, varlıkların, kurumların, grupların ve çeşitli alanların ne olduğunu tasvir etmeye, açıklamaya çalışan araştırmalar betimsel çalışmalar olarak adlandırılmaktadır (Karasar, 2006). Betimsel araştırmalar ile kullanılan teknikler bulunmaktadır. Anket, mülakat ve gözlem çalışmaları bunlar arasındadır. Araştırmada betimsel tarama modeli çerçevesinde anket uygulanmıştır.

Evren

Araştırma evreni Kocaeli ilindeki tüm seçmenlerden oluşmaktadır.

Örneklem

Rastgele örnekleme dayalı Kocaeli ilinde bulunan 18 yaş ve üstü 100 kişi örneklem olarak seçilmiştir.

Veri Toplama Aracı

Sosyal medyanın seçmenler tercihleri üzerindeki etkilerini tespit etmek için Kızı ve Akman'ın (2016) anket sorularına yer verilmiştir. Güvenirlik bağlamında ölçeğin kararlılığını saptamak amacıyla test-tekrar test yöntemi gerçekleştirilmiştir. Güvenirlik katsayıları da her bir alt boyut için (0.72 - 0.89; $p < .001$) manidar ve tüm ölçek için hesaplanan korelasyon katsayısı (0.83; $p < .001$) manidar bulunmuştur. Tüm geçerlik ve güvenirlik analizleri SPSS 20 (Statistical Package for the Social Sciences) programı ile yapılmıştır.

Veri Analizi

Araştırmadan elde edilen veriler SPSS 20 (Statistical Package for Social Sciences) programında analiz edilmiştir. Elde edilen veri analizinde tanımlayıcı istatistiksel yöntemlerinden yüzdelik, t testi ve tek yönlü anova kullanılmıştır.

Varsayımlar

1. Seçmenler oy kullanırken sosyal medyadan etkilenmektedir.
2. Seçmenler siyasi gündemi takip etmek için sosyal medyayı kullanmaktadır.
3. Seçmenler sorulara içtenlikle cevap vermiştir.

Sınırlılıklar

1. Araştırma, Kocaeli ilinde bulunan 18 yaş ve üstü seçmenler ile sınırlıdır.
2. Araştırma, sosyal medyanın seçmen tercihleri üzerindeki etkilerine dayalı oluşturulan anket sorularıyla 18 yaş ve üstü seçmenlerin verdikleri cevaplar ile sınırlıdır.
3. Araştırma, Kocaeli ilinde 18 yaş ve üstü seçmenlerden rastgele seçilen 100 kişi ile sınırlıdır.

Tanımlar

Sosyal Medya: İnsanların görüşlerinin sanal ağlar üzerinden açılan hesaplar yoluyla aktararak alternatif bir söylem gücüne sahip olabilme ve bunu güncel olaylara uyarlayabilme ve kullanabilme pratiklerini içerme olarak tanımlanmaktadır (Aydemir, 2014).

Seçmen: Seçimde oy hakkı verme hakkı olan kimse, müntehip (http://www.tdk.gov.tr/index.php?option=com_gts&arama=gts&guid=TDK.GTS.5a19ca5d52ddf9.24177947).

Yeni Medya: Dijital kodlama sistemi doğrultusunda ortaya çıkan multimedya içeriği ile birlikte eşzamansızlık, kitlesizleştirme ve etkileşim özelliklerine sahip olan çok katmanlı etkileşimin gerçekleştiği anlık hızda karşılık bulan iletişim araçları olarak tanımlanmaktadır (Rogers, 2003).

Bulgular

Bu bölümde, araştırma kapsamında toplanan veri analizi sonucunda seçmenlerin sosyal medya kullanımları ile ilgili elde edilen bulgulara yer verilmiştir. Anket çalışması Kocaeli ilinde bulunan 104 kişiye uygulanmıştır. Sosyal medya kullanmadıkları tespit edilen 4 kişi anketten çıkarılmıştır. 100 kişi üzerinden değerlendirme yapılmıştır. Ankette verilen cevapların yüzdelikleri hesaplanmıştır. Bu hesaplamalar aşağıdaki gibidir.

Tablo 1. Cinsiyetiniz					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	kadın	48	48,0	48,0	48,0
	erkek	52	52,0	52,0	100,0
	Total	100	100,0	100,0	

Tablo 1’de görüldüğü üzere ankete cevap veren katılımcılar cinsiyet değişkeni açısından incelendiğinde toplam 100 kişiden oluşan çalışma grubunun %48’ini (48 kişi) kadın, %52’sini (52 kişi) erkek katılımcılar oluşturmaktadır.

Tablo 2. Yaşınız					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-21	10	10,0	10,0	10,0
	22-25	6	6,0	6,0	16,0
	26-29	13	13,0	13,0	29,0
	30 ve üzeri	71	71,0	71,0	100,0
	Total	100	100,0	100,0	

Tablo 2’ ye bakıldığında zaman ankete cevap veren katılımcıların %10’u (10 kişi) 18-21 yaş grubundan, %6’sı (6 kişi) 22-25 yaş grubundan, %13’ü (13 kişi) 26-29 yaş grubundan, %71’i (71 kişi) 30 ve üzeri yaş grubundan oluşmaktadır.

Tablo 3. Eğitim Durumunuz					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	İlkokul	3	3,0	3,0	3,0
	Ortaokul	5	5,0	5,0	8,0
	Lise	13	13,0	13,0	21,0
	Lisans	60	60,0	60,0	81,0
	Lisansüstü	19	19,0	19,0	100,0
	Total	100	100,0	100,0	

Tablo 3’e bakıldığında ankete cevap veren katılımcılardan %3’ü (3 kişi) ilkokul, %5’i (5 kişi) ortaokul, %13’ü (13 kişi) lise, %60’ı (60 kişi) lisans ve %19’u (19 kişi) lisansüstü eğitim düzeyini oluşturmaktadır.

Tablo 4. Mesleğiniz					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	İşçi	16	16,0	16,0	16,0
	Devlet memuru	41	41,0	41,0	57,0
	İşveren	10	10,0	10,0	67,0
	Emekli	7	7,0	7,0	74,0
	İşsiz	11	11,0	11,0	85,0
	Öğrenci	15	15,0	15,0	100,0
	Total	100	100,0	100,0	

Tablo 4 incelendiğinde ankete cevap veren katılımcıların %16’sı (16 kişi) işçi, %41’i (41 kişi) devlet memuru, %10’u (10 kişi) işveren, %7’si (7 kişi) emekli, %11’i (11 kişi) işsiz, %15’i (15 kişi) öğrenci grubunu oluşturmaktadır.

Tablo 5. Aylık Geliriniz					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	500-1500	21	21,0	21,0	21,0
	1500-2500	16	16,0	16,0	37,0
	2500-3500	33	33,0	33,0	70,0
	3500-4500	23	23,0	23,0	93,0
	4500 ve üzeri	7	7,0	7,0	100,0
	Total	100	100,0	100,0	

Tablo 5'e bakıldığında ankete cevap veren katılımcıların %21'i (21 kişi) 500-1500, %16'sı (16 kişi) 1500-2500, %33'ü (33 kişi) 2500-3500, %23'ü (23 kişi) 3500-4500, %7'si (7 kişi) 4500 TL ve üzeri aylık gelir grubunu oluşturmaktadır.

Tablo 6. Sosyal Medya Araçları					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Facebook	12	12,0	12,0	12,0
	Twitter	7	7,0	7,0	19,0
	YouTube	23	23,0	23,0	42,0
	Instagram	25	25,0	25,0	67,0
	LinkedIn	33	33,0	33,0	100,0
	Total	100	100,0	100,0	

Tablo 6'ya bakıldığında katılımcılardan %12'si (12 kişi) Facebook, %7'si (7 kişi) Twitter, %23'ü (23 kişi) YouTube, %25'i (25 kişi) Instagram, %33'ü (33 kişi) LinkedIn sosyal medya araçlarını kullanmaktadır.

Tablo 7. Sosyal Medya Kullanım Süresi					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yıldan az	15	15,0	15,0	15,0
	1-2	8	8,0	8,0	23,0
	3-4	15	15,0	15,0	38,0
	5-6	24	24,0	24,0	62,0
	7 yıl ve üzeri	38	38,0	38,0	100,0
	Total	100	100,0	100,0	

Tablo 7'ye bakıldığında katılımcılardan %15'i (15 kişi) 1 yıldan az, %8'i (8 kişi) 1-2 yıl, %15'i (15 kişi) 3-4 yıl, %24'ü (24 kişi) 5-6 yıl, %38'i (38 kişi) 7 yıl ve üzeri sosyal medya kullanım süresine sahip olduklarını belirtmektedir.

Tablo 8. Sosyal medyayı çevremle iletişim kurmak için kullanım.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	12	12,0	12,0	12,0
	Çok az	22	22,0	22,0	34,0
	Ara sıra	23	23,0	23,0	57,0
	Çoğunlukla	28	28,0	28,0	85,0
	Her zaman	15	15,0	15,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyayı çevremle iletişim kurmak için kullanım.” anket sorusu ile ilgili tablo 8'e bakıldığında ankete cevap verenlerin % 12'si (12 kişi) hiçbir zaman, % 22'si (22 kişi) çok az, % 23'ü (23 kişi) ara sıra, % 28'si (28 kişi) çoğunlukla, % 15'i (15 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların % 28'si çoğunlukla sosyal medyayı çevreleri ile iletişim kurmak amacı ile kullandıklarını belirtmiştir.

Tablo 9. Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanım.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	18	18,0	18,0	18,0
	Çok az	21	21,0	21,0	39,0
	Ara sıra	30	30,0	30,0	69,0
	Çoğunlukla	23	23,0	23,0	92,0
	Her zaman	8	8,0	8,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanım.” anket sorusu ile ilgili tablo 9’a bakıldığında ankete cevap verenlerin % 18’i (18 kişi) hiçbir zaman, % 21’i (21 kişi) çok az, % 30’u (30 kişi) ara sıra, % 23’ü (23 kişi) çoğunlukla, % 8’i (8 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların % 30’u ara sıra sosyal medyayı fotoğraf, video ve görüş paylaşımı için kullandıklarını belirtmiştir.

Tablo 10. Sosyal medyayı ürün ve hizmetler hakkında bilgi toplamak amacıyla kullanım.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	21	21,0	21,0	21,0
	Çok az	16	16,0	16,0	37,0
	Ara sıra	36	36,0	36,0	73,0
	Çoğunlukla	19	19,0	19,0	92,0
	Her zaman	8	8,0	8,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyayı ürün ve hizmetler hakkında bilgi toplamak amacıyla kullanım.” anket sorusu ile ilgili cevap verenlerin %21’i (21 kişi) hiçbir zaman, %16’sı (16 kişi) çok az, %36’sı (36 kişi) ara sıra, %19’u (19 kişi) çoğunlukla, %8’i (8 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %36’sı sosyal medyayı ürün ve hizmetler hakkında bilgi toplamak için kullandıklarını belirtmiştir.

Tablo 11. Sosyal medyayı eğlence, oyun amaçlı kullanım.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	37	37,0	37,0	37,0
	Çok az	31	31,0	31,0	68,0
	Ara sıra	18	18,0	18,0	86,0
	Çoğunlukla	9	9,0	9,0	95,0
	Her zaman	5	5,0	5,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyayı eğlence, oyun amaçlı kullanım.” anket sorusu ile ilgili cevap verenlerin %37’si (37 kişi) hiçbir zaman, %31’i (31 kişi) çok az, %18’i (18 kişi) ara sıra, %9’u (9 kişi) çoğunlukla, %5’i (5 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %37’si sosyal medyayı hiçbir zaman eğlence ve oyun amaçlı kullanmadıklarını belirtmiştir.

Tablo 12. Sosyal medyayı benimle ortak ilgi ve gereksinimlere sahip bireyleri bulmak ve onlara katılmak amacıyla kullanım.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	44	44,0	44,0	44,0
	Çok az	23	23,0	23,0	67,0
	Ara sıra	15	15,0	15,0	82,0
	Çoğunlukla	11	11,0	11,0	93,0
	Her zaman	7	7,0	7,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyayı benimle ortak ilgi ve gereksinimlere sahip bireyleri bulmak ve onlara katılmak amacıyla kullanım.” anket sorusu ile ilgili cevap verenlerin %44’ü (44 kişi) hiçbir zaman, %23’ü (23 kişi) çok az, %15’i (15 kişi) ara sıra, %11’i (11 kişi) çoğunlukla, %7’si (7 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %44’ü sosyal medyayı hiçbir zaman ortak ilgi ve gereksinimlere sahip bireyleri bulmak ve onlara katılmak için kullanmadıklarını belirtmiştir.

Tablo 13. Sosyal medyayı siyasi gündemi takip etmek için kullanım.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	24	24,0	24,0	24,0
	Çok az	20	20,0	20,0	44,0
	Ara sıra	27	27,0	27,0	71,0
	Çoğunlukla	19	19,0	19,0	90,0
	Her zaman	10	10,0	10,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyayı siyasi gündemi takip etmek için kullanım.” anket sorusu ile ilgili cevap verenlerin %24’ü (24 kişi) hiçbir zaman, %20’si (20 kişi) çok az, %27’si (27 kişi) ara sıra, %19’u (19 kişi) çoğunlukla, %10’u (10 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %27’si sosyal medyayı siyasi gündemi ara sıra takip etmek için kullandıklarını belirtmiştir.

Tablo 14. Sosyal medyada yer alan partilerin sayfalarındaki bilgilere bakarım.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	24	24,0	24,0	24,0
	Çok az	33	33,0	33,0	57,0
	Ara sıra	20	20,0	20,0	77,0
	Çoğunlukla	21	21,0	21,0	98,0
	Her zaman	2	2,0	2,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyada yer alan partilerin sayfalarındaki bilgilere bakarım.” anket sorusu ile ilgili cevap verenlerin %24’ü (24 kişi) hiçbir zaman, %33’ü (33 kişi) çok az, %20’si (20 kişi) ara sıra, %21’i (21 kişi) çoğunlukla, %2’si (2 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %33’ü sosyal medyada yer alan partilerin sayfalarındaki bilgilere çok az baktıklarını belirtmiştir.

Tablo 15. Sosyal medyada yer alan parti üyelerinin özel sayfalarını incelerim.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	29	29,0	29,0	29,0
	Çok az	40	40,0	40,0	69,0
	Ara sıra	11	11,0	11,0	80,0
	Çoğunlukla	20	20,0	20,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyada yer alan parti üyelerinin özel sayfalarını incelerim.” anket sorusu ile ilgili cevap verenlerin %29’u (29 kişi) hiçbir zaman, %40’ı (40 kişi) çok az, %11’i (11 kişi) ara sıra, %20’si (20 kişi) çoğunlukla yanıtını vermiştir. Sonuç olarak katılımcıların %40’ı sosyal medyada yer alan parti üyelerinin özel sayfalarını çok az incelediklerini belirtmiştir.

Tablo 16. Sosyal medyada yer alan partilerin faaliyetleri hakkındaki bilgilere bakarım.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	16	16,0	16,0	16,0
	Çok az	24	24,0	24,0	40,0
	Ara sıra	18	18,0	18,0	58,0
	Çoğunlukla	38	38,0	38,0	96,0
	Her zaman	4	4,0	4,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyada yer alan partilerin faaliyetleri hakkındaki bilgilere bakarım.” anket sorusu ile ilgili cevap verenlerin %16’sı (16 kişi) hiçbir zaman, %24’ü (24 kişi) çok az, %18’i (18 kişi) ara sıra, %38’i (38 kişi) çoğunlukla, %4’ü (4 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %38’i sosyal medyada yer alan partilerin faaliyetleri hakkındaki bilgilere çoğunlukla baktıklarını belirtmiştir.

Tablo 17. Sosyal medyada yer alan parti adaylarının görüşleri önemlidir.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	21	21,0	21,0	21,0
	Çok az	23	23,0	23,0	44,0
	Ara sıra	13	13,0	13,0	57,0
	Çoğunlukla	41	41,0	41,0	98,0
	Her zaman	2	2,0	2,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyada yer alan parti adaylarının görüşleri önemlidir.” anket sorusu ile ilgili cevap verenlerin %21’i (21 kişi) hiçbir zaman, %23’ü (23 kişi) çok az, %13’ü (13 kişi) ara sıra, %41’i (41 kişi) çoğunlukla, %2’si (2 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %41’i sosyal medyada yer alan parti adaylarının görüşlerinin çoğunlukla önemli olduğunu belirtmiştir.

Tablo 18. Sosyal medyada yer alan partiler ile ilgili fotoğraflara bakırım.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	31	31,0	31,0	31,0
	Çok az	38	38,0	38,0	69,0
	Ara sıra	17	17,0	17,0	86,0
	Çoğunlukla	14	14,0	14,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyada yer alan partiler ile ilgili fotoğraflara bakırım.” anket sorusu ile ilgili cevap verenlerin %31’i (31 kişi) hiçbir zaman, %38’i (38 kişi) çok az, %17’si (17 kişi) ara sıra, %14’ü (14 kişi) çoğunlukla yanıtını vermiştir. Sonuç olarak katılımcıların %38’i sosyal medyada yer alan partiler ile ilgili fotoğraflara çok az baktıklarını belirtmiştir.

Tablo 19. Sosyal medyada yer alan parti liderinin fotoğraflarına bakırım.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	39	39,0	39,0	39,0
	Çok az	32	32,0	32,0	71,0
	Ara sıra	13	13,0	13,0	84,0
	Çoğunlukla	16	16,0	16,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyada yer alan parti liderinin fotoğraflarına bakırım.” anket sorusu ile ilgili cevap verenlerin %39’u (39 kişi) hiçbir zaman, %32’si (32 kişi) çok az, %13’ü (13 kişi) ara sıra, %16’sı (16 kişi) çoğunlukla yanıtını vermiştir. Sonuç olarak katılımcıların %39’u sosyal medyada yer alan parti liderlerinin fotoğraflarına hiçbir zaman bakmadıklarını belirtmiştir.

Tablo 20. Sosyal medya üzerinden paylaşılan partinin programı önemlidir.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	27	27,0	27,0	27,0
	Çok az	25	25,0	25,0	52,0
	Ara sıra	20	20,0	20,0	72,0
	Çoğunlukla	25	25,0	25,0	97,0
	Her zaman	3	3,0	3,0	100,0
	Total	100	100,0	100,0	

“Sosyal medya üzerinden paylaşılan partinin programı önemlidir.” anket sorusu ile ilgili cevap verenlerin %27’si (27 kişi) hiçbir zaman, %25’i (25 kişi) çok az, %20’si (20 kişi) ara sıra, %25’i (25 kişi) çoğunlukla, %3’ü (3 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %27’si sosyal medya üzerinden paylaşılan partinin programının hiçbir zaman önemli olmadığını belirtmiştir.

Tablo 21. Sosyal medya üzerinden paylaşılan partinin dine bakış açısı önemlidir.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	27	27,0	27,0	27,0
	Çok az	25	25,0	25,0	52,0
	Ara sıra	14	14,0	14,0	66,0
	Çoğunlukla	29	29,0	29,0	95,0
	Her zaman	5	5,0	5,0	100,0
	Total	100	100,0	100,0	

“Sosyal medya üzerinden paylaşılan partinin dine bakış açısı önemlidir.” anket sorusu ile ilgili cevap verenlerin %27’si (27 kişi) hiçbir zaman, %25’i (25 kişi) çok az, %14’ü (14 kişi) ara sıra, %29’u (29 kişi) çoğunlukla, %5’i (5 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %29’u sosyal medya üzerinden paylaşılan partinin dine bakış açısının çoğunlukla önemli olduğunu belirtmiştir.

Tablo 22. Sosyal medya üzerinden paylaşılan vaat ve söylemleri takip ederim.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	25	25,0	25,0	25,0
	Çok az	23	23,0	23,0	48,0
	Ara sıra	12	12,0	12,0	60,0
	Çoğunlukla	33	33,0	33,0	93,0
	Her zaman	7	7,0	7,0	100,0
	Total	100	100,0	100,0	

“Sosyal medya üzerinden paylaşılan vaat ve söylemleri takip ederim.” anket sorusu ile ilgili cevap verenlerin %25’i (25 kişi) hiçbir zaman, %23’ü (23 kişi) çok az, %12’si (12 kişi) ara sıra, %33’ü (33 kişi) çoğunlukla, %7’si (7 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %33’ü sosyal medya üzerinden paylaşılan vaat ve söylemleri çoğunlukla takip ettiğini belirtmiştir.

Tablo 23. Sosyal medyada paylaşılan partiler hakkındaki videoları takip ederim.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	24	24,0	24,0	24,0
	Çok az	29	29,0	29,0	53,0
	Ara sıra	25	25,0	25,0	78,0
	Çoğunlukla	20	20,0	20,0	98,0
	Her zaman	2	2,0	2,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyada paylaşılan partiler hakkındaki videoları takip ederim.” anket sorusu ile ilgili cevap verenlerin %24’ü (24 kişi) hiçbir zaman, %29’u (29 kişi) çok az, %25’i (25 kişi) ara sıra, %20’si (20 kişi) çoğunlukla, %2’si (2 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %29’u sosyal medyada paylaşılan partiler hakkındaki videoları çok az takip ettiğini belirtmiştir.

Tablo 24. Sosyal medyada paylaşılan parti adayları ile ilgili videoları takip ederim.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	25	25,0	25,0	25,0
	Çok az	32	32,0	32,0	57,0
	Ara sıra	18	18,0	18,0	74,0
	Çoğunlukla	22	22,0	22,0	96,0
	Her zaman	3	3,0	3,0	99,0
	Total	100	100,0	100,0	

“Sosyal medyada paylaşılan parti adayları ile ilgili videoları takip ederim.” anket sorusu ile ilgili cevap verenlerin %25’i (25 kişi) hiçbir zaman, %32’si (32 kişi) çok az, %18’i (18 kişi) ara sıra, %22’si (22 kişi) çoğunlukla, %3’ü (3 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %32’si sosyal medyada paylaşılan parti adayları ile ilgili videoları çok az takip ettiğini belirtmiştir.

Tablo 25. Sosyal medyada parti liderleri ve adayları hakkındaki bilgilere bakırım.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman	21	21,0	21,0	21,0
	Çok az	18	18,0	18,0	39,0
	Ara sıra	14	14,0	14,0	53,0
	Çoğunlukla	41	41,0	41,0	94,0
	Her zaman	6	6,0	6,0	100,0
	Total	100	100,0	100,0	

“Sosyal medyada parti liderleri ve adayları hakkındaki bilgilere bakırım.” anket sorusu ile ilgili cevap verenlerin %21’i (21 kişi) hiçbir zaman, %18’i (18 kişi) çok az, %14’ü (14 kişi) ara sıra, %41’i (41 kişi) çoğunlukla, %6’sı (6 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %41’i sosyal medyada parti liderleri ve adayları hakkındaki bilgilere çoğunlukla baktığını belirtmiştir.

Ankete verilen cevaplara göre daha önce belirlenen alt problemler doğrultusunda anket soruları ile ilgili cinsiyete göre anlamlı bir farkın olup olmadığını tespit etmek için T testi uygulanmıştır. Elde edilen sonuç aşağıdaki gibidir:

Tablo 26. Cinsiyet için T-Testi Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Sosyal medya üzerinden paylaşılan partinin programı önemlidir.	Equal variances assumed	,512	,476	2,008	98	,047	,48237	,24022	,00566	,95908
	Equal variances not assumed			2,007	97,178	,048	,48237	,24033	,00540	,95934

Tablo 26’ya göre hesaplanan α değeri ($\alpha:0,047 < \alpha:0,05$) 0,05’den küçük olduğu için “Sosyal medya üzerinden paylaşılan partinin programı önemlidir.” anket sorusu ile ilgili cinsiyete göre anlamlı bir fark bulunmaktadır. Kadınların aritmetik ortalaması 2,7708 olarak hesaplanmış ve aritmetik ortalaması 2,2885 olan erkek katılımcılara oranla sosyal medya üzerinden paylaşılan partinin programını daha fazla önemsedikleri sonucuna ulaşılmıştır. Diğer anket sorularında ise hesaplanan “ α ” değeri normal $\alpha: 0,05$ değerinden büyük olduğu için cinsiyete göre anlamlı bir farklılık bulunmamıştır.

Tablo 27. Yaş için Anova Testi						
		Sum of Squares	df	Mean Square	F	Sig.
Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım.	Between Groups	22,567	3	7,522	5,910	,001
	Within Groups	122,193	96	1,273		
	Total	144,760	99			
Siyasi gündemi takip etmek için internet haber sitelerini kullanırım.	Between Groups	13,641	3	4,547	3,073	,031
	Within Groups	142,069	96	1,480		
	Total	155,710	99			
Siyasi gündemi takip etmek için sosyal medyayı kullanırım.	Between Groups	17,933	3	5,978	3,553	,017
	Within Groups	161,507	96	1,682		
	Total	179,440	99			

Tablo 27'ye göre hesaplanan α değeri ($\alpha:0,001 < \alpha:0,05$) 0,05'den küçük olduğu için "Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım." anket sorusunda 18-21, 22-25, 26-29 ile 30 ve üzeri yaşları arasında anlamlı bir fark bulunmaktadır. "Siyasi gündemi takip etmek için internet haber sitelerini kullanırım." ve "Siyasi gündemi takip etmek için sosyal medyayı kullanırım." anket sorularında α değeri ($\alpha:0,031$ ve $0,017 < \alpha:0,05$) 0,05'den küçük olduğu için 18-21 ile 26-29 yaşları arasında anlamlı bir fark bulunmaktadır.

Tablo 28. Eğitim Düzeyine Göre Anova Testi						
		Sum of Squares	df	Mean Square	F	Sig.
Sosyal medyayı çevremle iletişim kurmak amacıyla kullanırım.	Between Groups	16,013	4	4,003	2,706	,035
	Within Groups	140,547	95	1,479		
	Total	156,560	99			
Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım.	Between Groups	19,956	4	4,989	3,798	,007
	Within Groups	124,804	95	1,314		
	Total	144,760	99			
Sosyal medyayı benimle ortak ilgi ve gereksinimlere sahip bireyleri bulmak ve onlara katılmak amacıyla kullanırım.	Between Groups	15,728	4	3,932	2,519	,046
	Within Groups	148,312	95	1,561		
	Total	164,040	99			
Sosyal medyayı siyasi gündemi takip etmek için kullanırım.	Between Groups	16,844	4	4,211	2,672	,037
	Within Groups	149,746	95	1,576		
	Total	166,590	99			
Sosyal medyada yer alan parti liderinin fotoğraflarına bakarım.	Between Groups	11,216	4	2,804	2,551	,044
	Within Groups	104,424	95	1,099		
	Total	115,640	99			

Tablo 28'e göre hesaplanan α değeri ($\alpha:0,035, 0,007, 0,046, 0,037$ ve $0,044 < \alpha:0,05$) 0,05'den küçük olduğu için "Sosyal medyayı çevremle iletişim kurmak amacıyla kullanırım", "Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım", "Sosyal medyayı benimle ortak ilgi ve gereksinimlere sahip bireyleri bulmak ve onlara katılmak amacıyla kullanırım", "Sosyal medyayı siyasi gündemi takip etmek için kullanırım" ve "Sosyal medyada yer alan parti liderinin fotoğraflarına bakarım" anket sorularına cevap veren katılımcıların ilkökul ile ortaokul, ilkökul ile lise, ilkökul ile lisans ve ilkökul ile lisansüstü eğitim düzeylerine göre anlamlı farkların bulunduğu sonucuna ulaşmıştır.

Tablo 29. Mesleğe Göre Anova Testi						
		Sum of Squares	df	Mean Square	F	Sig.
Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım.	Between Groups	24,034	5	4,807	3,743	,004
	Within Groups	120,726	94	1,284		
	Total	144,760	99			
Sosyal medyayı benimle ortak ilgi ve gereksinimlere sahip bireyleri bulmak ve onlara katılmak amacıyla kullanırım.	Between Groups	19,678	5	3,936	2,563	,032
	Within Groups	144,362	94	1,536		
	Total	164,040	99			
Sosyal medyayı siyasi gündemi	Between Groups	31,280	5	6,256	4,346	,001

takip etmek için kullanırım.	Within Groups	135,310	94	1,439		
	Total	166,590	99			

Tablo 29'a göre hesaplanan α değeri ($\alpha:0,004 < \alpha:0,05$), ($\alpha:0,032 < \alpha:0,05$) ve ($\alpha:0,001 < \alpha:0,05$) 0,05'den küçük olduğu için "Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım.", "Sosyal medyayı benimle ortak ilgi ve gereksinimlere sahip bireyleri bulmak ve onlara katılmak amacıyla kullanırım." ve "Sosyal medyayı siyasi gündemi takip etmek için kullanırım." anket sorularına cevap veren devlet memurları ile çalışmayanlar arasında anlamlı bir fark bulunmaktadır.

Tablo 30. Aylık Ortalama Gelire Göre Anova Testi						
		Sum of Squares	df	Mean Square	F	Sig.
Siyasi gündemi takip etmek için radyo dinlerim.	Between Groups	18,533	4	4,633	3,283	,014
	Within Groups	134,057	95	1,411		
	Total	152,590	99			
Siyasi gündemi takip etmek için internet haber sitelerini kullanırım.	Between Groups	13,486	4	3,371	2,728	,034
	Within Groups	117,424	95	1,236		
	Total	130,910	99			

Tablo 30'a göre hesaplanan α değeri ($\alpha:0,014 < \alpha:0,05$) ve ($\alpha:0,034 < \alpha:0,05$) 0,05'den küçük olduğu için "Siyasi gündemi takip etmek için radyo dinlerim." ve "Siyasi gündemi takip etmek için internet haber sitelerini kullanırım." anket sorularında aylık ortalama geliri 500-1500 ile 1500-2500 TL olanlar arasında anlamlı bir fark bulunmaktadır.

Tablo 31. Kullanılan Sosyal Medya Araçlarına Göre Anova Testi						
		Sum of Squares	df	Mean Square	F	Sig.
Sosyal medyayı çevremle iletişim kurmak amacıyla kullanırım.	Between Groups	18,360	4	4,590	3,155	,018
	Within Groups	138,200	95	1,455		
	Total	156,560	99			
Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım.	Between Groups	23,274	4	5,819	4,550	,002
	Within Groups	121,486	95	1,279		
	Total	144,760	99			
Siyasi gündemi takip etmek için sosyal medya araçlarını kullanırım.	Between Groups	32,370	4	8,092	5,227	,001
	Within Groups	147,070	95	1,548		
	Total	179,440	99			

Tablo 31'a göre hesaplanan α değeri ($\alpha:0,018 < \alpha:0,05$), ($\alpha:0,002 < \alpha:0,05$) ve ($\alpha:0,001 < \alpha:0,05$) 0,05'den küçük olduğu için "Sosyal medyayı çevremle iletişim kurmak amacıyla kullanırım.", "Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım." ve "Siyasi gündemi takip etmek için sosyal medya araçlarını kullanırım." anket sorularında anlamlı bir fark bulunmaktadır. LinkedIn sosyal medya aracını kullananlar, Facebook ve Youtube sosyal medya araçlarını kullananlara göre çok daha fazladır.

Tablo 32. Sosyal Medya Kullanım Süresine Göre Anova Testi						
		Sum of Squares	df	Mean Square	F	Sig.
Sosyal medyayı çevremle iletişim kurmak amacıyla kullanırım.	Between Groups	28,861	4	7,215	5,368	,001
	Within Groups	127,699	95	1,344		
	Total	156,560	99			

Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım.	Between Groups	28,158	4	7,040	5,735	,000
	Within Groups	116,602	95	1,227		
	Total	144,760	99			
Sosyal medyada yer alan partilerin sayfalarındaki bilgiler önemlidir.	Between Groups	16,125	4	4,031	3,465	,011
	Within Groups	110,515	95	1,163		
	Total	126,640	99			
Sosyal medyada paylaşılan parti adayları ile ilgili videolar önemlidir.	Between Groups	16,006	4	4,002	3,146	,018
	Within Groups	120,834	95	1,272		
	Total	136,840	99			

Tablo 32'ye göre hesaplanan α değeri ($\alpha:0,001 < \alpha:0,05$), ($\alpha:0,000 < \alpha:0,05$), ($\alpha:0,011 < \alpha:0,05$) ve ($\alpha:0,018 < \alpha:0,05$) 0,05'den küçük olduğu için "Sosyal medyayı çevremle iletişim kurmak amacıyla kullanırım.", "Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım.", "Sosyal medyada yer alan partilerin sayfalarındaki bilgiler önemlidir." ve "Sosyal medyada paylaşılan parti adayları ile ilgili videolar önemlidir." anket sorularında sosyal medyayı 7 yıl ve üzeri kullananlar ile sosyal medyayı 1 yıldan daha az kullananlar arasında anlamlı bir fark bulunmaktadır.

Sonuç Ve Öneriler

Bu araştırmada sosyal medya kullanımının seçmen tercihleri üzerine olan etkilerini belirlemek için anket soruları Kocaeli ilinde bulunan 52 erkek, 48 kadın olma üzere toplam 100 kişiye uygulanmıştır. Katılımcılardan %10'u (10 kişi) 18-21, %6'sı (6 kişi) 22-25, %13'ü (13 kişi) 26-29 yaş grubundan oluşurken, %71'lik (71 kişi) bir oran ile çoğunluğu 30 ve üzeri yaş grubu oluşturmaktadır. Eğitim düzeyine bakıldığında katılımcıların %3'ü (3 kişi) ilkokul, %5'i (5 kişi) ortaokul, %13'ü (13 kişi) lise, %19'u (19 kişi) lisansüstü mezunu iken çoğunluğu %60'ı (60 kişi) lisans düzeyindeki katılımcılar oluşturmaktadır.

Sosyal medya kullanımına bakıldığında katılımcılardan %12'si (12 kişi) Facebook, %7'si (7 kişi) Twitter, %23'ü (23 kişi) YouTube, %25'i (25 kişi) Instagram, %33'ü (33 kişi) LinkedIn sosyal medya araçlarını kullanmaktadır. Katılımcıların çoğunlukla LinkedIn sosyal medya aracını tercih ettikleri ortaya çıkmıştır. "Sosyal medyayı siyasi gündemi takip etmek için kullanırım" anket sorusu ile ilgili cevap verenlerin %24'ü (24 kişi) hiçbir zaman, %20'si (20 kişi) çok az, %27'si (27 kişi) ara sıra, %19'u (19 kişi) çoğunlukla, %10'u (10 kişi) her zaman yanıtını vermiştir. Sonuç olarak katılımcıların %27'si sosyal medyayı siyasi gündemi ara sıra takip etmek için kullandıklarını belirtmiştir.

Cinsiyet için yapılan t testine göre, "Sosyal medya üzerinden paylaşılan partinin programı önemlidir" anket sorusu ile ilgili cinsiyete göre anlamlı bir fark bulunmaktadır. Kadınların erkek katılımcılara oranla sosyal medya üzerinden paylaşılan partinin programını daha fazla önemsedikleri sonucuna varılmıştır. Yaş için anova testine göre ise "Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım." anket sorusunda 18-21, 22-25, 26-29 ile 30 ve üzeri yaşları arasında anlamlı bir fark bulunmaktadır. "Siyasi gündemi takip etmek için internet haber sitelerini kullanırım." ve "Siyasi gündemi takip etmek için sosyal medyayı kullanırım." anket sorularında α değeri ($\alpha:0,031$ ve $0,017 < \alpha:0,05$) 0,05'den küçük olduğu için 18-21 ile 26-29 yaşları arasında anlamlı bir fark bulunduğu tespit edilmiştir.

Eğitim düzeyine göre yapılan anova testi sonucunda; "Sosyal medyayı çevremle iletişim kurmak amacıyla kullanırım", "Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım", "Sosyal medyayı benimle ortak ilgi ve gereksinimlere sahip bireyleri bulmak ve onlara katılmak amacıyla kullanırım", "Sosyal medyayı siyasi gündemi takip etmek için kullanırım" ve "Sosyal medyada yer alan parti liderinin fotoğraflarına bakarım" anket sorularına cevap veren katılımcıların ilkokul ile ortaokul, ilkokul ile lise, ilkokul ile lisans ve ilkokul ile lisansüstü eğitim düzeylerine göre anlamlı farkların bulunduğu sonucuna ulaşılmıştır.

Anova testi sonucunda meslek gruplarına göre "Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım.", "Sosyal medyayı benimle ortak ilgi ve gereksinimlere sahip bireyleri bulmak ve onlara katılmak amacıyla kullanırım." ve "Sosyal medyayı siyasi gündemi takip etmek için kullanırım." anket sorularına cevap veren devlet memurları ile çalışmayanlar arasında anlamlı bir fark bulunmuştur. Kullanılan sosyal medya araçlarına göre ise "Sosyal medyayı çevremle iletişim kurmak amacıyla kullanırım.", "Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım." ve "Siyasi gündemi takip etmek için sosyal medya araçlarını kullanırım." anket sorularında anlamlı bir fark bulunmuştur. LinkedIn sosyal medya aracını kullananların, Facebook ve Youtube sosyal medya araçlarını kullananlara göre çok daha fazla olduğu tespit edilmiştir.

Sosyal medya kullanım süresine göre "Sosyal medyayı çevremle iletişim kurmak amacıyla kullanırım.", "Sosyal medyayı fotoğraf, video, görüş paylaşımı için kullanırım.", "Sosyal medyada yer alan partilerin sayfalarındaki

bilgiler önemlidir.” ve “Sosyal medyada paylaşılan parti adayları ile ilgili videolar önemlidir.” anket sorularında sosyal medyayı 7 yıl ve üzeri kullananlar ile sosyal medyayı 1 yıldan daha az kullananlar arasında anlamlı bir fark bulunduğu tespit edilmiştir.

Tespit edilen oranlar ve test sonuçlarına göre sosyal medyanın siyasi gündemi takip etmek için seçmenler üzerinde etkili olduğu göz ardı edilemez. Dolayısıyla seçmenlerin siyasi partilere ve siyasilere oy verirken sosyal medyayı dikkate aldıkları sonucuna varılmıştır. Siyasiler ve siyasi partilerin misyon ve vizyonlarının doğru bir biçimde sosyal medya araçlarını kullanarak seçmenlere aktardıklarında seçmenlerden daha fazla oy toplayabilecekleri tespit edilmiştir.

Demografik özellikler dikkate alındığında siyasi partilerin dijital ortamda sadece program içeriklerinin değil aynı zamanda görselliğin de görece olarak genç seçmenler üzerinde bıraktığı çarpıcı etki gerçeğini göz önünde bulundurmaları gerekmektedir. Sonuç olarak sosyal medyada yer alan siyasi partilerin faaliyetleri hakkındaki bilgiler, parti adaylarının görüşleri, paylaşılan vaat ve söylemler, parti liderleri ve adayları hakkındaki bilgiler ve sosyal medya üzerinden paylaşılan partilerin dine bakış açıları seçmen tercihleri üzerinde oldukça etkili olduğunu ortaya çıkarmıştır.

Kaynakça

- Akçay, H. (2011). Kullanımlar ve doyumlar yaklaşımı bağlamında sosyal medya kullanımı: Gümüşhane üniversitesi üzerine bir araştırma. İletişim Kuram ve Araştırma Dergisi, Güz, 33.
- Albayrak, D. (2012). Sosyal medyanın politik katılım ve hareketlerdeki rolü. Akademik Bilişim 2012: Uşak.
- Aydemir, M. (2014). Yeni medya üzerine, sosyal medyanın toplumsal eylemleri yönlendirmesi. Literatürk Academia: Konya.
- Arulchelvan, S. (2014). *Online journal of communication and media technologies*. 4 (3). July: India.
- Bartels, L.M.(2008). The Study of electoral behavior. Department of Politics and Woodrow Wilson School of Public and International Affairs, Princeton University.
- Biswas, A. Ingle, N. Roy, Mousumi (2014). *Influence of social media on voting behavior*. Journal of Power, Politics & Governance June 2014, Vol. 2, No. 2. American Research Institute for Policy Development.
- Bullas, J. (2011). 30 Terrific twitter facts and figures. Jeffbullas.com, Web log post online 04 May.
- Bulunmaz, B (2011). Yeni medya eski medyaya karşı: savaşı kim kazandı ya da kim kazanacak? Ege Üniversitesi.
- Cantril, H. (1942). Professor quiz: A gratifications study. In P. F. Lazarsfeld&F. Stanton (Eds.), *Radio research 1941* (pp. 34–45). New York: Duell, Sloan & Pearce.
- Cerici, S. Özdemir, H. (2015). *Medyanın toplumsal gelişimi: medya toplumları*. The Journal of Academic Social Science Studies. 33(1).
- Cohen, L. (1980). *Research methods in education*, london: Groom Helm Ltd.
- Danesi, M. (2009). *Dictionary of media and communications*. M.E. Sharpe. Armonk: New York.
- Delice, A. (2010). *Nicel araştırmalarda örneklem sorunu*. Kuram ve Uygulamada Eğitim Bilimleri / Educational Sciences: Theory & Practice 10 (4) Güz.
- Dugan, L. (2010). *Social media in the 2010 US midterm election: what worked (and what didn't)*. SocialTimes [online] 03 November.
- Gromark, J. Schliesmann, M. Johannesson, M. (2011). The effects of politicians' social media activity on voting behavior. Stockholm School of Economics Department of Economics: Stockholm.
- Hiscox, M.J. (2002). *International trade and political conflict*. Princeton, N.J. Princeton University Press.
- Karasar N. (2006). Bilimsel araştırma yöntemi. (16. Baskı). Ankara. Nobel Yayın Dağıtım.
- Kızı, N.C. Akman, E. (2016). Sosyal medyanın seçmen tercihleri üzerindeki etkileri. 2015 Kırgızistan Parlamento Seçimleri Örneği. Bişkek: Kırgızistan.
- Küçükçurt, M; Hazar M, Çetin M; Topbaş, H. (2009). *Kullanımlar ve doyumlar yaklaşımı perspektifinden üniversite öğrencilerinin medyaya bakışı*. Selçuk İletişim, 6, 1.
- Malik, N. (2014). The Effect of social media on individual voters in india. MBA: India.
- Mandiberg, Michael. (2012). *Introduction in the social media reader*. Edited by Michael Mandiberg, 1-10. New York: New York University Press.
- McQuail D. (1989) *Mass communication theory*. Second Edition, Sage Publications, Great Britain.
- Morain H. B. (2016). What is the role of social media in a general election campaign? A case study of the 2016 Irish General Election. Third Year Special Topics Research Project. Maynooth University: Ireland.
- Owen, D. (2011). *New media and political campaigns*. Georgetown University Communication, Culture, and Technology. The Oxford Handbook of Political Communication Theory and Research New York: Oxford University Press.
- Rogers, E. M.(2003). *Diffusion of innovation*. 5th. USA: Free Press.
- TDK. T.C. Başbakanlık Atatürk Kültür, Dil ve Tarih Yüksek Kurumu Türk Dil Kurumu. Güncel Türkçe Sözlük. Erişim tarihi: 25.011.2017, http://www.tdk.gov.tr/index.php?option=com_gts&arama=gts&guid=TDK.GTS.5a19ca5d52ddf9.24177947

- Peters, B. (2009). And lead us not into thinking the new is new: a bibliographic case for new media history. *New Media & Society*.
- Rickard, S.J. (2012). Electoral systems, voters' interests and geographic dispersion. *British Journal of Political Science*. 42 (04): Cambridge University Press.
- Rubin, A. M. (1984). Ritualized and instrumental television viewing. *Journal of Communication*, 34(3).
- Ruggiero, T.E. (2000). Uses and gratifications theory in the 21st Century. *Mass Communication & Society*. 3(1).
- Temizel, M.(2012). Türkiye’de seçmen davranışlarında sosyo-psikolojik, kültürel ve dinsel faktörlerin rolü: Kuramsal ve Amprik Bir Çalışma. Doktora Tezi. Selçuk Üniversitesi: Konya.
- Troitter D. Fuchs C. (2014). *Social media, politics and internet*. New York: Routledge.
- van Dijk, J.(2004). *Digital media, the sage handbook of media studies*, John D.H. Downing, Denis McQuail, Philip Schlesinger, Ellen Wartella, London: Sage.

South African Social Sciences Teachers' Understanding Of Democracy, Citizenship And Citizenship Education

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Abstract

This paper reports the findings of a study that surveyed a sample of social sciences teachers' understanding of the concepts of democracy, citizenship and citizenship education. A non-experimental survey research design involving quantitative data was used to generate data for the study. The results from the questionnaires were analyzed by means of descriptive statistical analyses. The three different definitions of each of the respondents were then coded by means of inductive and *a priori* coding. To reveal the meaning of the definitions, themes were identified, and organized into categories. The latter were used to summarize the content of the definitions.

The findings indicated that the most frequent elements to appear in the democracy definitions were forms of government and political equality (rights and responsibilities), and the least frequent element was the evaluative (critical thinking). The analyses of the respondents' citizenship definitions revealed that they held a minimalist view of South African citizenship. They saw citizenship as a responsibility and right. The elements with the lowest frequencies were membership, active and the evaluative. Two of the respondents made reference to critical multicultural citizenship. The respondents' citizenship education definitions gravitated towards the conservative orientation of citizenship education, and the emphasis was on responsibilities and education. The elements with the lowest frequencies were membership, evaluative, active and rights. A close reading of the three collected definitions revealed evidence of the reproduction of the existing socio-political order and the cultivation of national loyalty and obedience to authority. Given the latter, in practice, the education of critical, active and inquiring young South African citizens were not taking place.

Finally, an improvement plan to enhance democracy, citizenship and citizenship education within the framework of the school subject social sciences was recommended, given that the future of governments depends on citizenship education. "If the young is not trained by habit and reason in the spirit of the constitution, all is for nothing." (Thomas Jefferson)

Introduction

In 2018, South Africans celebrate 24 years of democracy. While the conditions of poverty, unemployment, disease and crime are daunting, their optimism about the prospects of democracy is encouraging. However, most citizens' involvement in governance is described as inadequate (Foley & Puta in Stevick & Levinson, 2007; TIMES Live, 2015). Foley and Puta's (in Stevick & Levinson, 2007) research findings confirm that a vibrant civil society is essential for democracy to flourish, and for them the solution to the problem lies in citizen participation and development. Globally, growing concern is also expressed in democracies about the "... levels of engagement or disengagement amongst young citizens and their ability to engage with basic civic responsibilities." (Hughes, Print & Sears, 2010, p.295; SAAPS, 2016). Hughes et al (2010) and Pinar (2011) confirm that one of the primary responsibilities of a public education system is to ensure that citizens have the knowledge and skills to effectively engage with the social, economic and political opportunities that are inherent to a democracy.

Problem Of The Study

Momentous curriculum changes have occurred in South Africa since the end of apartheid and the first democratic elections in 1994 (Department of Basic Education, 2011). A closer scrutiny of the curriculum policy documents revealed a number of problems, namely that the curriculum as document did not necessarily translate itself into curriculum as experience; and that it lacked conceptual clarity, coherence and consistency which resulted in conflicting forms and conceptions of citizenship and citizenship education. Citizenship education in South African public schools has in some cases a maximalist tone, but collectively reflects a minimalist conception of citizenship and citizenship education. South African public schools are providing the learners with knowledge about the country and the world's social, political, economic and geographical phenomena without any active engagement with social conflicts and problems such as racial and gender discrimination, conflicting political ideologies, competing economic systems, poverty and inequality. The emphasis in the values-based education documents is also on content instead of process, and the latter undermine democratic participation and an active citizenry, and promote obedience, if not, unquestioning loyalty to the South African government (Banks, 1990; Department of Basic Education, 2011; Mathebula, 2009).

According to Hammett and Staeheli (2009) and Parker (2015), the school subject social sciences globally focuses on democracy, human rights and citizenship education. However, the South African social sciences curriculum is abstract, and does not reflect the learners' experiences in their communities and society at large (Department of

Basic Education, 2011). Hughes et al (2010, 295) warned against curriculum policy documents depriving social sciences of its role of "... developing critical thinking and reflexivity among teachers and learners about the conflict-ridden realities of a world torn apart along political, economic, religious and racial lines." When school subjects do not focus on the conflicts and the problems of society, they serve the hegemonic power nexus, and reconfirm the social order. Mathebula (2009, pp. 2-3) cautions policy-makers that, "Democracy requires a range of forms of learning, both taught and caught, or inside and outside schools." For Hammett and Staeheli (2009), the minimalist conception of citizenship education is not appropriate for the South African context; what is needed is strategies for getting South Africa from where it is (mainstream conception of citizenship and citizenship education) to where the country ought to be (transformative conception of citizenship and citizenship education).

Research Question And The Purpose Of The Study

According to Kalous (as cited in Yazdgerdi, 1996, p.16), if practices of citizenship education are to change, it should start with a "... spontaneous bottom-up unfolding ..." of citizenship development reforms. With this in mind, the following exploratory research question was formulated: What could be done differently in terms of citizenship education in South Africa to enhance its potential for the development of informed, critical and participating citizens? Given this question, the purpose of the study was to survey a sample of social sciences teachers' understanding of democracy, citizenship and citizenship education to

- contribute to the current debate on the conceptual clarity, coherence and consistency in the education policies;
- sensitize role-players to strategies for getting South Africa from where it is to where the country ought to be; and
- serve as an impetus for further research to address the lack of citizen involvement in governance, and to promote a vibrant civil society in South Africa.

Literature Review

Given the topic of this paper, a brief description of the concepts democracy, citizenship and citizenship education is provided below. This is done to avoid any misunderstanding regarding the use of the concepts in this study.

Democracy

In the nation state, the modern concept of democracy consists of three principal components: democracy, constitutionalism, and liberalism. Each must exist in a political system to be a true democracy. The fundamental principles of democracy are the sovereignty of the people, political equality of all citizens, just powers of government based on the consent of the governed, and free, fair and frequent elections. Constitutionalism refers to the use of constitutions to limit governments by law, and to respect the freedom, equality and dignity of individual citizens. Liberalism recognizes the moral primacy of the individual and the protection of fundamental rights. Two parallel models of democracy are distinguished, the participatory (broad participation of the people in the direction and operation of political systems) and the representative (all eligible citizens vote for representatives to pass laws on their behalf) (Blaug & Schwarzmantel, 2006; Mathebula, 2009; McLaughlin, 1992).

Citizenship

The concept of citizenship has different meanings depending on the socio-cultural context and political organization of the state (Garcia, 2007). According to Mathebula (2009), South Africa is a participatory democracy and citizens' individual autonomy and equality are respected, and they need critical thinking skills for active engagement in all aspects of public life, both globally and nationally. According to Marshall (1950), citizenship is an equal status given to every citizen of a country, and they are granted rights and responsibilities. Marshall (1950) identified three kinds of rights: civil rights (freedom of speech, thought, faith and liberty); political rights (as elected member or voter); and social rights (public safety, health and education).

McLaughlin (1992) mapped citizenship along a continuum of minimalist and maximalist conceptions. He contrasted the minimalist and the maximalist conceptions of citizenship in terms of various citizenship issues. Major points of divergence between the two interpretations of citizenship are the extent of political involvement and the degree of critical understanding and questioning that is required for citizenship. With regard to a minimalist view, political involvement and participation is limited to voting for elected representatives, and citizenship is viewed as a private matter; while a maximalist view focuses on the broad participation of the people in government. The maximalist conception requires an explicit understanding of democratic principles, values and procedures, and the dispositions and capacities required for participation in the democratic processes. The minimalist conception requires an unreflective socialization of citizens into the political and social *status quo*.

Parker (1996) identified three conceptions of democratic citizenship, namely the traditional, progressive and advanced. According to him (Parker 1996), the traditionalists emphasize knowledge of government structures and

functions, and democratic values such as freedom of speech, liberty and voting. The progressives share a similar commitment, but also embrace notions such as strong democracy and civic participation in its numerous forms (Banks, 2004; Newmann, 1968). Advanced citizenship is built on the progressive perspective, but also focuses on the tensions between pluralism and assimilation (Parker, 1996). Additionally, Parker (1996) identified three conceptions of good citizenship, the personally-responsible, participatory and justice-oriented. A personally-responsible citizen has a good character, is a responsible member of the community, and endeavors to solve problems. A participatory citizen is knowledgeable about the operation of government agencies to resolve social problems, and want to improve society through civic participation, good relationships, common understandings, trust and collective commitments. A justice-oriented citizen, critically assesses social, political and economic structures to identify injustices, solve social problems and improve society.

Citizenship education

Citizenship education, in many countries, is categorized along a continuum of minimal to maximal characteristics. Minimal citizenship education includes normative ideas of citizenship, such as a legal ascription of citizens' identity and their rights and duties, with an emphasis on equality for all, without accounting for the diversity within multicultural societies. Within this form of citizenship education, the goal is to educate good citizens who are law-abiding, contribute to society, and possess good characters. The pedagogy is content-led with the focus on civic knowledge, with little or no attention to participation in processes to address societal structures and relations that create inequalities among citizens (Maree et al, 2012; McLaughlin, 1992).

Kerr, Stuurman, Schultz and Burge (2010) and McLaughlin (1992) describe maximal citizenship education as the development of learners' values, attitudes and skills for participation in democratic processes and civic organizations. The goal is to foster young citizens' involvement in political, societal and civic structures. The pedagogy focuses on the school curriculum and extra-curricular activities such as participation in school governance and service learning. The emphasis is on the acquisition of knowledge and skills in a variety of subjects.

Extending McLaughlin's (1992) minimal and maximal approaches to citizenship education, DeJaeghere (2006) and DeJaeghere and Tudball (2007) put forward the critical citizenship education approach that problematizes and (re)constructs democratic citizenship to address civic realities such as exclusion and discrimination, and the factors that prevent the full enactment of democratic citizenship in multicultural societies. This approach shares foundational principles with critical pedagogy, and the recent developments in multicultural education and post-colonial theory. Kincheloe and Steinberg (2002) explain that a critical multicultural approach to citizenship education questions the existing socio-political order that creates injustices and inequalities for certain groups in society. Both knowledge and participation are used to empower learners to understand and engage with the underlying causes of social problems in society. Knowledge in this approach refers to a critical analysis of historical and contemporary developments and practices of citizenship in nation-states, and the social structures through which democracy are enacted. This knowledge is learned from a variety of disciplinary and cultural perspectives, including perspectives of marginalized knowledge. Learners should develop positive attitudes and emotional connections to those who are different from themselves, and also engage with contested issues.

From the above, it is clear that the purpose of citizenship education is the development of good citizens. In terms of its implementation, which includes policies, curriculum and teaching strategies, the purpose is expressed as either conservative (maintaining the *status quo*), or progressive (empowering individuals and groups to struggle for emancipatory change). Citizenship education practices are situated somewhere along a continuum between these two orientations, but gravitate towards one or the other. The conservative orientation privileges reproductions of the existing socio-economic order to instill national loyalty, obedience to authority, voluntary service, and the assimilation of immigrants. It also deals with national narratives, historical and geographical facts, the functioning of government institutions, the reproduction of social structures, and the development of moral character and social cohesion. Representative democracy and voting are the most important expression of citizenship participation. The progressive orientation privileges societal transformation (gender, race and class), social justice, diversity, and emancipation by identifying and reducing the tension between capitalism and democracy. The most important expression of progressive citizenship is participation and activism. It nurtures critical analysis, political engagement, and cross-cultural respect and understanding to develop active, informed and critical citizens (Shugurensky & Myers, 2003).

Research Methodology

Critical theory was used as theoretical framework of the study given its emphasis on reason as the highest potential of human beings, and that by reasoning it is possible to criticize and challenge the nature of existing societies. It also claims that bias is present in every human action, that research can address the bias, injustice and subjugation

that shape people's experiences and understanding of the world, and that a study of the latter can result in an understanding, critique and change of society (Blaikie, 2001).

The context of the empirical study was a rural secondary school in the Gauteng province. The school has 1200 learners and 36 teachers. It has four grade 7 classes, nine grade 8 classes, and thirteen grade 9 classes with Tswana as language of teaching and learning. Access to the school was via an old tar road and a dirt track. Electricity, running water and poor sanitation facilities were available. The school buildings were overcrowded and needed renovation. The qualifications of the staff ranged from matriculation (Grade 12) certificates to honor's degrees, and their teaching experience varied from none to between 21 and 30 years.

A non-experimental survey research design involving quantitative data was used to generate data for the study of the rural teachers' knowledge and understanding of what it means to be a South African citizen. As a result of practical decisions to access an existing group, the non-probability convenience sampling technique was used. As the researcher was interested in getting an inexpensive and quick approximation of the truth regarding the development of rural South African citizens, only a limited number of respondents were involved (Maree et al, 2012). Stoker's (1985) guidelines for sampling were used to determine the sample size of the study. The questionnaire was group-administered to a sample of 15 teachers that included sub-groups of gender, age, academic qualifications, teaching experience, and grades and subjects responsible for. The objective of the questionnaire was to obtain facts and opinions about a phenomenon (citizenship development) from respondents who were informed about the particular issue (conceptions of democracy, citizenship and citizenship education).

The questionnaire started with a few biographical questions followed by three structured questions. The following biographical questions were included: a closed dichotomous question to determine the teachers' gender, and three fill-in questions to identify their ages, qualifications, experience, teaching subjects, and the grade(s) that they are teaching. A scaled question was formulated to determine the extent of their academic knowledge and understanding of the concepts democracy, citizenship and citizenship education. The questionnaire was concluded with three fill-in questions to determine the teachers' authentic knowledge and understanding of the concepts. The following ethical principles were negotiated with the respondents prior to the start of the data-collection procedure, namely anonymity, voluntary participation and confidentiality.

Results And Discussion

After the data has been captured, the descriptive statistical analyses were done using Microsoft Excel. The results from the questionnaires are presented in Tables 1 to 8.

Biographical information

Table 1 (see below) contains the frequency distribution of the gender of the teachers. Of the 15 teachers who responded to the question, 9 (64.29%) were female and 5 (35.71%) male. One (7.14%) of the sampled teachers did not respond to the question.

Table 1: Teachers by gender

Gender			
Female		Male	
Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
9	64,29	5	35,71
Total	*14		

* One of the 15 teachers did not respond to the question.

Table 2: Age distribution of teachers

Years	Frequency (f)	Percentage (%)
20-24	1	6.7
25-29	2	13.3
30-34	-	-
35-39	1	6.7

40-44	3	20.0
45-49	2	13.3
50-54	3	20.0
55-59	3	20.0
Total	15	100

Table 2 (above) reflects the age distribution of the teachers. Of the 15 teachers, one (6.7%) were between 20 and 24 years of age, two (13.3%) between 25 and 29, and another one (6.7%) between 35 and 39. Three of the sampled teachers (20.0%) were between 40 and 44 years, and two (13.3%) between 45 and 49 years of age. Six of the teachers were within the age cohorts of 50 and 54 (3, 20.0%) and 55 and 59 (3, 20%) respectively.

Knowledge and understanding of the key concepts

The teachers' opinion on the extent of their knowledge and understanding of the concepts democracy, citizenship and citizenship education are presented in Table 3 below.

Table 3: Extent of teachers' conceptual knowledge and understanding

Teachers' conceptual knowledge and understanding		
Category	Frequency (f)	Percentage (%)
Excellent	5	33.3
Good	7	46.7
Average	2	13.3
Poor	1	6.7
Total	15	100

Of the 15 sampled teachers, 5 (33.3%) indicated that their conceptualization of the three concepts was excellent, seven (46.7%) that it was good, two (13.3%) that it was average, and one (6.7%) that it was poor.

Qualitative data from the three definitions

The three different definitions of each of the respondents were coded by means of inductive and *a priori* coding. Each definition was read to elicit elements that might or might not be evident in the other definitions. The elements elicited from the document study were also used to bring order, meaning and structure to the collected information. The process of reading the data in this manner continued until an exhaustive list of possible elements was created. In each of the definitions, themes that would facilitate the teachers' understanding of the concepts were identified, and organized into coherent categories to summarize and reveal the meaning of the definitions. The categories used to classify the elements were: form (type of government, status); rights (civil, political, social, status); responsibilities (participation, status); membership (belonging to, status); evaluative (critical thinking); active (agency, practice, attitude); and knowledge (education) (Garcia, 2007; Mathebula, 2009; Schoeman, 2006). The results are reported in Tables 4 to 6 that focus on each of the three definitions.

Table 4 (below) contains the frequency distribution of the key elements in the teachers' democracy definitions.

Table 4: Frequency of elements in the teachers' democracy definitions

Element	Frequency (f)	Percentage (%)
Form	7	46.7
Rights	3	20.0
Responsibilities	3	20.0
Evaluative	2	13.3
Total responses	15	100

Of the teachers (n=15) who were sampled, the most frequent element to appear in their democracy definitions was form, with 7 (46.7%) references to forms of government. The second most frequent elements were rights (n=3, 20.0%) and responsibilities (n=3, 20.0%), and the least frequent element was the evaluative as only two (13.3, %) of the teachers referred to this element. The analysis of the teachers' democracy definitions revealed that the majority of them included references to forms of government. Most of the respondents referred to the fact that South Africa was a representative democracy, "... by voting to elect representatives to a parliament" (Teacher #7), and that "... all eligible members of [the] state vote through elected representation ... so that they represent them well." (Teacher #6). In only a few of the definitions, references were made to participatory democracy: "...

Government of the people" (Teacher #9), and a "... . System of government by the whole people" (Teacher #5). The definitions of the teachers provided evidence that they were knowledgeable about their status as citizens of a democratic South Africa, and multiple references to political equality (rights and responsibilities) were included. For example, Teacher #4 referred to the: "Right to vote ... and ... responsibility to ... say ... how and who should ..., make decisions for the people."

A low percentage of the teachers (2, 13.3%) made reference to the evaluative element. Despite the implementation of an education system conducive to the establishment of a democratic South Africa with participatory democracy and active citizenship at its core, in practice, the education of active, critical and inquiring individuals were not taking place. The latter are vital skills for citizens to affect the decisions that political representatives take on their behalf (Blaug & Schwartzmantel, 2006). According to Banks (1990), citizenship education in a democracy has to empower students to take control of their own lives, and for this they have to ask critical questions. Two of the teachers included references to some of the other characteristics of a democracy such as critical multicultural citizenship. For example, the protection of fundamental rights and dignity was cited: "I have rights to basic needs as stated in [the] South African Bill of Rights. ... The people have human rights" (Teacher #8), and that in a democracy the citizens are "Free from oppression, discrimination, and segregation to be governed according to ... [the] constitution of my country." (Teacher #10)

Table 5 below contains the frequency distribution of the key elements in the teachers' citizenship definitions.

Table 5: Frequency of elements in the teachers' definitions of citizenship

Element	Frequency (%)	% of responses
Responsibilities	6	40.0
Rights	4	26.7
Membership	2	13.3
Active	2	13.3
Evaluative	1	6.7
Total responses	15	100

Of the teachers who were sampled, the most frequent element included in their citizenship definitions was responsibilities. From the 15 responses, 40% (n=6) of the teachers' definitions contained this element. The next frequently mentioned element was rights (26.7%, n=4), followed by membership (13.3%, n=2) and active (13.3%, n=2). The least frequent element was the evaluative (6.7%, n=1). The results of the analysis of the citizenship definitions revealed that the respondents held a minimalist view of citizenship. They obeyed the calls for law and order and good neighborliness, but were more concerned about their formal and legal status, than their public duties and participation through representative politics.

A close scrutiny of the above responses, revealed the teachers' views on citizenship as a status (rights, membership) and an attitude (agency, active, evaluative). One of the most salient elements in the citizenship definitions of the respondents were their references to responsibilities and political rights: "I have a rights to vote for a government that represent me. I need ... access to information To make the right choices." (Teacher #10), and "I ... have the right to vote and choose the party that will be able to represent us as the voters" (Teacher #2). Two of the respondents referred to social and civil rights: "I have rights to housing, citizenship, ... and safe and clean water" (Teacher #7), and "I legally belongs to South Africa and have the rights and protection of my country." (Teacher #8). According to Pena (2003), democratic societies cannot be found on rights and institutions alone, they also depend on the qualities (responsibilities, participation, accountability) of their members. Habermas (1996, p.72) observed that "... the citizen as individual can reflectively use these qualities and attitudes to change their situation, position or material legal status." In the teachers' citizenship definitions, references were also made to citizenship as an attitude. Teacher #6 wrote: "I should be loyal to my country Carrying out my duties to the best [of my] ability. ... [and] choose who I want to run the country. (someone who is a hard worker, honest and trustworthy)."; and Teacher #15 explained that citizens have to " ... respect other peoples' right[s] [that is] whether you are a disabled person or not ... I would like to be [a] paramedic women so that I can help people who are injured in an accident." The element with the lowest frequencies in the respondents' citizenship definitions was once again the evaluative. McLaughlin (1992) indicated that the extent of citizens' political involvement is related to the degree of their critical understanding and questioning. Political involvement in South Africa is limited to voting. It was clear from the respondents' citizenship definitions that only a few of them developed the critical faculties to understand and question the issues related to equity and justice at local and societal levels such as to: " ... help people who are poor and ensure that they get a healthy life style." (Teacher #15), "... I will fix the lights on [the]

street and make sure that the roads are save and ... fine." (Teacher#2), and "I ... will Take part in community activities (volunteering)." (Teacher #13).

Table 6 below provides the frequency distribution of the key elements as identified in the citizenship education definitions of the teachers.

Table 6: Frequency of elements in the teachers' citizenship education definitions

Element	Frequency (%)	Responses (%)
Responsibilities	6	40.0
Education	3	20.0
Membership	2	13.3
Evaluative	2	13.3
Active	1	6.7
Rights	1	6.7
Total responses	15	100

Of the teachers (n=15) who were sampled, the most frequent elements to appear in their citizenship education definitions were responsibilities and education. Of the responses, 40% (n=6) and 20.0% (n=3) of the definitions contained these two elements. The next most frequent elements were membership (13.3%, n=2) and evaluative (13.3%, n=2), and the two least frequent elements were active and rights, with 1 teacher (6.7%) each. The respondents' citizenship education definitions gravitated towards the conservative orientation of citizenship education. According to Inman and Buck (1995), citizenship education should be concerned with empowerment and the development of learners' ability to take control, and exercise responsibility over their own lives, and to ask critical questions, evaluate evidence and question the taken-for-granted. A close reading of the collected citizenship education definitions revealed that all of them contained evidence of the reproduction of the existing socio-economic order, including the cultivating of national loyalty and obedience to authority. The emphasis was on the minimalist conception of citizenship education with the functioning of government institutions, representative democracy, and voting as the most important experiences of citizenship participation: " ... to provide the young people with an understand[ing] of the political [,] legal, and ... respect [for] the citizen." (Teacher #9), and "... citizenship education Means they want people leaving education with an understanding of the political ideal and economic functions of adult society and with the social and moral awareness to thrive in it. " (Teacher #7). Teacher #12 wrote, "Citizenship education [is to] promote responsibility and taking pride and to be [a] patriot." Teachers #13 and #14 respectively demonstrated that it is taught: "to ... ensure that we get a good education in our own country so that we can help our community to develop educationally and support of our government."; and to "... involve all people to address common issues and learn to solve them." In terms of Greeno's (1991) environmental view of knowing, in the South African citizenship education classrooms, the learners learn about an environment without exploring the actual territory.

Conclusion And Recommendations

Given Parker's (1996) identified conceptions of democratic and good citizenship, this study revealed that the sampled teachers demonstrated that they held traditional and progressive conceptions of democratic citizenship. According to him (Parker, 1996), as traditionalists they emphasized knowledge of government structures and functions, and democratic values such as freedom of speech, liberty and voting. However, as progressives they embraced notions such as strong democracy and civic participation in its numerous forms (addressing common and welfare issues by volunteering) (Banks, 1990; Newmann, 1968). Only two of the teachers, demonstrated characteristics of advanced citizenship, as they focused on the tensions between pluralism and assimilation (Charles Taylor cited in Parker, 1996).

Parker (1996) also identified three conceptions of good citizenship, the personally-responsible, participatory, and justice-oriented. The social sciences teachers sampled for this study, identified with the characteristics of personally-responsible citizens as they saw themselves as having good characters and being responsible members of the community with as their core responsibility the solving of problems. They also indicated that they were participatory citizens who were knowledgeable about how the South African government agencies operate to resolve social problems, and to improve society through civic participation, good relationships, common understanding, trust and collective commitments.

The social sciences teachers involved in this study, revealed a conservative orientation to citizenship education. They viewed the purpose of citizenship education as the reproduction of the existing socio-economic system, and to instill in prospective citizens national loyalty, obedience to authority, and voluntary services. The social sciences

curriculum focused mainly on national narratives, historical and geographical facts, the functioning of government institutions, the reproduction of social structures, and the development of moral character and social cohesion as the most important expressions of citizenship participation.

This paper is concluded with a response to the research question that was posed at the beginning of the study, namely: What could be done differently in terms of citizenship education in South Africa to enhance its potential for the development of informed, critical and participating citizens? Widespread consensus of how to respond to the issue of citizenship education exists across the democratic world (Hughes, Print & Sears, 2010). Given the above, the following are recommended for the South African context:

- A thorough conceptual analysis of the curriculum policy documents. Pinto (2012) asserts that curriculum policy documents are highly political since they set out what learners "ought to learn" and what teachers "ought to teach". Apple (2004) advises that curriculum theorists, teacher educators and teachers should document the conceptual tools which are used in curriculum policy documents to reveal to what extent they may act as agents of hegemony, and perform latent ideological functions.
- Democratic citizenship education as primary focus of social sciences education. Roth and Desautels (2004) and White (2000) demonstrated that there exists a close link between social sciences and citizenship education as both focus on discovery learning, active learner engagement and social participation. According to Parker (1996) and Ross (2006), Thomas Jefferson pointed out that the people are democracy's engine, and that they must be educated for political engagement. The critical social sciences education (CSSE) approach is the most appropriate approach to citizenship education. It is grounded in the maximalist conception of citizenship and citizenship education using both the informal and formal curricula. This approach is part of the progressive citizenship education orientation, and empowers learners to critically examine and engage with social reality; and create a more democratic and socially just world. Active teaching and learning strategies are used to develop learners' higher order thinking skills to interrogate issues such as racism, gender inequality, multiculturalism, and social criticism (Kumar, 2012; McLaughlin, 1992; Ross, 2006; Shugurensky & Myers, 2003).
- Building curriculum for citizenship education. Hughes et al (2010) and Zevin (2015) conducted analyses of leading democracies, and identified factors associated with the building of effective citizenship education curricula. These were used to propose an action plan for the design of an effective citizenship education curriculum for the South African context. See Table 7 below.

Table 7: Designing an effective citizenship education curriculum for South African schools

Six elements	Actions
Debate	Initiation of a national debate on the issue as change agent towards a proactive curriculum.
Goals	Formulation of widely accepted goals to establish standards for citizenship education as part of social sciences education.
Curriculum materials	Development of pedagogically sound teaching and learning support materials.
Funding	Adequate government funding for effective implementation.
Teacher development	Provision of substantive pre- and in-service teacher education programs.
Research	Funding of research and development to support citizenship education policy, program development, and pedagogy.

This paper is concluded with Aristotle's argument that the future of a regime depends on citizenship education, and if the young is not trained by habit and reason in the spirit of the constitution, all is for nothing. Given the above, politics are a central concern of education, the nature and extent of citizenship education is the major determinant of politics, and governments can do much to provide effective citizenship education to its citizens (Department of Basic Education, 2011; Jones & Jones, 1992; Watson, 2005).

References

- Apple, M.W. (2004). *Ideology and curriculum*. Third edition, New York: Routledge Falmer.
- Banks, J.A. (1990). Citizenship Education for a pluralistic democratic society. *The Social Studies*, 81(5), 210-214.
- Banks, J.A. (2004). Teaching for social justice, diversity and citizenship in a Global world. *The Educational Forum*, 68, 296-305.

- Blaikie, N. (2001). *Social research: Approaches to social enquiry*. London: Polity Press.
- Blaug, R. & Swarzmantel, J. (2006). *DEMOCRACY A READER*. (pp. 1-20). Edinburg: Edinburg University Press
- DeJaeghere, J.G. (2006). Intercultural meaning and global citizenship in the Australian secondary curriculum. Between critical contestations and minimal constructs. In D. Stevick and B.A. Levinson (Eds.), *Reimagining civic education. How diverse societies educate for democratic citizenship*. (pp. 293-305). Lanham, MD: Rowman and Littlefield.
- DeJaeghere, J.C. & Tudball, L. (2007). Citizenship. Looking Back, Looking Forward. *Critical Citizenship. Teaching and Learning* 3(2), December, 40-57.
- Department of Basic Education. (2011). *Curriculum Assessment Policy Statement. Social Sciences. Senior Phase, Grades 7 to 9*. Pretoria: Government Publishing Company.
- Foley, D. & Puta, M. (2007). Developing citizen leaders for democratic governance in South Africa. In E.D. Stevick, and A.U. Levinson (Ed.), *Reimagining Civic Education: How Diverse societies form democratic citizens*. (pp. 28-38). Plymouth: Rowman & Littlefield.
- Garcia, E.G. (2007). *On the concept and models of citizenship*. Granada: University of Granada.
- Greeno, J.G. (1991). Number sense as situated knowing in a conceptual domain. *Journal of Research in Mathematics Education*, 22, 170-218.
- Habermas, J. (1996). *Between Facts and Norms: Contributions to a Discourse theory of Law and Democracy*. Translated by Willaim Rehg. Michigan, MA: MIT Press.
- Hammett, D. & Staeheli, L.A. (2009). *Citizenship in South Africa: A report to schools*. Cape Town: University of Cape Town Centre for African Studies.
- Hughes, A.S., Print, M., & Sears, A. (2010). Curriculum capacity and citizenship education: a comparative analysis of four democracies. *Compare*, 40(3), 293-309.
- Inman, S. & Buck, M. (Eds.), (1995). *Adding value? School's Responsibility for Pupils' Personal Development*. Stoke-on-Trent: Trentham Books.
- Jones, E.B. & Jones, N. (1992). *Education for Citizenship, Ideas and Perspectives for Cross-curricular Study*. London: Kogan Page.
- Kalous, J. (1996). Civic Education Reform in the Context of Transition. In T. Yazdgerdi (Ed.), *Changes in the Educational System*. (pp. 14-18) Prague: Report on Eastern Europe.
- Kerr, D., Stuurman, I., Schultz, W., and Burge, B. (2010). ICCS. 2009. *European Report. Civic knowledge, attitudes and engagement among lower-secondary students in 24 European countries*. Amsterdam: Multicopy.
- Kincheloe, J.L. & Steinberg, S.R. (2002). *Changing multiculturalism*. Buckingham: Open University Press.
- Kumar, A. 2012. Transition: Effect of a Paradigm shift in Curriculum Discourse. *Transnational Curriculum Inquiry* (1) from <http://nitinat.library.ubc.ca/ojs/index.php/tci>. 8 June 2016.
- Maree, K., (Ed.), J.W. Creswell, L. Ebersohn, I. Eloff, R. Ferreira, N.V. Ivankova, J.D. Jansen, J. Niewenhuis, J., Pietersen, V.L. Plano Clark, & C. Van der Westhuizen. (2012). *First Steps in Research*. Pretoria: Van Schaik.
- Marshall, T.H. (1950). *Citizenship and social class: and other essays*. London: Cambridge University Press.
- Mathebula, P.T. (2009). *Citizenship education in South Africa: A critique of post-apartheid citizenship education policy*. PhD thesis. Department of Philosophy. Johannesburg: University of the Witwatersrand.

- McLaughlin, T. (1992). Citizenship, Diversity and Education: A Philosophical Perspective. *Journal of Moral Education*, 21(3), 235-250.
- Newmann, F.N. (1968). Discussion: Political Socialization in schools. *Harvard Educational Review*, 38, 536-545.
- Parker, W.C. (1996). *Social Studies Today. Research and Practice*. Second Edition. New York and London: Routledge.
- Parker, W.C. (2015). *Social Studies*. New York: Continuum Press.
- Pena, J. (2003). The Citizenship. In A Arteta (Ed.), *Political theory: power, morality, democracy*. (pp. 10-15). Madrid: Alianza.
- Pinar, W. (2011). *Curriculum Studies in South Africa: Intellectual histories, past, present circumstances*. New York: Palgrave Macmillan.
- Pinto, L.F. (2012). *Curriculum Reform in Ontario*. Boston, MA: Pearson.
- Ross, E.W. (2006). The struggle for the social studies curriculum. In E.W. Ross (Ed.), *The Social Studies Curriculum: Purpose, Problems, Possibilities*. (pp. 50-60). Albany, NY: State University of New York.
- Roth, W.M. & Desautels, J. (2004). Educating for citizenship: reappraising the role of science education. *Canadian Journal of Science, Mathematics and Technology*, 4(2), 149-168.
- SAAPS (South African Association for Political Studies). 2016. *Decolonization after Democracy: Rethinking Politics into the 21st Century*. Annual Conference held at the University of the Western Cape in Bellville, Cape Town. 21 August to 2 September.
- Schoeman, S. (2006). A blueprint for democratic citizenship education in South African public schools: African teachers' perceptions of good citizenship. *South African Journal of Education*, 26(1), 129-142.
- Shugurensky, C. & Myers, J.P. (2003). Citizenship education: Theory, research and practice. *Encounters on Education*, 4, Fall, 1-10.
- Stoker, D.J. (1985). *Sampling. Personal communication to the author*. Pretoria: Human Science Research Council.
- TIMES LIVE. 2015. *South Africa at risk but there is "still reason to be optimistic"*. Available: <http://www.timeslive.co.za?local/2015/08/12/SA-at-risk-but-there-is> still-reason-to-be-optimistic. Accessed 15 May 2018.
- Watson, B.C.S. (2005). *Civic education and culture*. Wilmington, Del: ISL Books.
- White, C. (2000). *Issues in Social Studies: Voices from the classroom*. Springfield: Charles C Thomas.
- Zevin, J. (2015). *Social Studies for the Twenty-first Century. Methods and Materials for Teaching in Middle and Secondary Schools*. New York and London: Routledge.

Sport Emotional Questionnaire: A Study On Validity And Reliability

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Abstract

Individuals experience a series of different emotions during sport activities (Hanin, 2000; Lazarus, 2000). Sport researchers, who are studying on the relations of emotions and performance and the distribution of the emotions, need valid and reliable scales. In this context, the objective of this study is to adapt the Sport Emotional Questionnaire, which includes items based on the emotional experiences of the athletes and which is a pre-competition emotion scale, to Turkish culture. Totally 191 athletes (87 females, 104 males) volunteered to participate in the study (MeanAge= 23,76 + 4,05). Sport experience of the participants was calculated as Meanexperience= 8,73 + 3,82. Sport Emotional Questionnaire, which was developed by Jones et al.(2005), was used as the data collection tool in the study. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were used in order to examine the factor structure of the scale. Additionally, Cronbach Alpha (α) coefficient was used concerning the reliability of the scale. When the findings of the study are examined, the original form of the sport emotional questionnaire, which was originally five-item, was transformed into a four-item structure after the adaptation process to Turkish Culture. Moreover, since the four items were gathered under different sub-dimensions, they were excluded from the model and re-analyzed. After the last analyses concerning the validity of the scale, goodness of fit parameters were calculated as χ^2/df :2.370, CFI: .95, SRMR: .003, RMSA: .08. As the conclusion, it was concluded that, having been developed for the athletes and adapted to Turkish Culture, the Turkish form of Sport Emotional Questionnaire was valid and reliable.

Keywords: *Sport Emotion, validity, reliability, Athlete.*

Introduction

Although the definitive description of emotion varies according to researchers, Fredrickson (2001) defines emotion as a cognitively assessed response given consciously or unconsciously to a fact. This response “triggers a stream of reaction flows that manifests itself in a system of superficial assembled components such as subjective experience, facial expressions, cognitive functioning and physical changes” (s.218). Some researchers emphasize the behavioral aspect (i.e., behavior tendencies) of the emotional reaction (see in Gross, 1998; Russell,2003).

This article focuses on how an inventory, which can be useful to assess the subjective feeling associated with an emotion, can be developed. Studies suggest that the context of the emotional experience can confidently be defined only with two dimensions including intensity and pleasure (Parrot, 2001). Physical and behavioral features accord with emotions in the most optimistic approach as long as the individuals who experience these situations do not verify by conveying their insights.

Emotion in the emotion scales in sports studies is used as affectivity and mood changes. However, there are theoretical differences between these structures (for a discussion on this topic, see Ekman & Davidson, 1994). Mood explains the long-term situations which an individual being in without knowing the reason for experienced feelings (Parkinson, Totterdell, Briner, & Reynolds, 1996). Conversely, emotions are relatively short-term and triggered by a particular premise (Lane & Terry, 2000). Affectivity is a broad term used to explain everything about emotions such as choices, feelings, and moods (Rosenberg, 1998). The Sports Emotional Questionnaire, which was developed to emotions by considering these definitional differences, is related to the individual's responses against a specific event (i.e., what do you feel about this competition) rather than what the individual generally feels (i.e., what do you feel now?). With the view that if the answer that is given in the question "what are you feeling now" is used when asked before the competition, emotional responses given to other situational factors will have been evaluated as well as those related to the competition (i.e.,the anger related to the delay in traffic on the way to the competition), if we use the question “what do you feel about this competition”, it is thought that the collected measurement will be related to emotional responses associated with the competition, and the Sport Emotional Questionnaire has been developed (Jones et al., 2005). There is neither a sport-specific perspective nor a developed or adapted measuring instrument for competition or sporting performance in our country. In this context, this study aims to adapt sport emotional scale to Turkish culture.

Method

Research Group

The validity and internal consistency reliability were tested on the athletes competing in different league status in different provinces in Turkey during the 2017 – 2018 season and the athletes were recruited according to purposeful sampling. 191 athletes ($\text{Mean}_{\text{age}}=23,76 \pm 4,05$) including 87 females (45,5%) and 104 males (54,5%) participated in the study. The means score of the sports experience was found to be $\text{Mean}_{\text{experience}}=8,73 \pm 3,82$.

Table 1: The distribution of the participants according to gender variable

	N	%
Women	87	45,5
Men	104	54,5
Total	191	100,0

When table 1, is examined, it seen that 191 athletes ($\text{Mean}_{\text{age}}=23,76 \pm 4,05$) including females 45,5% (87) and 54,5% males (104) participated in the study.

Data Collection Tools

Personal Information Form

The form designed by the researchers included information such as gender, age, sports branch, and sports experience (How long have you been competing?).

Sport Emotional Questionnaire (SEQ)

Sport Emotion Questionnaire developed by Jones et al. (2005) to measure the emotional state of the athletes. With the view that if the answer that is given in the question "what are you feeling now" is used when asked before the competition, emotional responses given to other situational factors will have been evaluated as well as those related to the competition (i.e., the anger related to the delay in traffic on the way to the competition), if we use the question "what do you feel about this competition", it is thought that the collected measurement will be related to emotional responses associated with the competition, and the Sport Emotional Questionnaire has been developed (Jones et al., 2005). The original questionnaire has 5 sub-dimensions including 22 items.

Data Collection/Process

Before starting to the translation process, the permission was asked via e-mail, and the authors granted the permission. Standard translation and back translation method suggested by Brislin (1986) was used in the translation process. In this method, there should be two independent translators. The first translator translated the original scale into the target language; the second translator did the back translation (Carlson, 2000). According to Savaşır (1994), the translators should know both language and the related concept about the scale. In this context, the original scale was translated into Turkish and then the Turkish form was translated into the original language by using the translation-back translation method. The English version of the scale was translated by one expert in the English language and two experts who know English in sports sciences. Translated scale items were compared with each other. The same experts made the necessary corrections regarding meaning and grammar by discussing on the Turkish version. The items having the same and the different translations were translated into English again by different language experts. Back-translation version of the scale was compared to the original scale, and differences and mistakes were determined. English translation was compared to the original scale, the last version of Turkish scale was created with the closest translations. The last version of the scale was applied to the athletes before or after training to find out the construct validity and reliability.

Analysis

In data analysis, Confirmatory factor analysis (CFA) was applied to test whether the scale was verified in Turkish culture. In the first analysis, because 5-factor structure was not confirmed, Exploratory Factor Analysis was conducted, and it was found that the scale had a 4-factor structure in Turkish culture.

In confirmatory factor analysis, maximum likelihood method was used to analyze the data. In confirmatory factor analysis, to confirm that the scale had an acceptable fit (χ^2/df ratio, root mean square error of approximation-RMSEA, standardized root mean square residual-SRMR, Tucker-Lewis Index-TLI, Comparative Fit Index-CFI and Goodness of Fit Index-GFI), the indices were evaluated by considering some criteria. Thus, χ^2/df ratio under 3 indicates perfect fit (Kline, 2005; Sümer, 2000). It is stated that RMSEA and SRMR value of 0-0.05 is a good fit, 0.05-0.10 is acceptable fit; the CFI value of 0.97-1.00 is a good fit, 0.95-0.97 is acceptable fit; GFI value of 0.95-1.00 is a good fit, 0.90-0.95 is acceptable fit (Schermelleh-Engel, Moosbrugger and Müller, 2003). Moreover, divergent and convergent validity analyzes of the scale were conducted in "Master Validity Tool" created by Gaskin & Lim (2016) in AMOS 21 program. The validity analysis was conducted in AMOS 21; the reliability was tested in SPSS 20 by using Cronbach's alpha values and Pearson Products Moment Correlation coefficient.

Table 2: Exploratory Factor Analysis

4 Factor Model

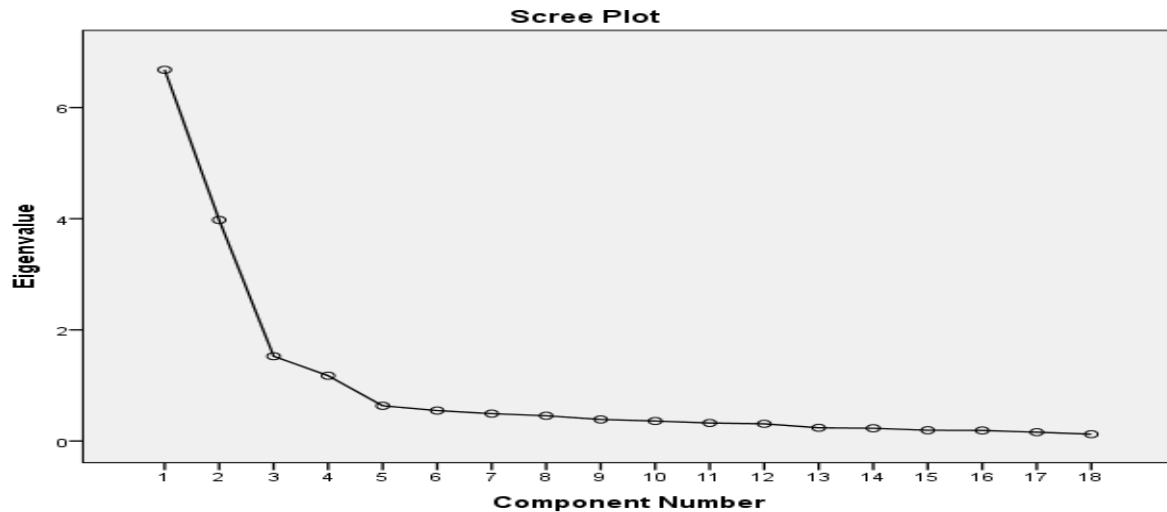
	1	2	3	4
d20	,859			
d10	,856			
d15	,828			
d19	,819			
d13	,808			
d5	,776			
d3	,766			
d17		,842		
d2		,832		
d12		,797		
d22		,764		
d7		,712		
d9			,855	
d14			,839	
d18			,736	
d16				,844
d21				,769
d6				,751
Açıklanan Varyans	% 6,680			
Açıklanan Toplam Varyans	% 74,208			

In the evidence collection process associated with scale construct validity, EFA, which is a statistical method that aims at explaining the structure with a smaller number of variables by gathering variables (items) measuring the same structure, was used (DeVellis, 2014; Tezbaşaran, 2008). It can be explained by the Kaiser-Meyer-Olkin (KMO) coefficient and Bartlett test whether the data collected from the study group is proper for factor analysis (Büyüköztürk, 2014). In this case, it is expected that the Bartlett test should be significant and KMO value should be higher than 0.50. According to literature, the KMO value is accepted as 0.60 medium, 0.70 good, 0.80 very good, 0.90 excellent. KMO value of 0.60 and significant Bartlett test indicate that the data is proper for factor analysis (Tavşancıl, 2014; Çokluk et al., 2012), reveal that the data comes from multivariate normal distribution and that the factoring technique between variables can be used (De Vellis, 2014; Fraenkel and Wallen, 2000; Kline, 1994). In this study, KMO sample fit value was 0.92, and the Bartlett test of Sphericity chi-square value was 2012.543 ($p < 0.01$). These values indicated that the data collected from the study group perfectly proper for the factor analysis.

There are various factoring techniques such as principal component analysis, maximum likelihood factor analysis, unweighted least squares analysis, and weighted least squares analysis (Tabachnick and Fidell, 2007). However, suggesting that principal component analysis is more powerful than many factoring techniques regarding psychometric aspect, mathematically simple and effective to cope with potential factor uncertainty problems, Stevens (1996) has said that principal component analysis is a technique that should be preferred with priority because of its listed advantages (cited in Akbulut, 2010). Hence, "Principal Component Analysis" was used in this study.

In Principal Component Analysis, the contribution of each factor to total variance and the latent variables having Eugene value over 1 by Kaiser-Guttman principle were considered when deciding factor number (Kline, 1994; Murphy and Davidshofer, 1991; Zwick and Velicer, 1986). Furthermore, the rotation technique was used to interpret factor structure easily and to gather items highly correlated with each other in a factor. Tabachnick and Fidell (2007) suggest that the direct oblimin rotation technique can be preferred in the axis rotation used in the conditions that the scale factors are correlated.

In this study, because the sub-dimensions of the features aimed to be measured were predicted to be correlated, the direct oblimin rotation technique was applied. According to many researchers (DeVellis, 2016; Büyüköztürk et al., 2012; Tavşancıl, 2014), the item factor loading value in a factor should be over 0.30. However, some researchers (Ferguson and Takane, 1989) suggested that 0.40 should be the cutoff point for the factor pattern. Accordingly, the cutoff point for item factor loading was accepted as 0.40. In the removal process of the items not measuring the same structure, it was considered that the factor loading should be over 0.40 and the difference between loading values should be 0.10 to prevent overlapping when an item had a high factor loading for two different factors (Büyüköztürk, 2014).

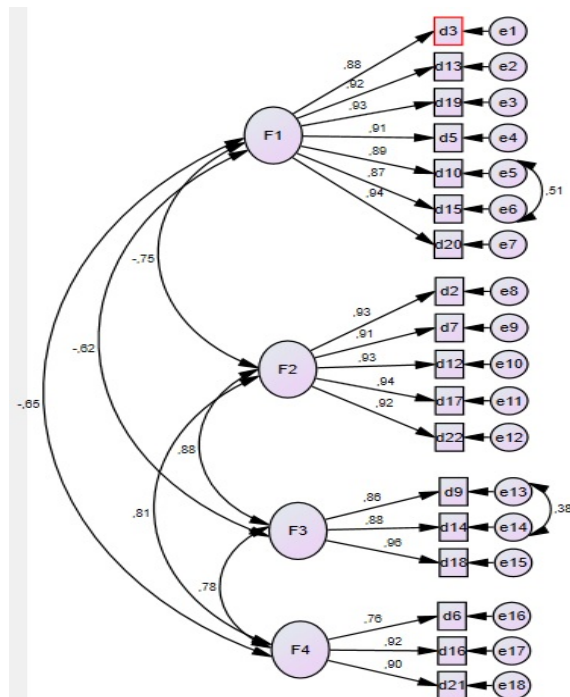
Figure 1: The Scree Plot

In figure 1, when the scree plot supporting to all decisions is examined, after the fourth point the slope makes a plateau. Besides, as it is seen in figure 1, the Eugene value of each factor is over 1.

Table 3: The fit indices of four- and five-factor measurement models

	χ^2	df	χ^2/df	CFI	SRMR	RMSEA	GFI
5 Factor	478.312	127	3.28	.82	.09	.09	.87
4 Factor	301.019	127	2.37	.95	0.03	08	.96

In table 3, when the fit indices are examined, while the indices for 5-factor structure are $\chi^2=478.312$, $df=127$, $\chi^2/df=3.28$, $GFI=.87$, $CFI=0.82$, $SRMR=0.09$ and $RMSEA=0.09$, those for 4-factor structure are $\chi^2=301.019$, $df=127$, $\chi^2/df=2.37$, $GFI=.96$, $CFI=0.95$, $SRMR=0.03$ and $RMSEA=0.08$. As the result of maximum likelihood analysis, all of the items in the scale had high t values.

**Figure 2: Diagram for the four-factor measurement model**

In the result of CFA, the factor loadings of the 4-factor model are displayed in figure 1. Figure 1 shows that the item loading values between latent and observed variables are between 0.87 and 0.94 in enthusiasm and happiness;

0.91 and 0.94 in indisposition; 0.86 and 0.96 in anger, 0.76 and 0.92 in anxiety. Kline (2010) suggested that the standardized weights of around 0.30 were moderate, while weights of .50 and above reflected large effect sizes. Hence, it can be said that item factor loadings collected as the results of CFA reflect large effect sizes. The values collected from CFA can be interpreted that the Sport Emotional Questionnaire can perform the valid and reliable measurement.

Convergent and Divergent Validity

Table 4: CR, AVE, MSV and factor-factor correlations

	CR	AVE	MSV	MaxR(H)	F1	F2	F3	F4
F1	0,970	0,823	0,567	0,972	0,907			
F2	0,966	0,852	0,773	0,972	-0,753***	0,923		
F3	0,928	0,811	0,773	0,947	-0,624***	0,879***	0,900	
F4	0,896	0,743	0,651	0,917	-0,648***	0,807***	0,777***	0,862

When table 3 is examined, Cr values range between .89 and .97. Besides, AVE value ranges between .74 and .85. When the factor-factor correlation is examined, it can be said that the significant correlation levels are moderate and high.

Reliability

Table 5: Cronbach's alpha and item correlation in Enthusiasm and happiness dimension

	Scale Deleted	Mean if Item Deleted	ItemScale Variance Deleted	if ItemCorrected Correlation	Item-TotalCronbach's Alpha if Item Deleted
d3	15,618		62,153	,868	,969
d13	15,377		61,699	,896	,967
d19	15,393		61,103	,902	,966
d5	15,560		62,606	,896	,967
d10	15,712		61,006	,901	,966
d15	15,670		61,275	,881	,968
d20	15,487		60,377	,922	,965

Cronbach's alpha value of Enthusiasm and happiness dimension was found to be 0.97. When the Cronbach's alpha coefficient values calculated after deleting each item, the reliability coefficient decreased after deleting items. Item total correlation coefficients in Enthusiasm and happiness sub-dimension was 0.92 at highest (d20. Item) and 0.87 (d3. Item) at lowest.

Table 6: Cronbach's alpha and item correlation in dejection dimension

	Scale Deleted	Mean if Item Deleted	ItemScale Variance Deleted	if ItemCorrected Correlation	Item-TotalCronbach's Alpha if Item Deleted
d2	4,335		29,403	,908	,957
d7	4,492		29,072	,887	,961
d12	4,545		29,334	,906	,958
d17	4,466		29,092	,914	,956
d22	4,382		29,153	,900	,958

Cronbach's alpha value of dejection dimension was found to be 0.97. When the Cronbach's alpha coefficient values calculated after deleting each item, the reliability coefficient decreased after deleting items. Item total correlation coefficients in Enthusiasm and happiness sub-dimension was 0.91 at highest (d17. Item) and 0.89 (d7. Item) at lowest.

Table 7: Cronbach's alpha and item correlation in anger dimension

	Scale Deleted	Mean if Item Deleted	ItemScale Variance Deleted	if ItemCorrected Correlation	Item-TotalCronbach's Alpha if Item Deleted
d9	2,738		8,036	,870	,916
d14	2,623		8,057	,887	,902
d18	2,859		8,406	,867	,918

Cronbach's alpha value of anger dimension was found to be 0.94. When the Cronbach's alpha coefficient values calculated after deleting each item, the reliability coefficient decreased after deleting items. Item total correlation coefficients in Enthusiasm and happiness sub-dimension was 0.89 at highest (d14. Item) and 0.87 (d18. Item) at lowest.

Table 8: Cronbach's alpha and item correlation in anxiety dimension

	Scale Mean if Item Deleted	ItemScale Variance if Item Deleted	ItemCorrected Correlation	Item-TotalCronbach's Alpha if Item Deleted
d6	3,236	7,276	,716	,906
d16	3,586	6,707	,846	,794
d21	3,534	6,776	,804	,831

Cronbach's alpha value of anxiety dimension was found to be 0.90. When the Cronbach's alpha coefficient values calculated after deleting each item, the reliability coefficient decreased after deleting items. Item total correlation coefficients in Enthusiasm and happiness sub-dimension was 0.85 at highest (d16. Item) and 0.72 (d6. Item) at lowest.

Discussion And Conclusion

This study was conducted to provide some relevant evidence for validity and reliability of Sport Emotion Questionnaire developed by Jones et al. (2005). In line with the study purpose, it was seen that internal consistency reliability coefficient of subdimensions of Sport Emotion Questionnaire ranged between 0.90 and 0.97. The internal consistency reliability coefficients were between 0.80 and 1.00, which Alpar (2001) suggested as highly reliable. In the study conducted by Jones et al. (2005), the internal consistency coefficients of the questionnaire having 22 items including 5 factors were found to be between 0.81 and 0.87. As it is stated by DeVellis (2016), the internal consistency coefficients are enough between 0.65 and .80.

The Turkish form of Sport Emotion Questionnaire, which was created the final version in line with translation-back translation method and experts' opinions, was applied to the athletes. In data analysis to test the construct validity, principal component analysis and confirmatory factor analysis were used. The results of the principal component analysis revealed four factors for Sport Emotion Questionnaire. Four-factor structure that was found out as the result of principal component factor analysis explained 74.208% of the total variance of "Sport Emotion Questionnaire." Factor loading ranged between 0.71 and 0.86. It was found out that there were 7 items in enthusiasm and happiness (factor 1), 5 items for indisposition (factor 2), 3 items for anger (factor 3), and 3 items for anxiety (factor 4). In this context, it was stated by Alpar (2001) that having factor loadings over .45 was acceptable.

Moreover, Erefe (2002) and Özgüven (1999) stated that item factor loadings could be accepted up to .30. Accordingly, the values can be said to meet the criteria. It can be said that the items in the questionnaire are acceptable. In confirmatory factor analysis, to confirm that the scale had an acceptable fit, χ^2/df ratio, RMSEA, SRMR, CFI, GFI, and TLI were evaluated. Some references are indicating the statistical model fit was used. In many types of research, more than one fit index is referenced. In this study, frequently used indices such as the ratio obtained by dividing chi-square by degrees of freedom (χ^2/df), root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), Tucker-Lewis Index (TLI), Comparative Fit Index-CFI and Goodness of Fit Index (GFI) were used. To have a good fit for a model, RMSEA should be smaller than 0.06. However, it is acceptable to have values up to .08 (Hu & Bentler, 1998). Having the value obtained by dividing chi-square by degrees of freedom under two indicates perfect fit (Tabachnick and Fidell, 2007). Conversely, there are studies suggesting that the value under 3 indicate perfect fit (Kline, 2005; Sümer, 2000).

Moreover, GFI and CFI should be over 0.90 for an acceptable fit, having values between 0.95 and 1.00 indicates perfect model fit (Bentler, 1990; Hu & Bentler, 1999). When all these criteria were considered, it was found that the hypothesized model of Sport Emotion Questionnaire had an acceptable fit and the indices were enough for model fit. Thus, the model consisting of eighteen items and four factors was found to be statistically fit.

Convergent validity refers to the statement related variables are correlated with each other and factor they constituted. Divergent validity is that the statements related to variables should be less correlated with the other factors. For the convergent validity, CR values should be higher than AVE values, and AVE should be higher than 0.5 (Hu & Bentler, 1999). In line with our results, having lower AVE values related to the questionnaire than CR values indicates that the scale has convergent validity.

For the divergent validity, it was examined whether MSV values were lower than AVE values. It is suggested that having lower MSV values than AVE values is evidence for divergent validity (Hu & Bentler, 1999). In this direction, it is seen that MSV values are lower than AVE values. In another word, the scale has divergent validity.

Consequently, in line with the result obtained from the validity and reliability studies of the Turkish form of Sport Emotion Questionnaire, it can be said that the questionnaire can be used validly and reliably to measure the athletes' emotional state before the competition. Some limitation of this study should be considered. For instance, construct validity related to validity and reliability, convergent and divergent validities and internal consistency coefficients were examined in this study. Additional studies are needed for psychometric features of the questionnaire. Furthermore, examining Sport Emotion Questionnaire in different groups will be beneficial. Conducting the criterion-related validity of Sport Emotion Questionnaire, examining its relationship between different concepts, and testing the factor structure for males and females will contribute to the validity and reliability of the questionnaire.

Author Note

This study is an improved version of the oral presentation presented in the International Conference on New Horizons in Education held between 18-20 July.

References

- Akbulut, Y. (2010). Sosyal Bilimlerde SPSS Uygulamaları. İstanbul: İdeal Kültür Yayıncılık
- Alpar R. (2001). Spor Bilimlerinde Uygulamalı İstatistik. Nobel Yayın Dağıtım, Ankara.
- Brislin RW. (1986). The wording and translation of research instruments. In W. J. Lonner & J. W. Berry (Eds.), *Field methods in cross-cultural research* (CrossCultural Research and Methodology Series, Vol. 8, pp. 137-164). Beverly Hills, CA: Sage.
- Büyüköztürk, Ş. (2014). Sosyal Bilimler İçin Veri Analizi El Kitabı: İstatistik, Araştırma Deseni SPSS Uygulamaları ve Yorum (Genişletilmiş 20. Baskı), Ankara: Pegem Akademi.
- Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö. E., Karadeniz, Ş. ve Demirel, F. (2012). Bilimsel araştırma yöntemleri (Geliştirilmiş 11.Baskı), Ankara: Pegem Yayınları
- Carlson ED. (2000). A Case Study in Translation Methodology Using the health- promotion lifestyle profile. II. *Public Health Nursing*. 17(1), 61-70.
- DeVellis, R. F. (2016). *Scale development: Theory and applications* (Vol. 26). Sage publications.
- Ekman, P., & Davidson, R.J. (1994). *The nature of emotion*. Oxford, England: Oxford University Press.
- Erefe İ. (2002). Veri toplama araçlarının niteliği. İ Erefe (ed), *Hemşirelikte Araştırma*, İstanbul: Odak Ofset, s.169-188.
- Ferguson, F. & Takane, Y. (1989). *Statistical Analysis in Psychology and Education*, McGraw Hill Book Company.
- Fredrickson, B.L. (2001). The role of positive emotions in positive psychology: The broaden- and-build theory of positive emotions. *American Psychologist*, 56, 218-226.
- Gaskin, J. & Lim, J. (2016), "Master Validity Tool", AMOS Plugin. Gaskination's StatWiki.
- Gross, J.J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2, 271-299.
- Hanin, Y.L. (2000). Successful and poor performance emotions. In Y.L. Hanin (Ed.), *Emotions in sport* (pp. 157-187). Champaign, IL: Human Kinetics.
- Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological methods*, 3(4), 424.
- Hu, L., Bentler, P.M. (1999), "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives" *SEM vol. 6*(1), pp. 1-55.
- Jones, M. V., Lane, A. M., Bray, S. R., Uphill, M., & Catlin, J. (2005). Development and validation of the Sport Emotion Questionnaire. *Journal of Sport and Exercise Psychology*, 27(4), 407-431.
- Kline RB. (2005). *Principles and practice of structural equation modeling* (2. ed.). NY: The Guilford Press.
- Kline, P. (1994). *An Easy Guide To Factor Analysis*, Routledge, London.
- Kline, R.B. (2010). *Principles and practice of structural equation modeling* (3rd ed.). New York: Guilford Press.
- Lane, A.M., & Terry, P.C. (2000). The nature of mood: Development of a conceptual model with a focus on depression. *Journal of Applied Sport Psychology*, 12, 16-33.
- Lazarus, R.S. (2000). How emotions influence performance in competitive sports. *The Sport Psychologist*, 14, 229-252.
- Parkinson, B., Totterdell, P., Briner, R.B., & Reynolds, S. (1996). *Changing moods: The psychology of mood and mood regulation*. London: Longman.
- Parrott, G. (2001). *Emotions in social psychology*. East Sussex, England: Psychology Press
- Rosenberg, E.L. (1998). Levels of analysis and organization of affect. *Review of General Psychology*, 2, 247-270.
- Russell, J.A. (2003). Core affect and the psychological construction of emotion. *Psychological Review*, 110, 145-172.

- Savaşır I. (1994). Ölçek uyarlamasındaki sorunlar ve bazı çözüm yolları. *Türk Psikolojisi Dergisi: Özel Sayı, Psikolojik Testler*, 9(33): 27-32.
- Schermelleh-Engel K, Moosbrugger H, Müller H. (2003). Evaluating the fit of structural equation models: Test of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research-Online*, 8(2), 23-74. 35.
- Stevens, J. (1996). *Applied multivariate statistics for social sciences*. (Third Edition). NJ: Lawrence Erlbaum Publishers.
- Sümer N. (2000). Yapısal eşitlik modelleri: Temel kavramlar ve örnek uygulamalar. *Türk Psikoloji Yazıları*, 3(6), 49-74.
- Tabachnick BG, Fidell LS. (2007). *Using multivariate statistics* (5th ed.). Upper Saddle River, NJ: Pearson Allyn & Bacon.
- Tavşancıl, E. (2014). *Tutumların Ölçülmesi ve SPSS ile Veri Analizi* (5. Baskı), Ankara: Nobel Yayınevi.
- Tezbaşaran, A. (2008). *Likert tipi ölçek hazırlama kılavuzu*. Ankara: Türk Psikologlar Derneği Yayınları.

Strategic Provision Of Staff And Facilities For Successful Delivery Of A Civil Engineering Technology Programme

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Abstract

The strength and competencies of teaching and supporting staff in an institution of higher learning should not focus on the academic programmes per se, but encompass the campus-wide efforts towards full implementation of outcome-based education, or more commonly known as OBE. This paper examines the strategic pairing of staff and facilities in the successful implementation of an undergraduate Civil Engineering Technology programme. The teaching staff comprises of professors, associate professors, senior lecturers, lecturers, instructors and the tenured tutors awaiting pursuit of postgraduate degrees. The instructors are especially equipped with industrial experience and exposure, often of former employment in related industrial fields and are therefore well-versed with workplace expectations. Teaching load is analysed with relevance to staff-student interaction for effective learning, coupled with the student advisory and counselling system for continual monitoring of the academic performance. The teaching staff are also encouraged to engage in professional development, such as via industrial attachment, consultancy and research collaboration to strengthen the practical-cum-industrial component of the engineering technology programme. In addition, staff assessment is conducted by both the university and the students to ensure unbiased quality monitoring. Facilities-wise, common academic services like library, lecture halls and rooms, laboratories and workshops are complemented by an integrated information technology system and other daily amenities such as residential colleges, banking services, healthcare centre, transportation, sports and recreation. In short academic excellence cannot be achieved by good teaching and learning techniques alone. It needs to be underpinned by an organized, well-grounded supporting system which includes comprehensively every façade of a student's life on campus, from within and outside the lecture rooms, to ensure effective and successful delivery of the programme in grooming balanced graduates.

Keywords: *Staff, facilities, university, engineering technology, industrial exposure, teaching workload, assessment*

Introduction

Staff and facilities are arguably the most important components for the successful delivery of an academic programme in any institutions of higher learning. While sometimes considered secondary to curriculum and syllabus of high standards, poor knowledge transfer mechanisms coupled with inadequate facilities would make delivery of the programme's contents ineffective, if not impossible. As globalisation created new challenges to institutions of higher learning, the onus of good programme delivery inadvertently falls on the academic staff specifically, and the supporting staff in general (Mushemeza, 2016). Lack of motivation among staff could be attributed to low morale primarily related with unsatisfactory rewards (Hijazi *et al.*, 2017). Based on 157 samples from 7 private universities in Nigeria, Akafo & Boateng (2015) reported that rewards in the forms of wage, bonus and compensation form a positive and direct relationship with job satisfaction. Academic staff are also subjected to unprecedented anxiety and uncertainty, in particular those under contractual tenures at universities (Bodla *et al.*, 2014). On the other hand, although university education is recognised to meet the foremost needs of learning opportunities, it is the institutional facilities that draw and retain students upon enrolment in the demand-driven higher education sector (McLaughlin and Faulkner, 2012). As pointed out by Milne, the 'out of sequence' learning pattern today has phased out traditional lecture delivery in rigid, sequential manner, where students of this digital age are more inclined to overlap learning and intellectual discourse via different media, technology and communities simultaneously (Milne, 2006). Moreover, students being young adults in general regard services such as healthcare, wellness and fitness as being necessary to help them maximize their university experience (Allen and Ross, 2013). This paper examines the strategic provision of staff and facilities for an undergraduate Civil Engineering Technology programme at UTHM, with elaborations on the engagement, monitoring and enhancement mechanisms introduced to ensure good, effective delivery of the programme.

Strength And Competencies Of Teaching Staff

Academic staff consists of Professors, Associate Professors, Lecturers and Instructors. The different positions denote academic qualification levels and past experiences / achievements in teaching and learning, research, publications, consultancies, community services and other related works. The general qualifications and competencies of the Academic Staff are as follows:

a. Professor

- ☐ Possesses Master or Doctorate qualification.

☐ Demonstrates exceptional performance in teaching and learning, supervision and research activities as evidenced by academic publications as well as outstanding community services.

b. Associate Professor

☐ Possesses Master or Doctorate qualification

☐ Demonstrates excellent performance in teaching and learning, supervision and research activities as evidenced by academic publications as well as outstanding community services.

c. Lecturer

☐ Possesses Master or Doctorate qualification

☐ Actively involved in research activities, including presentations and showcases in conferences, seminars and related exhibitions, academic publications as well as community services.

d. Engineer Instructor

☐ Possesses diploma or degree qualification with substantial relevant working experience in industry.

Table 1. Academic qualifications of teaching staff.

Academic Qualifications	Number of Staff
Doctorate	14
Masters	9
Bachelor	2
TOTAL	25

Table 2. Academic positions of teaching staff.

Post	Number of Staff
Professor	-
Assoc. Professor	6
Sr. Lecturer	5
Lecturer	7
Sr. Eng. Instructor	6
Eng. Instructor	1
Assistant Eng. Instructor	2
TOTAL	27

Table 3. Session breakdown and distribution of teaching staff.

TEACHING STAFF	Academic Session			
	2013/14	2014/15	2015/16	2016/17
(a) Total number of full-time staff (including those servicing other programme, staff on study or sabbatical leave & tutors)	2	3	3	8
(b) Full-time equivalent of teaching staff servicing other programme	1	2	2	3
(c) Teaching staff (on study or sabbatical leave)	0	0	0	0
(d) Tutors	0	0	0	0
(e) Effective full-time teaching staff = (a)-(b)-(c)-(d)	1	1	1	5
(f) Full-time equivalent of teaching staff from other programme servicing this programme	14	12	12	17
(g) Full-time equivalent of part time teaching staff	1	1	1	1
Full-Time Equivalent Teaching staff (FTES) contributing to Staff: Student Ratio = (e)+(f)+(g)	16	14	14	23

The academic staff of this programme, are adequately qualified and experienced and would be equipped with the required competencies for effectiveness delivery of the programme's curriculum. The summary of academic qualifications of teaching staff in the programme is shown in Table 1 and the summary of the posts held by full time Academic Staff is shown in Table 2 respectively. A breakdown in terms of numbers of academic staff (full-time, part-time and inter-programme) for 2013/2014 up to the year 2016/2017 is shown in Table 3.

The academic staff are well informed of the PEOs, PLOs, CLOs and the implementation of OBE, and always encourage active student's engagement in the learning process via outcome-based approach. A series of OBE workshops were organized at University and Faculty levels to enhance the staff's understanding and outlook of the teaching and learning method. A committee has been specially formed to organize teaching and learning activities related to OBE within the Faculty. It is compulsory for all new academic recruits to attend to an OBE induction course organized by the Centre for Academic Development and Training (CAD), which provides

insights to the fundamentals of teaching and learning in line with the OBE philosophy. A pass in the compulsory course is part of the requirements to be appointed as a permanent staff at UTHM. A good mix of OBE activities are regularly organized by the committee to inculcate the philosophy and practice of OBE, such as seminars, stakeholders' review meeting and committee meetings. In order to be sure of the attainment of outcomes predetermined for each student, each programme has mapped each course with appropriate level of cognitive, psychomotor and affective domains in Bloom's taxonomy as well as soft skills required for that particular course. Also, at the beginning of each class session, the learning objectives and outcomes (PEOs, PLOs, and CLOs) are being highlighted and explained, so that students are informed and aware of the learning outcomes expected of them.

Teaching Workload And Student-Staff Interaction

The overall staff workload is established according to the staff's academic background, industrial experiences and field of competencies. The average teaching load (teaching hours per week) for academic staff in this programme is 11 hours per week. Table 4 shows the ratio of staff and student for the four (4) academic sessions. Student-staff interaction is at its optimum level as the Faculty has a low staff/student ratio, i.e. better staff-student engagement and interaction leading to more effective learning among the students. The academic advisory system is implemented to monitor individual student's academic performance and wellbeing / welfare in general. Academic advisors are appointed among the academic staff, with the responsibilities of advising and counselling students in academic and to a certain extent, personal life matters. The academic advisory system has been made more accessible by going online, i.e. a university-wide system known as PA-Online (e2.uthm.edu.my/ppa/pa/). The personal information of the student, academic record (transcripts), past academic qualifications and other relevant data are recorded in the system, enabling the academic advisor to have close monitoring of the performance of each student without excessive interference.

Table 4. Ratio of teaching staff to students.

Academic session	2013/2014	2014/2015	2015/2016	2016/2017
No. of Full Time Equivalent Teaching Staff	16	14	14	23
No. of Students in Program	29	29	77	124
Staff to student ratio	1:2	1:2	1:6	1:5

All academic staff are involved in various committees as members in the Faculty's management system. The purpose of these committees is mainly on the smooth running of the academic programmes as well as to provide support in the management and organisation of various activities at the Faculty level, while giving exposure to the academic staff in organizing academic and non-academic activities with internal (e.g. inter-faculty programmes) and external partners (e.g. industry, professional bodies, other institutions, etc.). Some of the committees in the Faculty include:

- Academic Management Team
- Curriculum and Syllabus
- Industrial Training and Mobility
- Timetable
- Postgraduate Studies
- Outcome-based Education
- Promotion and Website
- Academic Advisory
- Research and Consultation
- Publication
- Quality Assurance (MS ISO 9001:2000)
- Laboratory Physical Development and 5S
- Staff Development
- Academic Development and Training
- Student Affairs and Alumni

Professional Exposure And Development

Professional development is vital element in enhancing the experience and knowledge amongst the academic staff. This includes participation in professional courses or seminars organized internally or by other agencies. The University encourages its staff to disseminate their research findings at national and international conferences. The University also encourages staff to enhance their technical experience and linkages through consultancy work, such as extending their services and expertise to industries of the related field. In addition, industrial visits are routinely arranged for all academic programmes to promote staff/student-industry interaction as well as acquisition of industrial exposure. This is also achieved via invigilation of students at Industrial Training.

To further enhance research and development as well as innovation, the Faculty has established a centre of research: the Advanced Technology Center (ATC) as a hub for research innovation and consultation activities at the Faculty. ATC comprises of 11 focus groups, encompassing a comprehensive field of research and industrial focus studies, as shown in Table 4. Through this medium, the academics are actively engaged in academic publications, including books, technical entries in conference proceedings and journals at both national and international levels. To further promote the research acculturation, the Faculty regularly reminds and encourages staff to apply for research grants by internal and external sources.

Staff assessment-wise, The University incorporates annual assessment of staff performance, including the aspects of teaching, supervision, research, publication, participation in professional, as well as community involvement. The assessment form used to evaluate the staff performance can be accessed through <http://prestasi.uthm.edu.my>. To get the evaluation or feedback from the students on matters relevant to their academic environment, the University has established several working systems, including: *Sistem Penilaian Pengajaran Staf Akademik dan Kursus (SPARK)* – in which students get to give comment and evaluate their satisfaction level of the lecturers and courses.

In addition, *Sistem Saluran Aduan Dan Cadangan Dalaman (SACAD)* – SACAD is an online application developed for staffs and students to lodge for complaints or suggestions directly to University administration. SACAD is a medium to enhance the efficiency and improvement of the university's governance system by getting the feedback for the provided services. The Secretariat serves to plan and monitor all activities related to the complaints and provide the internal proposals to the university so that all the shortcomings and weaknesses will be overcome and the quality of service can be continuously improved.

Strength And Competencies Of Supporting Staff

The supporting staff are divided into two categories, namely technical and administrative. The administrative staff are under the Dean's Office and led by the Assistant Registrar, who assists the Dean in administrative and financial matters of the Faculty. The administrative staff consist of 1 Administrative Officer, 2 Assistant Administrative, 2 Assistant Administrative Officers, 1 General Assistant, 2 Office Secretaries and 1 Senior Assistant Administrative Officer. On the other hand, the technical staff assist the Head of Laboratory (either instructor or lecturer) in handling the equipment in the laboratory, especially in terms of maintenance and services as well as preparation for teaching and research purposes. Currently the technical staff assisting the programme consist of 2 Assistant Engineers (departmental), 2 Assistant Architect (departmental), 2 science officer (shared) and 12 Assistant Engineers (shared). Table 5 summarizes the positions held by the supporting staff for the programme.

Table 5. Focus groups under ATC for research and innovation activities.

No.	Focus Group	Integrated Niche Area
1.	Green Environmental Technology	<ul style="list-style-type: none"> - Wastewater - Solid waste - Sludge and soil - Microbiology - Air quality
2.	Sustainable Green Building Technology and Management	<ul style="list-style-type: none"> - Green building - Applied science - Maintenance - Rehabilitation - Construction
		<ul style="list-style-type: none"> - Artificial intelligence - Neural networks - Fuzzy logic - Machine learning - Optimization for vision and learning

Table 6. Technical and administrative personnel constituting the supporting staff.

Supporting Staff	Position	Numbers in 2017
Administrative	Administrative Officer	1
	Assistant Administrative	2
	Assistant Administrative Officer	2
	General Assistant	1
	Office Secretary	2
	Senior Assistant Administrative Officer	1
Technical	Assistant engineer (civil departmental)	1
	Assistant Engineer (shared)	0
	TOTAL	10

The ideal and recommended staff to lab ratio of 1:1 notwithstanding, due to unavoidable staffing constraints, the current ratio for the Programme is understandably short of being favourable. At present, a technical staff is assigned to oversee the operations of 4 laboratories. Nonetheless each laboratory is managed by a Head of Lab, who is appointed from among the academic staff. Therefore, each laboratory is being jointly monitored and managed by an academic staff and a shared technical staff. Also, postgraduate research students (master's and PhD) are regularly recruited to assist in the laboratory sessions, to ensure good one-to-one group demonstration of the experiments involved, with post-lab session guidance and assistance. The postgraduate students are engaged either via paid schemes, or as part of their obligation as recipients of scholarships for their respective postgraduate studies. The exercise apparently kills two birds with one stone, i.e. the undergraduate students gain direct assistance

from the seniors, while the postgraduate students gain experience in teaching as well as develop soft skills in the semi-voluntary activity.

In addition, the concession signed between UTHM and SDPS (Sime Darby Property Selatan Dua) stipulates a 2-decade long of maintenance and services of the major laboratory facilities. This contractual relationship allows the Faculty to carry out regular and periodical maintenance works as well as repairs and services of technical faults of the equipment installations in a systematic manner. In other words, the shortage of technical staff in the management of the laboratories is also partially mitigated by the maintenance system in place.

The current practice and situation described above have not escaped the Faculty's attention. Request for additional technical staff has been forwarded the Registrar to make amends to the number of staff required in the laboratories. However due to financial constraints and other inevitable factors, the recruitment of new staff process has been gradual and on-going.

Teaching And Learning Facilities

In 2016, UTHM has successfully obtained 3-star rating for excellence (overall) in the 2016 QS Star Rating assessment (Figure 1 **Figure C6-1**). Other audit criteria in the QS Star Rating system is the University's facilities, Teaching and Innovation respectively, especially in terms of supporting teaching and learning as well as research activities of the institution's community. The 5-star ratings were awarded to the University for Facilities, Teaching and Innovation in the audit exercise of the same year is evidence of UTHM's commitment and preparedness to provide the best learning environment for students.



Figure 1. QS Stars Rating: 5-star for facilities at UTHM.

The facilities are not entirely for T&L purposes alone, but also include those necessary for students' convenience and wellbeing in general. Adequate to cater for the needs of over 15,000 students, the living, teaching and learning facilities are offerings of top-notch quality and value-for-money in the literal sense. This comprehensive infrastructure includes the library, respective faculty buildings equipped with the lecture rooms, laboratories, workshops and space for other student activities, common lecture halls, sports facilities (including an Olympic-size swimming pool) as well as affordable residential colleges or hostels. Other facilities comprise of a bank and teller services, a mosque and prayer rooms, bookshop, convenience stores and clinic.

Despite its location in the suburb, the University strives to create a vibrant, dynamic and accessible learning environment with the necessary amenities for students' everyday living. Therefore, it goes without saying that it is a source of great pride for the University to receive the QS Star-Rating, especially in Facilities, which effectively puts UTHM at par with other well-endowed and more longstanding local or foreign institutions in and outside the country. Following are detailed accounts of the facilities mentioned earlier:

i) Teaching and Learning Facilities

Lecture halls and rooms of various sizes, seminar rooms and examination halls are fully air-conditioned rooms and equipped with suitable audio-video equipment, such as LCD projector, visualizer and PA systems for the larger rooms. Maintenance services are just a phone call away where the contact details of the maintenance team are displayed in each of these rooms and halls.

ii) Library

The Tunku Tun Aminah Library, named after the princess of the current Sultan of Johor, covers a splendid 16,000 square meters of floor area, with a storage capacity of 300,000 books and can comfortably accommodate 3,000 users at any one time. The Library provides a spacious and conducive learning environment with 118 carrel rooms, 40 discussion rooms, 2 seminar rooms, a postgraduate research room, an auditorium, a special reference room, a journal room and a 24-hour reading room. An extensive database of print and digital resources to support teaching, learning and research activities are on offer at the Library. At present, the Library has acquired over 230,000 copies of books, 15,000 theses and 25,000 items of audio-visual materials. There is also an active subscription to

24 packages of database, e-books and 170 title of e-journals. The collections are in general of open access and classified according to the Library of Congress Classification (LCC) system. In addition, the library has a growing database of scanned documents, which currently archives over 5,000 scanned documents such as journal articles, conference papers and exam papers available in PDF format. Further information on the Library services can be found at <http://library.uthm.edu.my/v3/>.

iii) Information Technology System

The Information Technology Centre or Pusat Teknologi Maklumat (PTM) goes as far back as December 1994, functioning initially as the provider of computer services for students and staffs, but has today expanded to the provision and management of university-wide ICT facilities, including the related infrastructure, hardwares and softwares. PTM is fully equipped with a wide campus link based on an advanced fiber optic backbone supported by a 3Com Net Builder II Router, MSH Hubs and Switch Hub. This link is connected with the outside world via a leased line of 2Mbps speed. Controlled by a central server system with the Avaya P550 network engine, the system is able to support data up to 100Mbps on the Fast Ethernet Technology. To cater for the growing needs of the University, the system is currently in the process of being upgraded to GBIT technology with the capacity to reach a maximum of 1000 Mbps speed. The development of this high speed link system is essential for supporting high resolution video streaming, in line with the University's concerted efforts towards enhanced online outreach in terms of programme delivery, global connectivity and access. In addition, wireless university-wide internet service is readily accessible by the University's community and guests 24-7. Further information on It services of the University can be found at <https://ptm.uthm.edu.my/>.

All students and staff are assigned personal email addresses based on the University's domain, as the official channel for dissemination of information and notifications, and as the primary means of electronic correspondence in general. On continual improvement of services, PTM also provides several Microcomputer and Unix Workstation laboratories as connected to the Novell and Unix server respectively with a University-wide access. Technical advice and assistance are always at hand for staff and students alike, especially in IT matters for T&L purposes. Short courses are regularly organized too as an initiative to encourage the usage of the latest computer and software technology.

iv) Laboratories and Workshops

The Faculty has several state-of-the-art laboratories and workshops facilities to support T&L activities. Health and safety of users at these facilities are strictly observed and monitored with regular maintenance and updating of the relevant equipment, procedures and training. In relation to the Programme, these facilities enable students to perform experiments and to conduct basic research work at course and FYP levels. These facilities for practical and hands-on sessions are rudimentary to the Engineering Technology programme in grooming future technical graduates of balanced technical and soft skills.

Overall, these laboratories and workshops are equipped with testing and measuring equipment, various supporting apparatus and instruments, machineries, computers with relevant softwares installed as well as for data recording and analysis purposes during the practical session. Practical sessions in these facilities give students the opportunity to verify theories and principles taught in lectures, to examine the practical implications of theoretical frameworks, and to relate textbook materials and field implementations for enhanced understanding of the subject matter. The facilities also expose students to the fundamental tests, measurements and standards commonly adopted in the related industries. This ensures graduates to make a smoother varsity-to-market place transition upon completion of the Programme, giving them a better leverage against others in the competitive job market.

Living Sphere Facilities

i) Other facilities

The University is constantly improving the facilities to meet the needs of T&L and general wellbeing of staff and students. In addition to the main facilities described above, other facilities available for the convenience of the University's community include the following:

- i. Transportation
- ii. Residential colleges
- iii. Medical and health care services
- iv. Sports and recreational facilities
- v. Cafeterias
- vi. Mosque/Prayer rooms
- vii. Banking services
- viii. Bookshop
- ix. Convenience store

ii) Banking Services

The University has a fully operational Bank Muamalat branch on campus, and a banking kiosk equipped with teller machines for several local banks, e.g. Bank Rakyat, CIMB and others. The banking kiosk is located adjacent to the University's main bus stop for ease of access to the students.

iii) Residential Colleges

The residential colleges aim to provide affordable living quarters for the students and the facilities are mainly on campus or located in close proximity to the campus. The capacity of residential colleges at the Parit Raja and Pagoh campuses are approximately 7,000 and 6,000 students respectively. General amenities available at these living quarters include prayer and study rooms, cafeteria, visitor's room, photocopy kiosks and laundry services.

iv) Transportation

Transportation services by buses and vans are provided for the students by the offices of the Centre for Student Housing and Transportation (P2P). Shuttle services are available at fixed schedules to help in the mobility of students to and from campus, as well as within the University. The operation hours are 0700-2300 daily, except for weekends and public holidays). The transportation services provided are especially useful for students without personal vehicles, while contributing to a 'greener' campus where the number of vehicles on campus are reduced.

v) Cafeteria and Canteen

There are a number of cafeterias and canteens available on campus to serve as waterholes for staff and students alike without having to leave the University's compound, saving both time and transportation costs.

vi) Mosque

The University's mosque, Masjid Sultan Ibrahim, was named after the present Sultan of Johor. The house of worship can accommodate up to 4000 people, and is managed by the offices of the University's Islamic Centre, which is also located in the mosque. To cater for various activities related to Islamic studies, worship and spiritual development, the multi-function building is equipped with a number of specialized rooms, namely Al-Farabi seminar room, Al-Khwarizmi computer room, Harun Al-Rashid resource room, an open study / activity area for students, among others. At the Pagoh campus, a mosque is available as part of the shared facilities among other institutions at the education hub (UTM, IIUM and Politeknik Tun Syed Nasir). Prayer rooms are also provided at selected blocks of the campus for the convenience of staff and students.

vii) Sports and Recreational Facilities

The sports and recreational facilities are especially myriad to serve the various interests and needs of the students, namely track and field facilities in a mini stadium, an Olympic-size swimming pool, a couple of football fields, futsal court, rugby field, lawn bowl pitch, hockey field, tennis courts, badminton courts, basketball court, *sepak takraw* court, volley ball court and netball court. Similar sports and recreational facilities are also provided at the Pagoh Campus, though the accessibility is shared among the co-habitants of the education hub.

viii) Medical and Health care Services

Students and staff can seek medical attention or healthcare services at the in-house clinic named as University Healthcare Centre (PKU) for free. The clinic also provides emergency and outpatient treatments on weekdays with standard operating hours. The clinic is staffed by 3 medical doctors, 2 dentists and 3 medical assistants who work hand in hand with 9 nurses. There is also an ambulance service to cater for emergency cases.

ix) Bookshop

A bookshop owned by the University's Publisher is open daily for the patronage of all. A full range of the University's publications are on display and for sale. Students particularly find the service convenient to purchase textbooks or main reference books authored by the University's academic staff.

x) Convenience Stores

Four convenience stores operate on campus, selling provisions and goods for daily use and consumption of students in general. Fondly known as Coop Mart UTHM, the stores are managed by the COOP UTHM, and can be found strategically in the vicinity of Bank Muamalat, Arked, residential colleges Kolej Kediaman Tun Syed Nasir (TSN) and Kolej Kediaman Tun Dr. Ismail (TDI).

Conclusions

The discourse above illustrates the importance of complementing good academic and supporting staff with functional facilities and services to cater for the needs of students on campus. These may seem to be the execution

extensions of the academic curriculum, or supplementary pillars of the institution, but they are indeed the key components to enliven the education process, without which campus life would be unwholesome and incomplete. Nonetheless continual improvement and upgrading are necessary to maintain the level of conduciveness for the students in this tertiary education environment.

Acknowledgements

Thank you and kudos to the Faculty's **AA Team** (academic and supporting staff) for the successful ETAC accreditation of programmes late last year.

References

- Akafo, V. & Baoteng, P.A. (2015). *Impact of reward and recognition on job satisfaction and motivation*, European Journal of Business and Management, vol. 7, no. 2, pp. 112-124.
- Allen, R. & Ross, C.M. (2013). *An assessment of proximity of fitness facilities and equipment and actual perceived usage by undergraduate university students: A pilot study*, Recreational Sports Journal, vol. 37, pp. 123-135.
- Bodla, A.A., Hussain, M. & Chen, C. (2014). *Determinants of job satisfaction in academic professionals in Pakistan*, Sukkur IBA Journal of Business and Management, vol. 1, pp. 20-39.
- Hijazi, S., Kasim, A.L. & Daud, Y. (2017). *Leadership styles and their relationship with the private university employees' job satisfaction in United Arab Emirates*, Journal of Public Administration and Governance, vol. 6, no. 4, pp. 110-124.
- McLaughlin, P. & Faulkner, J. (2012). *Flexible spaces... What students expect from university facilities*, Journal of Facilities Management, vol. 10, no. 2, pp. 140-149.
- Milne, A. (2006). *Designing blended learning space to the student experience*, Learning Spaces, D.G. Oblinger ed., Educause, pp. 11.1-11.15.
- Mushemeza, E.D. (2016). *Opportunities and challenges of academic staff in higher education in Africa*, International Journal of Higher Education, vol. 5, no. 3, pp. 236-246.

Strengthening The Perception Of Organizational Performance In Sport Management Studies

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Abstract

This paper analyses teaching and learning strategies that are applied in sports management studies in order to equip students with a strong perception of organizational performance in a sports context. Using the case study method, the aim is to suggest an educational model that would develop and strengthen the skills to allow students to assess and measure performance of sports organizations effectively. The model is conceptualized on the basis of the analysis of students' assignments using the Atlas .ti software with the purpose of identifying their perception of organizational performance concepts in sport after the completion of the core subjects of sport management studies. In the light of these findings, the reflection in terms of current educational models and subjects and their teaching and learning methods was also conducted. Upon the findings, the author proposes the inevitable changes that should focus on the classification of different managerial situations and cases in a variety of sports organizations (public, professional, non-profit) where the organizational performance measurement is of the utmost importance for their survival and further development.

Introduction

The professionalization of sports organizations meant application of business principles in the marketing of sports products, planning, human resource management, and other aspects of organizational activities. Performance management is one of the most important principles. The diversity of the missions of the sports organizations led to the development of various tools and criteria for evaluating their performance. Sports manager must, therefore, know the ways how to define, analyse and present performance in the environment of sports management.

Performance is generally understood as a combination of two criteria – efficiency and effectiveness. Efficiency is traditionally defined as an ability to achieve the aim of the institution. Effectiveness compares the number of means used for achievement of the results without considering user satisfaction. For private companies financial indicators and assets represent the basic synthetic measures of performance evaluation. In the case of non-profit organisations efficiency need not be relevant and effectiveness is a complex construct with an external dimension (external social performance).

Specific Evaluation of Performance in Sport and Sports Organisations

The definition of organizational performance in Sport is key to the proper understanding of the difference between

- the athlete and sporting performance that is measured by sport rankings and league tables and
- performance of the sport organization as a whole that is measured by key performance indicators of the sport organizations.

Evaluation of performance is based on criteria identical with business organisations, which reflects progress towards professionalism.

Due to the existence of specific features of sport there are also differences in performance evaluation derived from the fact that sport is not driven by the need to optimise profit; sports organisations follow a pair of conflicting missions, profit maximisation and avail maximisation, emphasizing rivalry of clubs and their desire to win.

Sport Performance Evaluation Indicators

Performance indicators in sports organisations differ from these of purely business organisations for there are multiple organisational goals related to the desire for sporting achievement, financial stability and social responsibility. Therefore sports organisations are driven by more or less clearly declared performance indicators related to one of the following areas: sport, economy and social.

The Study

Our study was realized in the three subsequent steps. Firstly, we conducted a review of relevant literature from sport management in order to understand the latest trends in the definition of the performance measures and performance management systems for public, professional and non-profit sport organizations. Secondly, a qualitative analysis of articles in sport management journals published in the years 2011-2015 using the Atlas.ti functionality of filter was carried out, with the aim of identifying the extent to which the two selected concepts suitable for performance management in sport – namely Balanced Scorecard and Performance Prism can be found. Both content analyses can influence and will be reflected in our understanding of how to design the education/course content of organizational sport performance within sport management studies. Finally a qualitative analysis of the students' assignments from the subject of Sport Management using coding techniques (Strauss, A. & Corbin,

J.,1998) and Atlas.ti software was performed in order to reveal the extent to which the current approach in teaching and learning organizational performance in sport reflects the desired learning outcomes, i.e. understanding of the strategic focus of performance measures and performance management system in sports organizations.

Findings

Approaches to Performance Evaluation in Sports Organisations

According to Hoye et al. (2012) the following approaches to sports organisation evaluation can be identified:

- 1) Performance management related to the organisation's objectives and intentions
- 2) Theory of sporting performance evaluation – from stakeholder perspective
- 3) Theory of sporting performance evaluation (input – output)
- 4) Multidimensional models of performance measurement

Multidimensional model is preferred in sports organisation performance evaluation, though, according to Winand (2014), for every sports organisation has many stakeholders with different ideas of what should be evaluated for the purpose of measurement of the organisation's effectiveness and performance.

When evaluating performance of sports organisations methods / models developed for organisations from other sectors, profit, non-profit and public, may be applied. The most popular and the most frequently applied methods / models include the following multidimensional models:

- Balanced Scorecard (Kaplan&Norton, 1992)
- The Performance Prism (Neely, Adams &Kennerley, 2002)

Balance Scorecard (Kaplan & Norton, 1992) emphasized not only financial indicators but also the overtaken indicators which can help identify many potential issues before their impact on the financial measures can be seen. The Balanced Scorecard model emphasizes four different aspects of the organisation where performance needs to be evaluated: finance, customers, internal processes and motivation to learning. Practical application of this model in evaluation of performance of a sports organisation [Table 1] is possible after setting indicators for the individual dimensions and their specification. What always matters is the particular strategy and vision of the given sports organisation and performance indicators in the balance scorecard may be made operational for both long- and short-term objectives.

Table 1: Example of application of Balance Scorecard model in sports organisation

Goals	Evaluation method	Plan	Activities
Financial objectives / performance			
Revenue portfolio extension (diversification)	% of various sources of financing in the budget	60 % of gains in the budget will come from sponsors	Club brand building Sponsor network building and extension
Increase of club membership base	Number of club members	25 % increase of membership base	Promotion, recruitment sports events
Customers			
Increase of fan satisfaction with services	Fan satisfaction level	15 % increase of fan satisfaction	Revision of all services on the basis of fan satisfaction Implementation of remedial measures Questionnaire-based inquiry using SERQAL model
Reduction of complaints of sports events visitors	Number of complaints	20 % reduction of the number of complaints	Introduction of processes for early identification of critical points in services and their addressing Adoption of a system for on-the-spot troubleshooting
Learning and development / growth			
Increase of key skills of employees	Number of training courses and practices	Increase %	Preparation and implementation of educational and training plan

			Introduction of a system of education and training effectiveness evaluation
Fluctuation reduction	Fluctuation (measurement methods)	Decrease %	Personal motivation interviews with key employees Measures for increase of employee motivation and satisfaction
Effective processes			
Reduction of new member recruitment costs	Costs of recruitment	Reduction %	Involvement of volunteers in recruitment Use of information system and social media for recruitment
Streamlining of the process of communication with fans	Number of target groups	Increase of the target group number	Introduction of CRM (customer relationship management) to work with target groups of fans

Source: Nová et al. (2016) pursuant to Balance Scorecard Framework (Kaplan&Norton, 1992)

Performance Prism

The authors of the Performance Prism (Neely et al., 2002), unlike those of the Balance Scorecard, emphasize the key role of the stakeholders in achievement of success of the organisation. The expression “prism” is used to emphasize the fact that the model uncovers hidden elements of the organisation affecting its performance. The model defines five basic questions for the organisation management evaluating performance of their organisation [Table 2].

Table 2: Evaluation of organisation performance aspects

Performance aspect	Question for management
Stakeholder satisfaction	What are the needs and desires of our stakeholders?
Stakeholder asset/contribution	What can our stakeholders give us?
Strategies	What strategies are needed to satisfy stakeholders' needs?
Processes	What processes need to be introduced to satisfy stakeholders' needs?
Skills	What practices, people, technologies and infrastructure are needed for full implementation of processes and strategies?

Source: Neely et al., 2002

In our opinion, this model is very fitting for application in sports organisations with their broad portfolios of stakeholders [Table 3].

Table 3: Example of application of the Performance Prism in sports organisation

Stakeholders	Players	Fans	Media	Employees	Sponsors
Stakeholders satisfaction (what are their expectations in relation to the sports organisation)	Game success, adequate salaries and benefits, low injury rates	Game equality and excitement, high proportion of victories to losses, complex experience	Mass market, high level of public interest	Adequate salaries and benefits, employment security, professional development	Positive club or association reputation, brand awareness and recognition
Strategies	Do we possess adequate training, playing and financial strategies to achieve sports success and	Are the strategies of sports event preparation focused on the needs and desires of fans?	Are our media strategies in harmony with the media market?	Do we possess adequate human resource management strategies?	Do we create and implement strategies of brand building and cooperation with sponsors?

	financial stability?				
Processes	Do our processes support our sporting and financial strategies?	Do our processes support quality of services to fans for their engagement?	Do our processes support effective work of and with media?	Do our processes support application of effective methods of work with human resources?	Do we have processes in place for support of communication with sponsors and their presentation?
Skills	Do we possess skills for utilisation of increased effectiveness by means of technologies and innovations?	Do we offer the correct portfolio of services and quality human resources?	Are we able to increase our media coverage?	Are we able to support HR strategy?	Do we possess skills for targeted building of partnerships with sponsors?

Source: Nová et al. (2016) pursuant to Performance Prism Framework (Neely et al., 2002)

National Sport Management Bodies and Organisations Effectiveness Evaluation

Frameworks for organisational management of performance of national sports organisations and sport management bodies have so far been the most profoundly examined area of performance in sport.

Winand et al. 2010 design a model for measurement of organisational performance of management bodies for Olympic sports, distributing their objectives among five main dimensions [Table 4].

Table 4: Model of organisational performance of sport management bodies

	Dimension	Sub dimension	Objectives
Strategic goals	<i>Sport</i>	Elite sport	International sports success Increased participation of athletes in international competitions Improvement of services for athletes Increased sporting activities for members
	<i>Customer</i>	Sport for all Sporting values and service for the society Development of members	Maintenance of sporting values in the society Improvement of non-sport services for members Member acquisition Member loyalty development
Operative goals	<i>Communication and an image</i>	Image Communications	Dissemination of positive image of individual sports in media and in the society Dissemination of positive image of individual sports among members Improvement of club's internal communication towards members Improvement of communication establishment towards members
	<i>Finance</i>	Financial resource management Financial survival	Fundraising Finance management Management of self-financing Management of financial independence on public authorities
	<i>Organisation</i>	Staff skills Internal functioning	Improvement of office and sports staff skills Improvement of volunteer skills Improvement of internal functioning of the central office Improvement of organisational atmosphere in the central office

Source: Translated and adapted by the author pursuant to (Winand et al., 2010)

Performance Evaluation of Non-Profit Sports Organisations

A unified model for performance evaluation of non-profit sports organisations is offered by Winand et al. (2014), [Table 5].

Table 5: Unified model for performance evaluation of non-profit sports organisations

EXTERNAL ENVIRONMENT			
INPUT	THROUGHPUT		OUTPUT
Fundraising	Financial	Sports programmes	Achievements
Size Volunteers Technical staff Members	Resource management Independence External communication and contacts	Elite sport Mass sport Organisation operation Internal atmosphere Process effectiveness	Success of elite sport Mass sporting Services for members, athletes, society Services provided
Physical resources	Stability, Research support, Human resource support and recognition, Planning and flexibility		Financial objectives Ethical objectives, Safety, Recreational goals
PERCEPTION			Ethical values
Internal stakeholders: Management board members, salaried office staff, salaried research and technical staff, coaches, members, elites			FEEDBACK
External stakeholders: sponsors, governmental agencies, top management bodies			Internal Satisfaction External Image

Source: Adapted by the author pursuant to (Winand et al., 2014)

Evaluation of Performance of Sport Management Bodies and Organisational on Local Level

There is no theoretical framework for evaluation of performance of sport management bodies and organisations on the local level. However, in countries like Great Britain, Australia, New Zealand, Canada etc., i.e. where the New Public Performance model is applied, there are various models for evaluation of performance and quality of services of local sports organisations applying for public finance also on the local level. In addition individual sports organisations issue activity evaluation criteria for their local clubs in case they want to apply for financial contributions to their activity [Table 6].

Table 6: Examples of evaluation of performance of sports organisations on local level

Organisational management of performance in sport on local level
1) <i>Measurement of Performance for Sport Development – Good Practice Guide for Local Authorities</i> (2001) published by Sport England Sporting outcomes (range of participation and skills development opportunities available ; levels and frequency of participation in sport; levels of (voluntary) involvement in sport leadership, coaching , officiating and administration; achievement of sporting success, attitudinal change) Process outcomes (strategic and development plans; range/nature of partnership developed; proportion of resources from other agencies; satisfaction of individuals , including users, partner organizations and stakeholders, awareness level) Service outputs (location, number and accessibility of facilities provided; number of users/ visits; frequency of attendance; number of people trained ; number of organisations assisted) Process outputs (quality management system accreditation; methods of delivery and processes adopted; speed of response; satisfaction with staff) Equity measures (ethnicity, gender, socio – economic group, age) Social, economic and environmental outcomes (health and well – being ; economic development and regeneration; environment and sustainability, community safety; educational attainment and lifelong learning; equity and inclusiveness; quality of life)
2) <i>Model SPARC-Sport And Recreation New Zealand, Activities in Performance Management in Sport</i> - New Zealand – considered an instrument for development and assessing the following criteria: Management; Planning; Sport management (internal); Human leadership; Customer focus; Method of sporting opportunity provision
3) <i>AFL Community Club Improvement Program</i> The Australian Football League recognises that volunteers and administrator active in sports clubs significantly contribute to success of Australian football, and that the demand placed on club volunteers and administrator increases together with the need to operate the clubs in the professional manner.

AFL programme for improvement of local club activity was developed specifically for helping the clubs review their current operation and identify opportunities for improvement.

After the programme completion, the clubs receive a detailed report with information about the good practice to help them formulate action plans for improvement of the club activity, operation and management in future.

By means of the programme the clubs can receive recognition for good/excellent club administration:

The club quality level suggests effective club administration

Gold Club Quality – level acknowledges that the club management is excellent

*Source: Adapted by the author from: <https://www.oag.govt.nz/2010/sparc/docs/sparc.pdf> ;
<http://www.aflcommunityclub.com.au/index.php?id=13>;
<http://www.toolkitsportdevelopment.org/html/resources/3F/3F087249-B1C6-4BFA-BB63-42DF308CAC30/best%20value%20through%20sport%20performance%20measurement.pdf>.*

Evaluation of performance in sport often involves overlapping of performance and quality assessment systems. This phenomenon was described by Nová (2014), who also suggested an Integrated Model for Quality and Performance Management in Non-Profit Sports Organisations.

A qualitative analysis of sport management journal articles

A qualitative analysis of sport management journal articles (Sport Management Review n= 222, Journal of Sport Management n= 206, European Sport Management Quarterly n= 102) published in the years 2011-2015 using the thematic coding (and Atlas.ti functionality Word Cruncher was carried out. The aim was to identify the extent to which two selected organizational performance concepts (Balanced Scorecard and Performance Prism) have been researched. The analysis showed that the expression / code balanced scorecard and performance prism and their derivations were found in these articles: Hagen Wäsche and Alexander Woll (2013) in their study provided an understanding of the organization and management of Regional Sport Tourism networks and in one case the balanced scorecard was used as the strategic management tool. Ian O'Boyle and David Hassan (2014) examined the situation in the field of organisational performance management and measurement within non-profit sport organisations and they stated that an area of research that is not addressed in any study of organisational performance in NPSOs is the use of traditional business performance management tools such as The Balanced Scorecard (Kaplan & Norton, 1992, 1996), The Performance Prism (Neely et al., 2002; O'Boyle & Hassan, 2013), or any derivative of such tools. Ian O'Boyle (2015) examined the issue of developing and implementing performance management tools – Balance Scorecard and Performance Prism that can potentially help national sport organisation managers.

Analysis of students' assignments

The study programme Sport Management at the Faculty of Sport Studies Masaryk University (FSPS MU) is delivered in cooperation with the Faculty of Public Administration (teaching the basics of management, marketing, economics and HRM). On the basis of these general management subjects the Faculty of Sport Studies delivers courses with the endeavour of teaching students how to apply the acquired knowledge in a sport context especially when it comes to organizational strategy and performance of sport organizations, see [Table 7].

Table 7: Delivery Logic of the organizational body of knowledge in Sport Management at FSPS MU

Subject /course taught in Sport Management Studies	Content related to organizational strategy and performance
Basics of Management	Definition and basic characteristics of organizations' strategy and business performance
Management in Sport	Organizational strategy and organizational performance within a sport context, interrelation between the organizational strategy of sport organizations and performance measurement and performance management systems in sport organizations
Case Studies in Sport Management	Reflection and application of strategy-based performance theory in practice based on specific case studies

We examined the assignments of 36 undergraduate students who passed the subjects Basics of Management and Sport Management (spring semester 2018). A condition for completing the subject of Sport Management was the writing of the assignment respecting the following instructions for the part of the assignment that was related to organizational performance:

- 1) Select a sports organization, briefly describe its mission, vision, and strategy
- 2) Study in detail the Balanced Scorecard by Kaplan and Norton (1992) and suggest performance indicators for your organization. Fill in, at your own discretion, the indicators suggested by Hoye et al. (2012) and

Nová et al. (2016). Justify your proposal. Create the Performance Prism for your organization (by Nova et.al, 2016)

The content analysis of students' assignments using a coding method (Strauss and Corbin, 1998) and Atlas.ti software was conducted so as to assess their perception of the organizational performance

The examination was guided by the following questions:

- To what extent can the students apply critical thinking with regard to organizational performance in the chosen sport organization? and
- Are they able to implement two well-known frameworks (Balanced Scorecard and Performance Prism) in the chosen sport organization?

To answer the above-mentioned questions in the process of the content analysis, 9 general codes have been suggested that classify the extent to which the students were able to operationalize the prescribed performance tools for the chosen sport organization [Table 8].

Table 8: Extent of the utilization of the Balanced Scorecard (BSC) and Performance Prism (PP) for the chosen sport organization in the students' assignments

Code	Comment	Grounded
Balanced scorecard mentioned not used	Students fail to operationalize the BSC for sport context	10
Balanced scorecard utilized	Students used the dimension of the BSC but failed to link it to the strategy of sport organization	7
Balanced scorecard utilized accurately	Students managed to operationalize the all dimensions of the BSC in variations and linked them to the strategy of sport organization	13
Balanced scorecard utilized with limited extent	Students managed to operationalize all dimensions of the BSC and linked them partially to the strategy of sport organization	6
Performance Prism mentioned not used	Students fail to operationalize the PP for sport context	2
Performance Prism not mentioned not utilized	Students have not demonstrated either knowledge or operationalization of PP	9
Performance Prism utilized	Students used the dimension of the PP but failed to link it to the strategy of sport organization	12
Performance Prism utilized accurately	Students managed to operationalize all dimensions of the PP for a variety of stakeholders and linked them to the strategy of sport organization	11
Performance Prism utilized with limited extent	Students managed to operationalize all dimensions of the PP for limited stakeholders and linked them just partially to the strategy of sport organization	2

Almost 31% of students successfully used the Performance Prism and more than 36% successfully used the Balance Scorecard. 16% of students used the BSC to a limited extent and more than 5% used PP within a limited extent.

What is challenging from the pedagogical point of view is the fact that more than 33% of students were able to recognize the importance of the PP tool and utilized it but failed to link it to the strategy. This statement is valid for more than 19% of students when it comes to the utilization of the BSC.

Analysing the accurate operationalization of the BSC and PP within the variety of the sport organizations chosen by students for their assignments, it is obvious that the best results in setting the performance measures were achieved for non-profit local sport organizations and 1st league for profit sport organizations [Table 9].

Table 9: Accurateness in applying the performance models for various types of Sports Organizations

Type of the Sport Organization N=36	BSC mentioned not used n=10	BSC utilized n=7	BSC utilized accurately n=13	BSC utilized with limited extent n=6	PP mentioned not used n=2	PP not mentioned not utilized n=9	PP utilized n=12	PP utilized accurately n=11	PP utilized with limited extent n=2
Non Profit local N= 18	5	3	8	2	0	4	8	5	1
For Profit local N= 4	0	2	1	1	0	1	2	1	0
1st league For Profit N=7	2	1	3	1	0	2	2	3	0
Non Profit national Sport Association N=5	1	1	1	2	1	1	0	2	1
For Profit national for e Sport ; N=1	1	0	0	0	0	1	0	0	0
For Profit national Olympic Centre N=1	1	0	0	0	1	0	0	0	0

Conclusions

Although research and practice guides referring to the organizational performance in sport are sufficient there are no studies available that shed light on how sport management students understand or are taught this important topic. This qualitative case study offers an initial exploration of how the organizational performance for a variety of sport organizations is learned and taught in sport management studies. After careful analysis of the transcripts from the undergraduate students' assignments, their preparedness to operationalize the most popular business performance models, namely the Balanced Scorecard and the Performance Prism in a real sport context was examined.

To achieve a better understanding of organizational performance in sport and to equip the students with the relevant knowledge and skills the current approach regarding the teaching and learning of these crucial topics was revisited. On the basis of this and also our findings the starting point is to set up a competence framework in the area of organizational performance. Based on our findings the following competences and skills must be demonstrated by students at the end of the respective courses:

- Demonstrate the knowledge of the respective performance models from business and the sport industry that are applicable within a variety of sport organizations
- Manifest the ability to determine the performance management system and key performance indicator sets considering the organizational strategy
- Determine relevant stakeholders, their relationship with the sport organization and to be able to identify their expectation
- Be able to ensure that the necessary information is available to operate and improve the organizational processes and to monitor, analyse and evaluate the performance of the overall organization
- Set up appropriate measures to measure and monitor key indicators to demonstrate the organization's performance in the light of the organizational strategy
- Ensure that data and information are sufficiently accurate, reliable and secure
- Analyse and evaluate data and information using suitable methods
- Measure performance and provide performance feedback to stakeholders so as to enhance improvement initiatives

Bearing in mind the results of the analysis of students' assignments, the structure of the sport management study programme and current teaching and learning strategies that are considered as critical elements in teaching and learning organizational performance, it is advised to introduce the following measures in order to successfully achieve the above-mentioned learning outcomes.

- A. Content change within the study programme structure** led by the need to provide the space for single subjects focused on organizational performance in a sport context, namely:
- Organizational performance and sustainability of Sport Organizations
 - Critical Reflections of Sport Management Practice in the light of the performance concepts (Balanced

Scorecard; Performance Prism etc.)

- The role of Sport Business Intelligence and Integrated Management System in a sport context in relation to the organizational performance

The content changes can be theoretically underpinned by the opinions of the experts in the area of cognitive psychology who claim for providing the students with sufficient subject matter knowledge base and guidance so to allow them apply fully and encourage the critical thinking (Kirschner et al., 2006).

B. Adoption of the teaching and learning methods that would provide the opportunity for:

- Self-development activities to gain skills such as being able to gather and process data (Sport Business Intelligence) or design the appropriate IT tools or design the Integrated Management Systems that would include the performance management systems (more practice and project-oriented subjects are required for this)
- Further strengthening of the teaching case studies in sport management education (Nova, 2013) as far as the teaching case studies describe problem situations occurring in the daily practice of sport organizations and the students are expected to assess the appropriateness or accuracy of the solution, which was adopted by the management of sports organizations or to propose, on the basis of information, the most appropriate solution / decision, even using theoretical concepts from management theory.
- Learning in teams to support critical and creative thinking in the area of organizational performance
- Full exploitation of the Cognitive Load Theory Model (Sweller, 1988; van Merriënboer & Sweller, 2005). This learning model is appropriate for the competency based curriculum as far as it uses the logic of the mind processes and stores information. But the model must be supplemented by good quality and quantity of study materials. Thus, the effectiveness of students learning can be achieved (Schilling, 2016).
- To achieve the interactive students' engagement behaviors using the ICAP framework that differentiates four modes of students learning modes: Interactive, Constructive, Active, and Passive – ICAP. This framework states that students' learning is increasing as they are more engaged with the learning materials and thus moving from passive to active, constructive and interactive behavior (Chi & Wylie, 2014).

All suggested changes that are supported by the latest theories in the active learning will allow the designing of a new, more focused approach to the teaching and learning of the relevant body of the knowledge to enhance the students' skills and capabilities for the appropriate implementation of the organizational performance models after completion of the sport management studies.

References

- Bayle, E. & Madella, A. (2002). Development of a Taxonomy of Performance for National Sport Organizations. *European Journal of Sport Science*, vol. 2, issue 2, 1-21.
- Bayle, E. & Robinson, L. (2007). A Framework for Understanding the Performance of National Governing Bodies of Sport. *European Sport Management Quarterly*, Vol. 7, No. 3, 249 – 268.
- Hoye, R., Nicholson, M., Smith, A., Stewart, B., & Westerbeek, H. (2012). *Sport Management: Principles and applications* (3rd ed.). Abingdon, United Kingdom: Routledge.
- Chappelet, J. & Bayle, E. (2005). *Strategic and Performance Management*, Champaign, IL: Human Kinetics
- Chi, M.T.H. & Wylie, R. (2014). The ICAP Framework: Linking Cognitive Engagement to Active Learning Outcomes. *Educational Psychologist*, 49(4), 219–243. DOI: 10.1080/00461520.2014.965823.
- Kaplan, R.E. - Norton, D.P. (1992). The Balanced Scorecard- Measures That Drive Performance. *Harvard Business Review*. January -February 1992, pp.71-79.
- Kaplan, R. S., & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system. *Harvard Business Review*, 76, 75–85.
- Kirschner, P.A., Sweller J. & Clark, R.E. 2006). Why minimal guidance during instruction does not work: an analysis of the failure of constructivist ,discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist*. 41(2):75-86. doi:10.1207/s15326985ep4102_1.
- Van Merriënboer, J.J.G & Sweller, J. (2005) Cognitive load theory and complex learning: recent developments and future directions. *Educational Psychology Review*. 2005;17(2): 147-1 77. doi: 10.1007/s 10648-005-3951 -0.
- Neely, A., Adams, C., & Kennerley, M. (2002). *The Performance Prism*. Financial Times, UK: Prentice Hall
- Nová Jana (2013). The role of the teaching case studies in the sport management education. In Zuzana Sajdlová, Martin Zvonář. *Sport and Quality of Life 2013*. Brno: Masarykova univerzita, 2013, 319-328.
- Nová, J. (2014). The managerial concepts of the quality and performance and their integration in the sports organizations. *SPORT MONT*, 40–42(12), 73–80. Retrieved from http://www.sportmont.ucg.ac.me/download_pdf_arhiva.php/SM_40-41-42.pdf
- Nová, J. (2016). PRINCIPLES AND FUNCTIONS OF SPORT MANAGEMENT In : Nová, J., Novotný, J., Racek, O., Rektořík, J., Sekot, A., Strachová, M. & Válková, H. (2016). *Management, marketing a ekonomika sportu*. 1. vyd. Brno: Masarykova univerzita.

- O'Boyle, I. & Hassan, D. (2014). Performance management and measurement in national-level non-profit sport organisations. *European Sport Management Quarterly*, Vol. 14, No. 3, 299–314, <http://dx.doi.org/10.1080/16184742.2014.898677>
- O'Boyle, I. (2015). Developing a performance management framework for a national sport organization. *Sport Management Review* 18 (2015) 308–316.
- Robinson, L. (2012). The management and measurement of organizational performance. In: *Managing Sport Business. An Introduction*. Edited by Linda Trenberth and David Hassan. Routledge, pp.169- 184.
- Schilling, J.F. (2016). Cognitive Load Theory of Learning: Underpinnings and Model. *International Journal of Athletic Therapy*. Vol. 21 (2), 12-16, <http://dx.doi.org/10.1123/ijatt.2014-0074>.
- Strauss, A. & Corbin, J. (1998). *Basic of Qualitative Research. Techniques and Procedures for Developing Grounded Theory*. Sage Publications. Thousand Oaks. California.
- Sweller, J (1998). Cognitive load during problem solving: effects on learning. *Cognitive Science*. 1988; 12 (2):257-285. Doi :10.1207/s15516709cog1202_4.
- Wäsche, H. & Woll, A. (2013). Managing regional sports tourism networks: a network perspective. *European Sport Management Quarterly*, Vol. 13, No. 4, 404-427, <http://dx.doi.org/10.1080/16184742.2013.811608>.
- Winand, M. & Zintz, T. & Bayle, E. and Robinson, L. (2010). Organizational performance of Olympic sport governing bodies: dealing with measurement and priorities. *Managing Leisure* 15, 279- 307.
- Winand, M. Vos, S., Claessens, M., Thibaut, E. & Scheerder, J. (2014). A unified model of non-profit sport organizations performance: perspectives from the literature. *Managing Leisure*, 2014, Vol. 19, No. 2, 121–150, <http://dx.doi.org/10.1080/13606719.2013.859460>

Web resources:

- AFL Community Club Improvement Program. [On-line].Retrieved from:
<http://www.aflcommunityclub.com.au/index.php?id=13>. [19.08.2018].
- SPARC-Sport And Recreation New Zealand: Improving how it measures its performance. [On-line].Retrieved from: <https://www.oag.govt.nz/2010/sparc/docs/sparc.pdf> . [19.08.2018].
- Performance measurement for the development of sport – A good practice guide for local authorities. (2001). Sport England. SE/2081A/P/10/01. . [On-line].Retrieved from:
<http://www.toolkitsportdevelopment.org/html/resources/3F3F087249-B1C6-4BFA-BB63-42DF308CAC30/best%20value%20through%20sport%20performance%20measurement.pdf>. [19.08.2018].

Students Opinions About Psychological Counseling And Guidance Services (Istanbul-Girl Vocational High School Sample)

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Özet

Modern education has made psychological counseling and guidance services an integral part of educational activities. However, problems are observed in the implementation of guidance services in the schools. The purpose of this study is to examine student opinions on psychological counseling and guidance services carried out in vocational high schools. Findings can help improve the functioning of guidance services. The research was conducted using the scanning model. The universe of the research is İstanbul, Üsküdar IMKB (Istanbul Stock Exchange) girl technical and vocational high school. The study group consisted of a total of 119 students from 9th, 10th, 11th and 12th grades selected by chance sampling method. The data were collected by a 30-item questionnaire. Students responded to the survey questions by choosing yes, no preference. The data obtained from the survey were analyzed by using percentage and frequency statistical technics. The data obtained from the survey were analyzed by using descriptive statistical techniques. It has been determined that the majority of students recognize the counselors in the school and know the location of the guidance service. Students also stated that; they could easily apply to the guidance service, found their activities satisfactory, helped solve the problems, got real and close interest in their problems, tried to determine their interests and they were informed about courses and discipline rules. It has been determined that other statements have been answered negatively. It has been suggested that similar studies should be conducted with larger groups in order to generalize the findings.

Students' Perception Of Smart Learning System Within The Management Information System Course At Fujairah University

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Abstract

The aim of this paper is to measure students' perception towards the use of Smart Learning System (SLS) available at Fujairah University within a Management Information System course (MBA level). The study will show the effect of using the smart learning system on students' performances and the issues that could be added to enhance it. To achieve this, a questionnaire was delivered to eighteen students taking the Management Information System course and then it will be analyzed using the well-known software, Statistical Package for Social Sciences (SPSS). The results will show if there will be a positive perception toward the adoption of the Smart Learning System at the University.

Students' Views On Laboratory Courses

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Abstract

The purpose of this study is to take students' views about laboratory courses. The research was carried out in Düzce University Faculty of Education General Chemistry Laboratory I-II and General Physics Laboratory I-II courses. General Physics and General Chemistry laboratory courses were conducted in the same laboratory. In the lessons, experiments were carried out by groups of 4 to 6 students. Demonstration experiments were frequently preferred depending on the material and safety situation. For this study, after 2 semesters and 4 laboratory courses, an open-ended questionnaire was applied to the 25 freshman science teaching students and by the way data was collected. The data was analyzed qualitatively and answers of the students were categorized into 4 main points. According to the results, students thought that laboratory courses increase learning of theoretical knowledge and develop science practices like making experiments, analyzing the process, etc. On the other hand, the other two categories were stressing the missing sides of those courses. Students need a well-designed laboratory handbook with theoretical information about experiments. Moreover, students complain about laboratory facilities like inadequate and outdated materials. Findings of this study showed that students were aware of the benefits of the laboratory courses. And, if the laboratory facilities were improved, those courses would be more efficient for students.

Study Programs And College Student Satisfaction: The Case Of Czech Students

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Abstract

Student satisfaction with their study programs is considered one of the most crucial factors that shape their experience within the higher education system. In this article, we address the following research question: How important are subject fields and academic features of study programs for college student satisfaction? For this purpose, we used data from a survey of college students (N = 1237) carried out in 2018 at Tomas Bata University in Zlín (Czech Republic), where a modified version of the Studiebarometeret (NOKUT) questionnaire was applied. The results are based on the 6-factor solution of CFA. Descriptive results of all study fields are compared. Although the overall differences in satisfaction are rather small, a cluster analysis shows that they are not based on different study fields but primarily on other academic characteristics of those study fields (size of study groups, level of study, and the ratio of applicants and admitted students).

Introduction

The Czech higher education system has been undergoing a complex transformation in recent years. Following the adoption of a new law in 2016, extensive measures for achieving the desired quality of educational processes and auditing services of universities have been implemented. It was due to beliefs that the quality of education, despite its problematic conceptualization (Green, 1994), is a crucial indicator of distinction in both the national and international higher education arena, i.e. something that several authors (Blackmore, 2009; Strathern, 2000; Muijs & Bokhove, 2017) critically see as a tool of accountability and marketing rather than means of enhancement of their practices and services.

In this regard, the Czech higher education system has been following a trend that started in the early 1990s in the Western countries and then has been continuing in Asia and East Europe countries (Douglas et al., 2006, 2015; Liu et al., 2017; Peter, 1997). Nowadays, it is part of a broader transformation of the higher education system in the Central Europe where a new “skill-production regime” is being slowly built (Hall & Soskice, 2001) with a higher level of accountability to the public.

A big part of these new measures within the Czech higher education system is connected with the implementation of different models of quality indicators and evaluation, especially the evaluation of students' satisfaction with their study programs, teaching quality, counseling, and other forms of institutional support. In this context, students are seen as customers of the universities (Gruber et al., 2010; Finey & Finey, 2010; Jongbloed et al., 2008; Joseph et al., 2005) using various services and products that should satisfy their needs, while shaping their experience with the college studies. Probably the most crucial role in this process is played by various interactions between the customers (students) and the university staff – e.g. teachers, counselors, and other representatives of the university who may change the students' satisfaction upwards or downwards (Bitner et al., 1994).

Subsequently, the data about students' satisfaction serve as an essential tool for universities and their management, because it can be used for several purposes such as:

- (1) Building and developing strategies for improving the quality of education and related services (among others see Alvaréz et al., 2016; Burgess et al., 2018; Liu et al., 2017). As Liu et al. (2017) argue, it is a primary indicator of self-assessment at any university which can be used as building stone for a quality management of the institution.
- (2) Improving the marketing strategy with a focus on new applicants (Lin et al., 2017) and responsiveness to changing the marketplace. Identifying strong and weak sides of student satisfaction can help in modifying market tools – for example, what should be highlighted, and, on the other hand, what should be de-emphasized.
- (3) Increasing loyalty of the students, which leads to their continuing studies at a higher level, or their recommending the university to new applicants (Ali et al., 2016; Alves & Raposo, 2007; Green et al., 2015; Douglas et al., 2015; Lin et al., 2017).
- (4) Improving the education outcomes of the students. In the expert literature, we can find many works (Jemelske, 2009; Richardson, 2005; Mascarella & Terenzini, 2005) that highlight a strong relationship between students' satisfaction and their learning outcomes.

Many Western countries, especially those that slowly started with “qualitative” reforms in the late 1990s, have their national student satisfaction surveys. Probably the most known is NSS (National Student Satisfaction Survey) from the UK that has been used as a source of student satisfaction data in numerous studies (Burgess et al., 2018; Callendar et al., 2014; Cheng & Marsh, 2010; Sabri, 2013; Yorke, et al. 2014). National scale surveys are also carried out in the USA (National Survey for Student Engagement), Australia (Australia's Course Experience Questionnaire), Japan (Japanese College Student Survey), or Norway (Studiebarometeret). In contrast to those countries, the Czech higher education system does not have a unified approach to studying and evaluating student satisfaction. There does not exist any standardized protocol or research tool used in the whole country. Every university is responsible for creating their own. For this reason, our presented data are the product of a survey carried out by one of the Czech state universities in the spring of 2018.

Research in the area of student satisfaction is extensive. It mainly focuses on different factors influencing student satisfaction: e.g. student employment status (Moro-Egido & Panedes, 2010), quality of assessment (Russell & Lehman, 2008), teaching quality and organization management (Burgess et al., 2018; Langan et al., 2013), college experience (Elliott & Healy, 2001), class size (Peterson et al., 2001), or a combination of several factors together (Tessema et al., 2012).

According to several studies (Audin et al., 2003; García-Aracil, 2009; Green et al., 2015; Lid et al., 2014; Radloff & Coates, 2010), subject fields are one of the most critical factors that make student satisfaction different. It is based on the assumption that students from various study fields have both different motivation to study and experience within the higher education system. According to some international studies (Lid et al., 2014; Radloff & Coates, 2010), we can find significant differences between social-science disciplines (e.g. psychology, social work), law and medicine on the one side, and other sciences (for example engineering), and education (e.g. pedagogy) on the other side. In the case of the latter, students are usually less satisfied with their studies and related services.

Purpose of the study

In this study, we follow the international research about the role of subject field in student satisfaction. We examine to what extent subject fields, as a curricular basis of the higher education in the Czech Republic, are essential factors influencing student satisfaction. In this regard, we address two fundamental research question:

- (1) Do Czech college students significantly differ in their satisfaction according to their subject field?
- (2) Are there any commonalities between different subject fields according to a cluster analysis?

Methodology

For our survey we have decided to use a modified version of the Norwegian questionnaire known as Studiebarometeret which is a product of NOKUT (Norwegian Agency for Quality Assurance in Education) and was first implemented in 2013. We work with its English version from 2015. Our modification consists of two critical changes: the translation of the questionnaire into the Czech language and its transformation according to the educational context of the Czech Republic as well as our university. It meant a slight meaning modification of some items and also a partial modification of the factor structure (only some dimensions were used and one was added).

The research tool is still being modified (NOKUT, ©2017), so its internal structure has not been finalized yet. Some factors and items are stable while some were added or changed over time. As the structure is variable, we have decided to use a modified version. This solution is more suitable for an internal quality evaluation at our university. As the evaluation process at our university is based on more surveys among students, we have only chosen some dimensions from the Studiebarometeret which are suitable for a summative evaluation of our study programmes. As for other unapplied dimensions, we have not applied the Teaching and Counselling dimension as there is an individual survey considering only this parameter of quality evaluation at our university where students have an opportunity to assess each teacher in each subject after every semester. Instead, we added one dimension called International mobility (F5).

The next table (Table 1) presents all the factors (dimensions) and their items chosen to be applied in our survey. The numbers of factors are not connected to the original questionnaire but to our modified version.

Some other items of our questionnaire were also based on Studiebarometeret, but they were only used as single items for our internal evaluation. In this text, we only work with the 6-factor structure which was further reduced during the validation as shown below. We have also used a set of sorting variables (mainly the information connected to the faculties and fields of study).

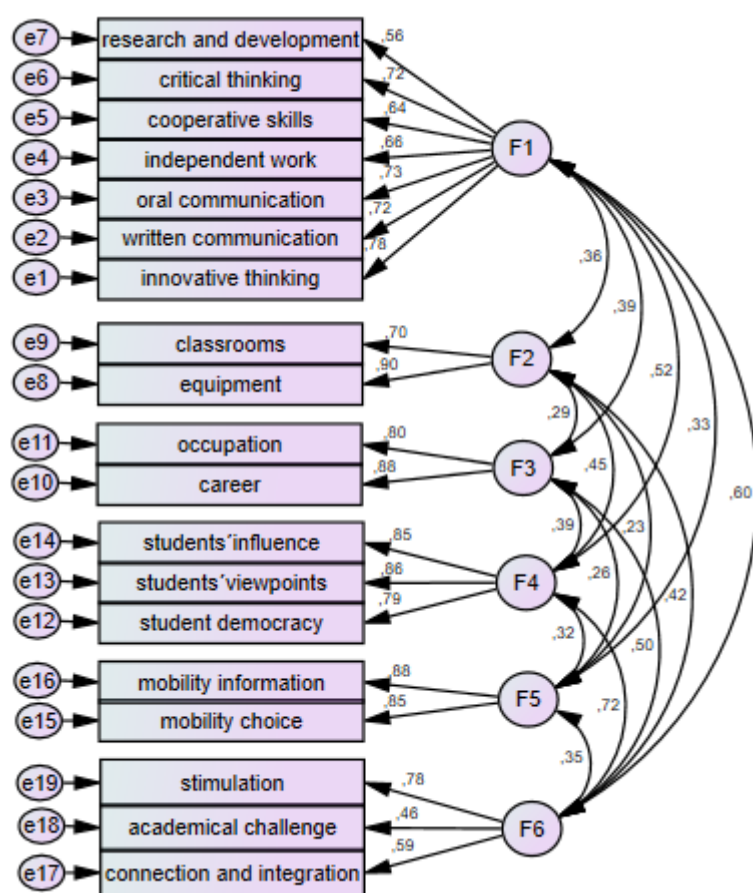
Table 1: Factors and dimensions of the research tool

Factors	Items
F1 Learning outcomes	Theoretical knowledge
	Knowledge of scientific work methods and research
	Experience with research and development work
	Skills specific to the discipline and working life
	Critical thinking and reflection
	Cooperative skills
	Ability to work independently
	Oral communication skills
	Written communication skills
F2 Study environment	Innovative thinking
	Rooms for teaching and other study work
	Equipment and study tools
	Library and library services
F3 Working life relevance	ICT tools and services (e.g. teaching platforms, software and PC availability)
	Relevance to 'natural' occupational fields
	Relevance to good career opportunities
	The knowledge that is generally useful in occupational life
F4 Participation	Skills that are generally useful in occupational life
	The students' opportunity to influence the study programme content and design
	How students' viewpoints are taken into account and followed
F6 Stimulation and coherence	The local student democracy
	The programme is stimulating
	The programme is academically challenging
	The programme consists of courses that are well connected and integrated

Overall, 1,237 students took part in the survey. An online questionnaire was applied. The total response rate was 26 %. One student was excluded from the analysis due to his unclear study field affiliation.

As the first step of the validation, an exploratory factor analysis (EFA) was applied to see whether it is possible to work with the original (but slightly modified) structure of the questionnaire. As the result was very similar, we based our model of the confirmatory factor analysis (CFA) on its solution. However, we expected some reductions in the model, as CFA has much more stringent requirements from the statistical point of view. The final result (after a reduction of weak items) is presented in the following picture (Schema 1). The basic parameters are fulfilled (Chi-square = 530,259; Degrees of freedom = 137; CMIN/DF = 3.871; Probability level = 0.000; CFI = 0.955; TLI = 0.938; RMSEA = 0.048). Although some coefficients inside the structure are rather weak, we consider it a suitable model for our research.

The level of reliability is high (see Table 2), except for Factor F6 (0.599). One of the possible explanations could be its general and more abstract content in comparison to other factors. We consider Factor F6 the last and weakest one, and future applications of the questionnaire will show whether it should be discarded completely from the questionnaire structure.

Schema 1: Confirmatory factor analysis (the source: our own calculation)**Table 2:** Reliability of factors – Cronbach's α (source: own calculation)

F1	Learning outcomes	0.860
F2	Study environment	0.777
F3	Working life relevance	0.806
F4	Participation	0.873
F5	International mobility	0.848
F6	Stimulation and coherence	0.599

Results

We present the descriptive results of our survey in three diverse but complementary forms. The first of them use the ISCED F (2013) classification of study fields (Table 3). The second one uses the same classification as was applied by Lid et al. (2014) in their survey through the NOKUT questionnaire (Table 4), and the third utilizes the structure of the study programs described in the García-Aracil (2009) study about the European graduates (Table 5). This strategy helps us show our descriptive results in different contexts using various procedures for the data aggregation – from the most detailed approach (the ISCED F classification used in Table 3) to the most general approach (García-Aracil's classification). It also helps us compare our results with findings from two international studies.

Descriptive results

If we look at differences in satisfaction according to different study fields, we can find that these differences are rather small. Students are satisfied slightly above average. The highest level of satisfaction (see Table 3) can be found in students of Fine Arts, Marketing and Advertising, Software and Applications Development, Engineering, and Education. Their average score is of 3.5 to 3.8 on a scale of 1 to 5. On the other hand, we identified the lowest level of satisfaction in the area of Audio-Visual Techniques and Media Production, Database and Network Design and Administration, and Caring for the Elderly and Disabled Adults. All of them have scored around 3.0. From these results it is evident that there are no clear thematic groups of subject fields (e.g. social sciences versus natural sciences) that influence student satisfaction.

Table 3: College student satisfaction according to different study fields – 23 study fields, ISCED F classification (the source: our own calculation)

Field of study	F1	F2	F3	F4	F5	F6	Total
Audio-visual techniques and media production	3.2	3.4	3.0	2.8	2.9	2.6	3.0
Database and network design and administration	3.2	3.5	3.1	2.8	3.0	3.0	3.1
Caring for the elderly and disabled adults	3.5	3.5	3.1	2.8	2.5	3.0	3.1
Training of pre-school teachers	3.5	3.4	3.3	2.5	3.0	3.3	3.2
Nursing and Midwifery	3.6	3.5	3.4	2.7	3.1	3.1	3.2
Management and administration	3.5	3.8	3.2	2.7	3.0	3.3	3.2
Accounting and taxation	3.5	3.5	3.4	2.7	3.0	3.3	3.2
Food processing	3.4	3.7	3.4	2.7	3.0	3.3	3.3
Protecting people and property	3.4	3.7	3.2	3.0	3.0	3.2	3.3
Economics	3.5	3.7	3.4	2.7	3.0	3.3	3.3
Finance, banking, and insurance	3.4	3.8	3.3	2.6	3.3	3.1	3.3
Art and humanities (interdisciplinary)	3.7	3.6	3.4	2.7	3.4	3.2	3.3
Environment	3.9	4.1	2.8	3.2	2.8	3.2	3.3
Fashion, interior, and industrial design	3.6	3.4	3.4	3.3	3.2	3.3	3.4
Technology and construction (interdisciplinary)	3.6	3.6	3.7	3.0	3.0	3.5	3.4
Chemical engineering and processes	3.4	4.0	3.6	2.8	3.4	3.1	3.4
Engineering and engineering trades	3.4	4.2	3.8	2.8	3.2	3.1	3.4
Education and training (interdisciplinary)	3.8	3.5	3.3	3.1	3.2	3.4	3.4
Education	4.0	3.8	3.4	3.2	3.1	3.3	3.5
Software and applications development and analysis	3.7	4.3	3.1	3.5	3.5	3.3	3.6
Teacher training with subject specialization	3.9	4.0	3.5	3.3	3.5	3.4	3.6
Marketing and advertising	4.0	4.0	3.6	3.4	3.3	3.4	3.6
Fine arts	4.0	4.0	3.6	4.2	3.7	3.6	3.8

When we take another step forward in our analysis and compare study fields according to the Lid et al. (2014) classification, differences are even smaller (see Table 4). Individual study fields differ by only 0.1 to 0.2 of scale points, the lowest score being for Nursing and Engineering, and the highest for Art, and Pedagogy. A comparison with the results of student overall satisfaction from Norway (see the last column of the Table 4) shows that students from the Nordic country are generally more satisfied than Czech students in our survey but there are no similarities with satisfaction according to study fields.

Table 4: College student satisfaction according to different study fields – seven study fields (the source: our own calculation and Lid et al., 2014)

Field of study	F1	F2	F3	F4	F5	F6	Total	Lid et al. (2014) results*
Nursing	3.6	3.5	3.2	2.7	2.9	3.1	3.2	4.1
Engineering	3.3	3.7	3.2	2.9	3.0	3.1	3.2	3.8**
Teacher education	3.6	3.5	3.3	2.6	3.0	3.3	3.2	3.7
Business and administration	3.6	3.7	3.4	2.8	3.1	3.3	3.3	4.2
Natural sciences	3.5	4.0	3.4	2.9	3.3	3.2	3.4	4.1
Art	3.6	3.5	3.4	3.4	3.3	3.3	3.4	4.0
Pedagogy	3.9	3.6	3.4	3.2	3.2	3.4	3.4	4.0

Note: *Results of overall satisfaction for all students from the particular study fields in Norway. **Data for Engineering at the bachelor level.

In the last step of our descriptive analysis we analyzed study fields classified only into six categories. Not surprisingly, also in this case, the differences were minimal – 0.1 to 0.2 of scale points (see Table 5). We did not

find any relevant commonalities between study satisfaction and study fields in our survey and the data from the García-Aracil (2009) survey of the European graduates (see especially the last two columns of Table 5).

Table 5: College student satisfaction according to different study fields – six study fields (the source: our own calculation and García-Aracil, 2009).

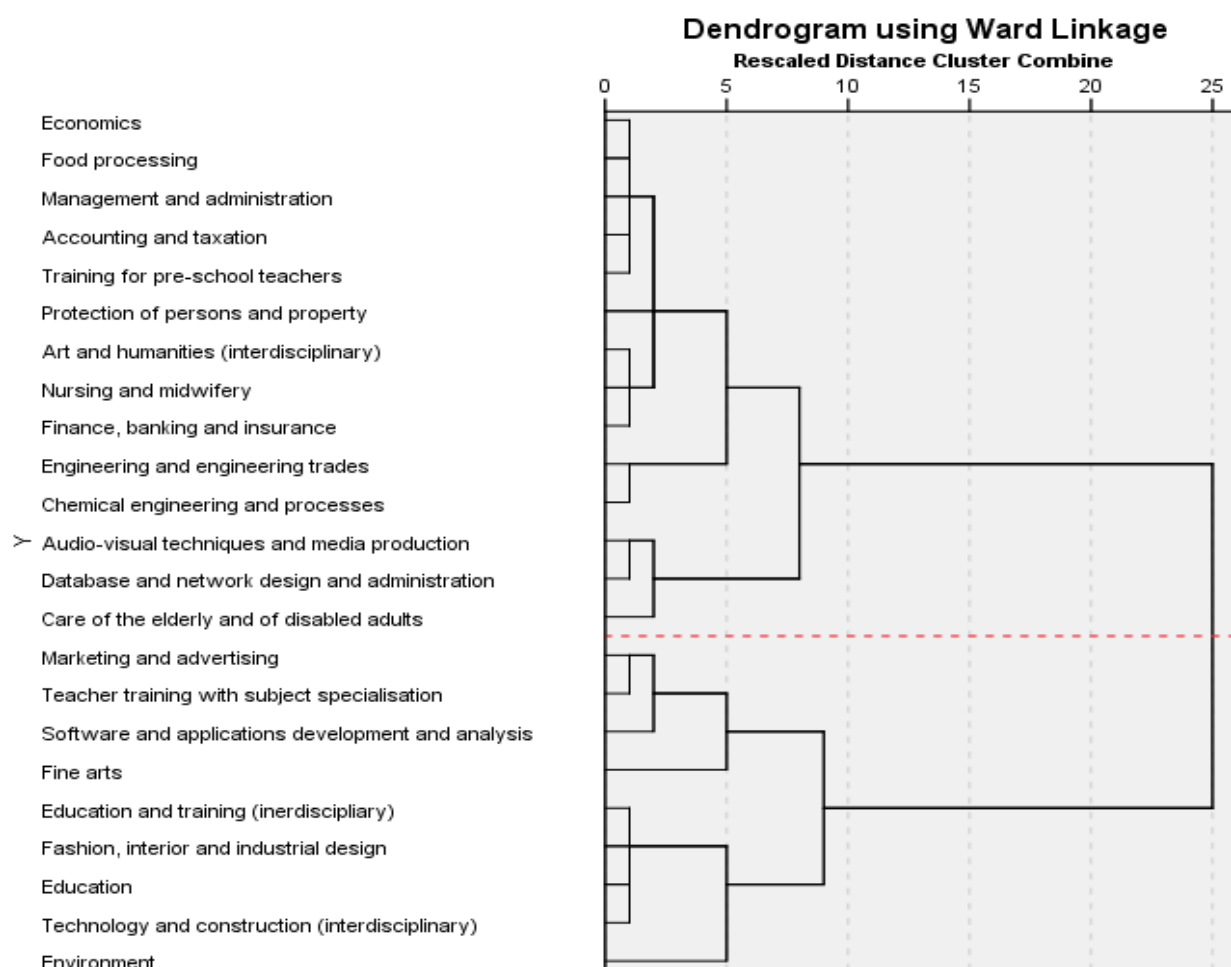
Field of study	F1	F2	F3	F4	F5	F6	Total	Czech*	Europe**
Medical sciences	3.6	3.5	3.2	2.7	2.9	3.1	3.2	3.0	3.8
Engineering	3.3	3.7	3.2	2.9	3.0	3.2	3.2	3.7	3.8
Social sciences	3.7	3.8	3.4	2.9	3.1	3.3	3.3	4.0	3.8
Humanities	3.6	3.5	3.4	3.1	3.3	3.2	3.4	3.6	3.7
Education	3.8	3.6	3.3	3.0	3.1	3.4	3.4	3.3	3.7
Natural sciences	3.6	4.0	3.4	2.9	3.3	3.1	3.4	3.5	3.6

Note: *Results of overall satisfaction of graduates from the particular study fields in the Czech Republic from the García-Aracil (2009) study. ** Results of overall satisfaction of graduates from the particular study fields in Europe (11 European states together) from the García-Aracil (2009) study.

Analytic results

For a more detailed analysis of our data we used a cluster analysis based on the 6-factor structure of the questionnaire. The Dendrogram created by the Ward Linkage method helped us identify fields of study with similar results. The closer the linkage on the standardized scale (0-25) between two fields is, the more similar their assessment in the 6-factors of the questionnaire is.

Schema 2: Cluster analysis (the source: our own calculation)



From the Dendrogram (Schema 2) we can see that two primary groups of study fields can be defined (shown by the dashed line). Although we could consider other solutions with more clusters, we preferred simplicity, which enables a more precise interpretation. The first cluster includes 14 study fields (using the ISCED F classification)

with 829 students (67 %), and the second one includes nine study fields with 407 students (33 %). When we compare the results of the two clusters and add other information about the study fields (academic features of the study programs), the results show that the satisfaction is higher in all 6-factors, except for Factor F2. In addition, in the second cluster there is a much higher percentage of students attending small study groups of the bachelor study programmes where less than 40 % of applicants were admitted to the study (see Table 6).

Most significant differences between these two clusters lie in the evaluation of learning outcomes (Factor F1). More satisfied students score higher in the evaluation of their learning process. They are also significantly more satisfied with the possibilities of participating in their learning process (Factor 4) – how they can influence the study program content, or how academic staff work with their comments and remarks. In other factors, differences are smaller.

Table 6: Differences between less satisfied and more satisfied students (the source: our own calculation)

		Ward Method	
		Cluster 1	Cluster 2
		Less satisfied	More satisfied
Overall results in 6 factors of the questionnaire (mean)			
Factors	F1: Learning outcomes	3.4	3.9
	F2: Study environment	3.7	3.7
	F3: Working life relevance	3.3	3.4
	F4: Participation	2.7	3.3
	F5: International mobility	3.1	3.2
	F6: Stimulation and coherence	3.2	3.4
Complementary information about study fields (column %)			
Size of study groups	Size of study groups ≤ 20 students	7%	41%
	Size of study groups 21 - 50 students	62%	26%
	Size of study groups > 50 students	31%	33%
Level of study	Bachelor study programme	52%	67%
	Master study programme	46%	32%
	Doctoral study programme	2%	1%
Ratio of applicants	The ratio of applicants and admitted students > 60%	59%	46%
	The ratio of applicants and admitted students 41 - 60%	40%	14%
	The ratio of applicants and admitted students ≤ 40%	1%	40%

Discussion

This research aimed at getting to understand the complex relationship between student satisfaction and study fields, the latter being considered an important factor influencing college student experience (Audin et al., 2003; García-Aracil, 2009; Green et al., 2015; Lid et al., 2014; Radloff & Coates, 2010). Contrary to previous studies we did not find any significant differences in student satisfaction according to their study fields. Only on the level of the ISCED F classification we identified relevant differences between some study fields but without any thematic familiarity (see Table 3). This conclusion is also relevant for analytical results that did not show any thematic similarity between study fields based on the cluster analysis. In order to answer the first one of our research questions (Do Czech college students significantly differ in their satisfaction according to their subject field?) we can conclude that college students in our sample do not significantly differ in their satisfaction according to subject fields.

One of the possible reasons for this result lies in the limitation of our survey to only one university which does not work with a much more bigger and representative sample as the research done by García-Aracil (2009) or Lid et al. (2014). This is probably the reason why García-Aracil (2009, p. 14) identified as the negative influence the study fields of Education, Humanities, Engineering, and Medical Sciences in students satisfaction, while we did not find such a strong and clear relationship.

Based on our findings from the cluster analysis, we can say that commonalities between different subject fields exist (the research question no. 2). We identified two clusters of study fields that are significantly different, but we should highlight that this difference is the output of academic characteristic of these programs rather than their curricula or thematic orientations. The crucial factor in this distinction is the following three characteristics of study programs: (1) size of study groups (higher level of satisfaction can be expected in small study groups); (2) level of study (higher level of satisfaction seems to be connected with lower level of study); (3) ratio of applicants and admitted students (higher level of satisfaction is found in programs with lower ratio of applicants and admitted students).

These findings are partially novel in the context of international research focused on the link between student satisfaction and features of study programs, mainly in the focus on the ratio of applicants and admitted students that is not well researched. In the case of the study group size, we corroborate findings from the previous literature (Peterson et al., 2001) that consider the importance of smaller study groups for student satisfaction. On the other hand, we diverge from other studies (García-Aracil, 2009; Tessema et al., 2012) in the study level. According to them, students of higher level of study tend to express greater satisfaction. We identified an opposite trend.

Although these findings have some substantial limits for the understanding of college students' satisfaction (of their representatives, in particular), they are crucial evidence for the university management. They can be utilized for improving the study programs structure and offer. For this purpose, we can suggest two complementary strategies. One focused on "strong" study programs with a higher level of satisfaction (Cluster 2), and the other focused on "weak" study programs (Cluster 1).

The first strategy should focus on improving some evaluated factors in the study programs from Cluster 2 which have a similar score as the study programs in Cluster 1. Namely, these are Factor F3 – Working life relevance, and Factor F5 – International mobility. We suppose that an improvement in these two areas which are not directly connected with academic features of the study programs can change student satisfaction upwards.

The second strategy should focus on changing the design of the study programs in Cluster 1 in order to improve student satisfaction: (1) to lower the number of students in study groups to increase personal interaction between teachers and students; (2) to gain feedback from older students (students of the higher level of study) telling why their satisfaction during studies declined, and then to propose remedies; (3) to lower the ratio between applicants and admitted students, and accordingly, to improve and personalize the marketing of study programs toward students that are highly motivated for enrolling in particular study programs. Most of these measures are in line with the recommendations from the international literature (Ali et al., 2016; Lin et al., 2017).

References

- Ali, F., Zhou, Y., Hussain, K., Nair, P. K., & Ragavan, N. A. (2016). Does higher education service quality effect student satisfaction, image and loyalty? A study of international students in Malaysian public universities. *Quality Assurance in Education*, 24(1), 70–94.
- Alves, H., & Raposo, M. (2007). Conceptual model of student satisfaction in higher education. *Total Quality Management*, 18(5), 571–588.
- Álvarez R. V., Freira D., Vernazza, E., & Alves, H. (2016). Can students' satisfaction indexes be applied the same way in different countries? *International Review of Public Nonprofit Market*, 13(1), 101–118. DOI: 10.1007/s12208-016-0155-x
- Audin, K., Davy, J., & Barkham, M. (2003). University quality of life and learning (UNIQLL): An approach to student well-being, satisfaction and institutional change. *Journal of Further and Higher Education*, 27(4), 365–382.
- Bitner, M. J., Booms, B. H., & Mohr, L. A. (1994). Critical service encounters: The employee's viewpoint. *Journal of Marketing*, 58(1), 95–106.
- Blackmore, J. (2009) Academic pedagogies, quality logics and performative universities: evaluating teaching and what students want. *Studies in Higher Education*, 34(8), 857–872, DOI:10.1080/03075070902898664
- Burgess A., Senior C., & Moores, E (2018), A 10-year case study on the changing determinants of university student satisfaction in the UK. *PLoS ONE* 13(2), e0192976. DOI:10.1371/journal.pone.0192976
- Douglas, J., Douglas, A., & Barens, B. (2006). Measuring student satisfaction at a UK university. *Quality Assurance in Education*, 14(3), 251–267.
- Douglas, J. A., Douglas, A., McClelland, R., & Davies, J. (2014). Understanding student satisfaction and dissatisfaction: An interpretative study in the UK higher education context. *Studies in Higher Education*, 39(1), 251–267.
- Callendar C., Ramsden P. & Griggs J. (2014) *Review of the National Student Survey: HEFCE*. Available at: <http://www.hefce.ac.uk/pubs/rereports/year/2014/nssreview/>.

- Cheng J. H. S. & Marsh, H. W. (2010). National Student Survey: are differences between universities and courses reliable and meaningful? *Oxford Review of Education*, 36(6), 693–712. DOI:10.1080/03054985.2010.491179
- Elliott, K. M. & Healy, M. A. (2001) Key factors influencing student satisfaction related to recruitment and retention. *Journal of Marketing for Higher Education*, 10(1), 1–11.
- Finney, T. G. & Finney, R. Z. (2010). Are students their universities' customers? An exploratory study. *Education + Training*, 52(4), 276–291
- García-Aracil, A. (2009). European graduates' level of satisfaction with higher education. *Higher Education*, 57(1), 1–21.
- Green D. (1994). What Is Quality in Higher Education? Bristol, UK: Taylor & Francis.
- Green, H. J., Hood, M., & Neumann, D. L. (2015). Predictors of Student Satisfaction with University Psychology Courses: A Review. *Psychology Learning & Teaching*, 14(2), 131–146. DOI:10.1177/1475725715590959
- Gruber, T., Fuß, S., Vosss, R., Zikuda, M. G. (2010). Examining student satisfaction with higher education services: Using a new measurement tool. *International Journal of Public Sector Management*, 23(2), 105–123.
- Hall P. A., Soskice D. (2001). *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford University Press.
- ISCED Fields of education and training 2013 (ISCED-F 2013). Available at: <https://ege.ge/res/docs/228085e.pdf>
- Jemelske, E. (2009). Measuring the impact of a university first-year experience program on student GPA and retention. *Higher Education*, 57(3), 373–391.
- Jongbloed, B., Enders, J., & Salerno, C. (2008). Higher education and its communities: interconnections, interdependencies and a research agenda. *Higher Education*, 56(3), 303–324.
- Joseph, M., Yakhou, M., & Stone, G. (2005). An educational institution's quest for service quality: customers' perspective. *Quality Assurance in Education*, 13(1), 66–82.
- Lin, K-J., Chen, H-M., Chen, H-M., & Chang, Y-S. (2017). The effect of TQM strategy on learning satisfaction and loyalty of students - the mediation effect of teaching quality. *World Transactions on Engineering and Technology Education*, 15(1), 49–56.
- Langan M. A, Dunleavy P. & Fielding, A. (2013) Applying Models to National Surveys of Undergraduate Science Students: What Affects Ratings of Satisfaction? *Educational Science* 3(2). DOI:10.3390/educsci3020193.
- Lid, S. E.; Bakken, P.; Kantardijev, K. (2014). *Student views on quality in their study programs – what matters?* Trondheim: NOKUT. Available at: https://www.nokut.no/globalassets/studiebarometeret/2014/stein-erik-lid_student-views-on-quality-in-their-study-programs---what-matters.pdf
- Liu L., Wang Y-S, Wu, T-J. (2017). Student Satisfaction Scale Development and Application for Sport Management in China. *Euroasia Journal of Mathematics Science and Technology Education*, 13(5), 1429–1444. DOI: 10.12973/eurasia.2017.00678a.
- Moro-Egido, A. I. & Panades, J. (2010) An Analysis of Student Satisfaction: Full-Time vs. Part-Time Students. *Social Indicators Research*, 96(2), 363–378.
- NOKUT. (2017). Previous questionnaires. Available at: <https://www.nokut.no/en/studiebarometeret/previous-questionnaires/>
- Muijs, D. & Bokhove, Ch. (2017). Postgraduate student satisfaction: A multilevel analysis of PTES data. *British Educational Research Journal*, 43 (5), 904–930. DOI: 10.1002/berj.3294
- Pascarella, E. T. & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: John Wiley & Sons.
- Peter, A. M. (1997). Quality in European higher education: recent trend and their historical roots. *European Journal of Education*, 32(2), 111–127.
- Peterson, M., Wagner, J. A., & Lamb, C. W. (2001). The role of advising in non returning students' perception of their university. *Journal of Marketing for Higher Education*, 10(3), 274–282.
- Radloff, A., & Coates, H. (2010). *Doing more for learning: Enhancing engagement and outcomes. Australasian Survey of Student Engagement: Australasian Student Engagement Report*. Camberwell, Australia: Australian Council for Educational Research (ACER).
- Richardson, J. T. (2005) Instruments for obtaining student feedback: A review of literature. *Assessment and Evaluation in Higher Education*, 30(4), 387–415.
- Rusell, M. & Lehman, A. (2008) Predicting Student Satisfaction with Academic Advising. *The Mentor: An Academic Advising Journal*, 10(1). Available at: <https://dus.psu.edu/mentor/old/articles/080813mr.htm>
- Sabri D. (2010). Student Evaluations of Teaching as 'Fact-Totems': The Case of the UK National Student Survey. *Sociological Research Online* 18,(4) 15. DOI:10.5153/sro.3136
- Strathern, M., ed. 2000. *Audit cultures: Anthropological studies in accountability, ethics and the academic*. London and New York: Routledge.

- Tessema, M. T., Ready, K. & Yu, W-C. W. (2012). Factors Affecting College Students' Satisfaction with Major Curriculum: Evidence form Nine Years of Data. *International Journal oh Humanities and Social Science* 2, (2), 34–44.
- Yorke M., Orr S. & Blair, B. (2014). Hit by a perfect storm? Art & Design in the National Student Survey. *Studies in Higher Education*. 39,(10), 178–810. DOI:10.1080/03075079.2013.806465

Syrian Asylum-Seekers' Children In Turkish Schools: Inclusion Experiences Of Teachers

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Abstract

Recent immigrant flow affected Turkey very much that approximately three and a halfmillion asylum-seekers live in Turkey. For the purpose of addressing their educational needs, integration to Turkish culture, and preventing generation gap (UNICEF, 2017), Ministry of Education implemented an inclusive approach to schooling of Syrian asylum-seekers' children by educating them in public schools with their Turkish peers in the same classrooms in 2016. Education, as basic human rights and as a way of integration to Turkish society, is provided free of charge in all levels of education in Turkey. The inclusion of Syrian students in the classrooms is quite new experiences for teachers and if it is not managed properly it can have negative effects on both students and their teachers.

Dryden-Peterson (2015) identifies three most common education experiences that refugee students face in countries of first asylum: "language barriers, teacher-centered pedagogy, and discrimination in school settings" (p. 1). Recent studies on asylum-seekers in Turkey concluded that Syrian students had PTSD (Çiğerci & Güngör, 2016) and language barriers (Erdem, 2017). Research on teachers is limited. Only a handful of studies focused on teachers (Yaylacı, Serpil, & Yaylacı, 2017). Because educating students from different backgrounds in terms of race, language, and culture is a novice issue for teachers, it is needed to learn more about their experiences in inclusive classrooms.

Phenomenological studies focus on lived experiences of individuals (Merriam & Tisdell, 2016). The purpose of this study was to explore experiences of teachers teaching Syrian students in the city of Kilis, where the number of asylum-seekers is more than its own population and almost one-fifth of the students in public schools are Syrians. The guiding question of this research was "What are the lived experiences of elementary and middle school teachers educating Syrian children in inclusive classrooms?"

Five teachers from four different primary and middle schools were interviewed. The six open-ended interview questions allowed the participants to reflect on their experiences. The data were collected during the spring semester of 2017. The interviews were analyzed according to thematic methods. Three themes emerged: Language barrier, lack of family support, and teachers' lack of pedagogical skills to teach asylum-seeker students.

Teacher Professional Development Strategies Of General Buddhist School

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Abstract

The objectives of this study were to propose strategies for development of teacher professional of general Buddhist schools and to study teacher professional development strategies. This study used mixed methods research consisting of 2 phrases. Phase 1: The study of current conditions and desirable to determine the requirements needed for development of teacher professional used questionnaire for 354 teachers general Buddhist schools. Phrase 2: The qualitative study focus group discussion with 15 experts with general Buddhist schools, analyzing the contents according to the objectives of the study.

The results :The Need Assessment of teachers professional development descending order was: Collaborative networks of forces (PNImodified = 0.16), Supportive Structures and Environment (PNImodified = 0.15) Individual Teacher Need (PNImodified = 0.14), Acting under Professional standards (PNImodified = 0.13), Learning of students and teachers (PNImodified = 0.13) and Following the Acting under KulayanamitDhamma. (PNImodified = 0.10). Teacher professional development strategies suitable and useful for general Buddhist schools consisted of 4 goals ,6 strategies, 9 Measure and 36 indicators .

Key Words: *Strategies ,teacher professional development*

Introduction

The quality of the education system depends on the quality of teachers. Because the quality of teachers is the most important factor for the quality of student learning. (OECD, 2013) The education systems of the countries getting high marks often give first priority to teachers through the selection of appropriate quality teachers or teacher quality. That is having the best person to be a teacher, keeping good teachers and taking the best out of teachers. (McKinsey Report, 2007) As the quality of teachers is critical to improving the quality of education because teacher quality affects student quality. Teachers have an important role in the development of a complete human being for all physical, mental and moral, ethics and culture to live with others happily. The quality of teachers is the key factor affecting the learning of the students. For there were research findings from various periods that students who had a good teacher develop 3 times advanced students to teachers is not good. And from the collection of relevant data analyzed, synthesized, and classified related to teacher development, including the teaching of teachers, ethics of teachers, the use of information technology (ICT) for teaching, new knowledge for teachers in the 21st century, the media and the teaching of teachers and problems of teacher development. The study found that driving to develop teachers lacks of mechanisms for collaboration to drive professional development of teachers to be a noble profession and the curriculum and teacher development are not consistent with the needs of teachers. (Office of the Education Council, 2013)

General Buddhist schools, Department of Education Buddhist Studies, Division Office of National Buddhism organize 409 lower secondary schools and upper secondary schools with 4,411 teachers. Having teachers recruited to teach is the duty, authority and responsibility of each school. The results of the 2nd round external assessment of 391 general Buddhist schools nationwide shows that only 209 schools or 53.45 % accredited quality standard, while 182 schools or 46.55 % have not certified. Considering the average standard of each standard, it revealed that 5th Standard: Students with the knowledge and skills required by the curriculum, has the lowest average (2.12). The next is 9th Standard: Teachers are capable of teaching effectively and focus on the learners, (2.45). This is consistent with the analysis of the potential for development of the general Buddhist schools, finding the weaknesses is that teachers lack of security and advancement of the profession. Teachers have not been developed to be able to organize the teaching and learning process that emphasizes learner-centered equitably and appropriately. Changes cause a brain drain to other organizations having more security. And management and staff development are not systematic. (Division of Buddhist Studies, 2010).

From the background and the importance above, the researchers are interested to study the needs for teacher professional development in general Buddhist schools to develop teachers on knowledge and skills to

meet the required performance. And to improve the working methods of teachers to effectively develop their productive stage as a professional teacher. This will affect the quality of education to students.

Objectives Of The Study

were to assess the needs for development of teacher professional of general Buddhist schools and to study teacher professional development strategies.

Definition

1. Strategy refers to the management or way of working at General Buddhist School. The general education is used as a tool for the development of professional quality teachers. Thus, Individual Teacher Needs Student and Teacher Learning Collaborative networks of forces Supportive Structures and Environment Acting under Professional standards and Acting under Kulayanamit Dhamma Achieve effective with 4goals are :

1.1 Goal means The overall goal of the strategy is to anticipate the importance of professional development.

1.2 Strategies means The Management Approach at General Buddhist School has chosen to work to achieve

the objectives set out.

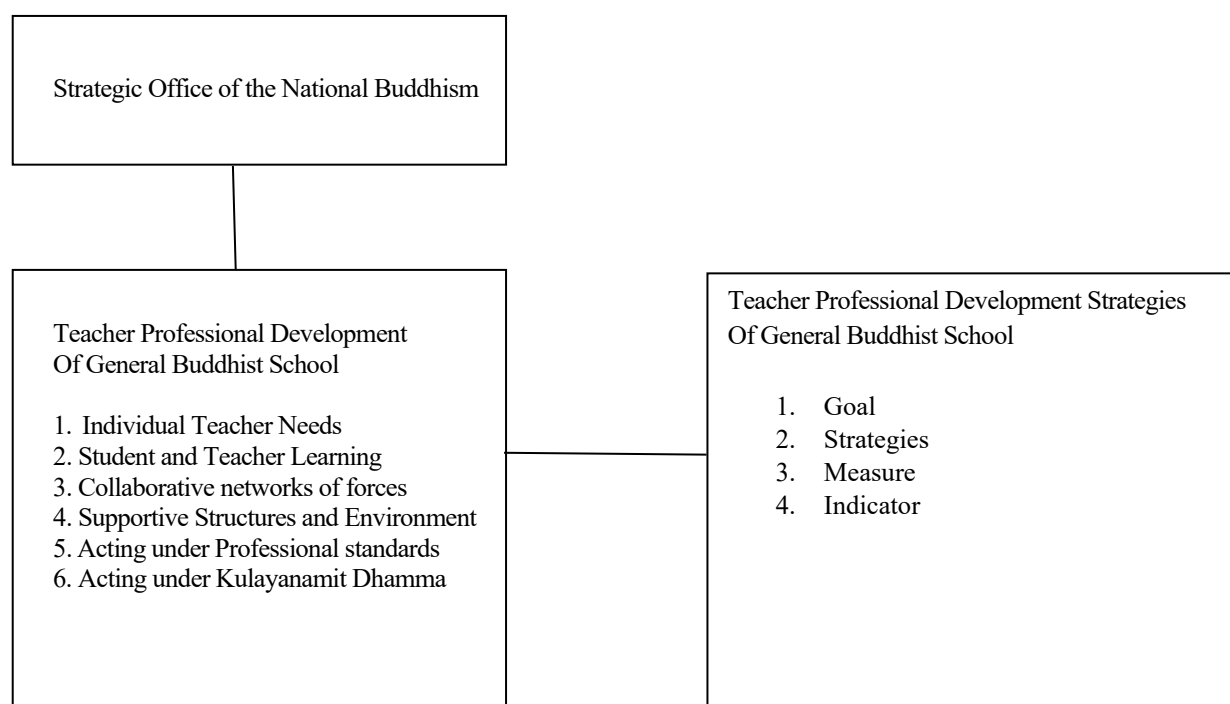
1.3 Measure means The program is based on a professional development strategy used by the teacher.

Each strategy succeeds.

1.4 Indicator means Identify or reflect on accomplishing goals.

2. General Buddhist School means Schools that provide basic education under the Ministry of Education To the novice monk.

conceptual framework



Population and sample

Phase 1 : The population in this study were 4,411 teachers in general Buddhist schools all over the country.

The target group was 354 teachers in general Buddhist schools randomized by the multi-stage random.

The sample size is determined by the square of Krejcie & Morgan, 1970.

Phase 2 : The qualitative study focus group discussion with 15 experts

Methodology

This study used mixed methods research consisting of 2 phrases.

Phase 1 : The study of current conditions and desirable to determine the requirements needed for development of teacher professional used questionnaire for 354 teachers general Buddhist schools.

Phrase 2 : The qualitative study focus group discussion with 15 experts with general Buddhist schools, analyzing the contents according.

The Findings

1. Results of the study of the current conditions and desirable conditions and assess the needs for development of Teacher Professional Development of General Buddhist Schools are as follow :

No	TEACHER PROFESSIONAL DEVELOPMENT OF GENERAL BUDDHIST SCHOOLS	Current conditions		Desirable conditions		PNI _{modified}	Levels
		\bar{x}	S.D.	\bar{x}	S.D.		
1.	Collaborative networks of forces	3.37	1.01	3.90	0.89	0.16	1
2.	Supportive Structures and Environment	3.44	1.02	3.95	0.88	0.15	2
3.	Individual Teacher Need	3.48	1.00	3.96	0.91	0.14	3
4.	Acting under Professional standards	3.60	0.96	4.09	0.84	0.13	4
5.	Learning of students and teachers	3.50	0.96	3.96	0.91	0.13	5
6.	Acting under Kulayanamit Dhamma	3.89	0.90	4.27	0.81	0.10	6
	Totals	3.560	0.975	4.022	0.873	0.135	

2) Teacher professional development strategies suitable and useful for general Buddhist schools consisted of 4 goals were : 1) Promote the creation of a collaborative network of teachers of the Buddhist Scripture School. Department of General Education 2) Develop a structure and environment that supports professional development. 3) Promote the development of professional teachers to meet the needs of each teacher. 4) Promote and develop teachers to practice their professional standards.

- 6 strategies were : 1) Build collaborative networks of forces 2) Organize the structure and environment supporting professional development 3) Create a professional development system to meet the need of each teacher 4) Implement measures to promote compliance with professional standards 5) Encourage the Development of student and teacher learning 6) Promote the practice of moral principles ,
- and 9 Measures 36 indicators.

The Discussion

Phase 1: The study of current conditions and desirable to determine the requirements needed for development of teacher professional found The Need Assessment of teachers professional development descending order was: Collaborative networks of forces because Educational Professional Network is a good example. Pay attention to personnel. And have ongoing operations Believe that learners are valuable and develop. Collaboration of school administrators, voluntary administrators These can be described as beliefs and good standing in the development of professional education networks. And when it is done, it results in the development of a professional education network well and with clear guidelines. Should be expanded. May be prepared as a plan. In addition, there is a need to improve the quality of education in order to improve teachers' professional qualities. Consistent with Thompson Gregg and Niska (2004) Community Network of Professional Learning is a combination. Sharing the power of sharing and learning with teachers, administrators and educators. Based on a culture of friendship, vision, values, goals, and common missions. Working together as a team to learn continuously in the way of working and living together. There are teachers together as leaders. And the management is supporting the learning and development of professional quality change. The quality of learning management emphasizes the success or effectiveness of learners. Of the members of the network.

Phase 2: Teacher professional development strategies suitable and useful for general Buddhist schools consisted of 4 goals were : 1) Promote the creation of a collaborative network of teachers of the Buddhist Scripture School. Department of General Education 2) Develop a structure and environment that supports professional development. 3) Promote the development of professional teachers to meet the needs of each teacher. 4) Promote and develop teachers to practice their professional standards. and 6 strategies were : 1) Build collaborative networks of forces 2) Organize the structure and environment supporting professional development 3) Create a professional development system to meet the need of each teacher 4) Implement measures to promote compliance with professional standards 5) Encourage the Development of student and teacher learning 6) Promote the practice of moral principles , and 11 Measure 36 indicators. because Strategy is the management approach that the organization chooses to implement. In order to achieve the goals set in the future. Strategies are the framework and guidelines that will allow executives to define plans and projects in

detail about what to do, how to go about a product that corresponds to the mission and goals of the organization. Consistent with Somjed Srisomjak (2016) Strategies for teacher development and educational personnel include 4 strategies, 9 Measure and 11 indicators.

Suggestion For Future Research

General Buddhist schools should do Research and Development to obtain an application form or programs in teacher professional development.

References

- Eleonora, M. (2003). *The Objects of Social Science*. London: Continuum Press.
- Division of Buddhist Studies, (2010). **Strategic Plan and Action Plan for Educational Development Department of General Education. (2010 - 2019)**. Bangkok : National Buddhist Printing Office.
- Krejcie, R.V., & Morgan, D.W. (1970). **Determining sample size for research**. In *Journal of Educational and Psychological Measurement*, 30(3), 607-610.
- McKinsey & Company. (2007). **How The World's Best Performing School Systems Come on Top**, (Online), Available: http://mckinseysociety.com/downloads/reports/Education/Worlds_School_Systems_Final.pdf, Retrieved March 11, 2016. From <http://pisathailand.ipst.ac.th/issue-2016-5>
- OECD. (2013). **PISA 2012 Results: What Makes Schools Successful? Resources, Policies and Practices, PISA**, OECD Publishing. From <http://pisathailand.ipst.ac.th/issue-2016-5>
- Office of the Education Council. (2013). **Analysis of status of teacher development system and Suggestions to improve teacher for student quality**. Bangkok: Phrigwan Graffic Limited.
- Somjed Srisomjak (2016). **Strategies for quality schools under the office of secondary educational service area 20**. Thesis submitted in partial fulfillment of the requirements for the degree of doctor of philosophy. Khon Kean University.
- Suwimon Wongwanitch, (2007). **Needs assessment research (Edition 2)**. Bankok : Tummada place.
- Thompson, S.C. ; Gregg, L.; & Niska, J.M. (2004). **Professional Learning Communities, Leadership, and Student Learning**. *RMLE Online*. 28(1) : 1-15. <http://dx.doi.org/10.1080/19404476.2004.11658173>

Teachers' Opinions Related to Values Education in Gifted-Talented Students

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Abstract

In this survey, it is aimed to determine opinions of teachers about values education. The investigation is a case study one of the qualitative research models in the direction of the projection of the examination. Study group of the investigation consists of 10 teachers working in a science and art centre in the province of Aksaray. Interview form prepared by the researcher was utilized as a data collecting tool. Analysis of the collected data was performed by the use of descriptive analysis method. According to the result of the survey, it is inferred that the teachers reach the information about values education on their own meaning. The question that which values should be acquired by the students was replied as love, respect, fairness, helpfulness and honesty. What is more, the teachers suggest long term social responsibility about values education. The question that which teaching method, techniques, equipment and materials should be utilized shows that the teachers do not have enough knowledge. In this context according to the result of the survey it can be suggested that the teachers can be informed about the teaching methods, techniques, equipment and materials related to the values education and rearrangements can be applied in the current curriculum.

Key Words: *Gifted-Talented Students, Values Education, Teacher Opinions.*

Introduction

Through the centuries, the education changing the society has been changed with the society as well (Ogelman & Sarıkaya, 2015). For instance, technological developments has brought about the social problems as “value crisis”. Therefore it is inevitable that the new necessities of the changing society now has new values (Yiğittir & Öcal, 2011). In other words, the renewing value concept has a very essential position in education. Since the time of Plato, Aristo and the following years, according to many philosophies and their works, the studies about values and its education and how to inherit the values from generation to generation have always been in the essential subjects. (Kenan, 2009). The values education remarks were concurred in the time of Socrates as well. (Ogelman & Sarıkaya, 2015). Socrates is the first westerner educationalist who is into teaching the children to be a good human in the Ancient Greek (Nash, 1997). Basic values like moral, responsibility, respect, fair and sensitiveness can be transferred to the individuals of society and sustain the persistence of culture (Yazıcı, 2006).

Values education starts from the birth of a baby. In the following years, the values education at school should develop at the same direction so that the aimed value acquisitions can be achieved but the family and school values should not conflict each other. Which values the parents want their children to have, the society aim all the children to gain the same values of parents as well (Çengelci, Hancı, & Karaduman, 2013). Ryan and Bohlin (1999) made suggestions to parents in order to create a good character for their children in terms of values education: first of all be a good example for your children, do not carry this heavy burden on your own and ask for help, control what is in your heart and mind, be patient about the main rules and values to be learned, the child should know the reason of punishment when it is necessary, use a moral language in your conversations and do not reduce character education just to the words.

The school is a place where social and individual perceptions develop consonantly to each other (Dewey, 2008). Emotional gains like respect, tolerance, responsibility and helpful are aimed to teach children with cognitive acquisition at schools (Akbaş, 2008; Çengelci, Hancı, & Karaduman, 2013). In this context, the tasks of the school in the open and hidden curriculum are to have them gain values in directions of education aims, affect them positively in terms of personal structure and point of view themselves, promote their moral developments (Akbaş, 2007).

When it comes to the meaning of the word “value”, it is possible to assess different definitions. Çelikkaya (1996) defined value as every kind of emotion, thought, behaviour, rule or dignity based on as social, humanistic, ideologist or divine that is accepted and sustained in a society, belief, ideology or people.

Tezcan (1974) defined the values as standards that appreciates all cultures and societies. The most essential social values are respect, love and responsibility. Some of the values which are valid all times and places are these; fair,

modesty, loyalty, peace, courage, faithfulness, friendship, mindfulness, empathy, reliability, tolerance, steady, cooperation, helpfulness, austerity, leadership, mercy, kindness, self-esteem, sharing, patience, loyalty, respect, love, responsibility, prudence, fidelity, beneficence, spirituality, consistency in conversation and behaviours (Aydm, 2010).

Respect to the developments has occurred since then, there has nearly never been any time that “self-control refreshment” has been needed to come true of values education away from all political conflicts and every culture and geography (Kenan, 2009). Finally, renewal of the present values education in the curriculum by analysing the results of the values education studies is essential in terms of future of education.

Method

This study is a case study of qualitative research designs. In this research, semi structured interview technique was utilized in this qualitative research method which is described as investigation process that is used in order to present the events and phenomenon in a real and natural way by the use of data collecting methods like observation, interview, document analysis (Yıldırım and Şimşek, 2008).

In this investigation, teachers' opinions about values education are aimed to detect. In this context, the developed interview form was finally edited by expert views. There are six open ended questions in the interview form.

Study Group

The study group of the investigation was detected by the use of convenient sampling method. The researcher selects an assessable and close fact or phenomenon and performs it quickly and practically in this convenient sampling method (Yıldırım and Şimşek, 2008). In this examination, 10 teachers working in a science and art centre in the province of Aksaray consist of the study group by the use of convenient sampling method.

Data Collecting Tool

In this study, an interview form was performed so as to collect data. 6 open ended questions which present the research problem best by scanning the current literature were prepared and added to the interview form in the process of interview questions' preparation. Open ended research questions provides the researcher to approach the phenomenon flexibly and in an open ended style (Yıldırım ve Şimşek, 2008).

The interviews were performed according to the teachers' advisable working time and dates. The interviews were recorded by the use of voice record tool and then transcribed so as to prevent data loss. A written permission was received for voice record from the teachers.

Teachers replied the 6 questions that they faced in the interview and added their opinions about values education. The interview questions prepared as a data collection tool were presented in Table 1.

Table 1. *Interview Questions of Data Collection Tool*

1.	Do you have any information about the values education applied in the National Education Institution? Was there any informing work, meeting or a seminar about this subject? How and where did you access the information about the values education?
2.	Which values do you think to be acquired by the students in the scope of values education? Why?
3.	Do you find the values education enough applied at schools? What are your suggestions about this subject?
4.	Which teaching methods, techniques or equipment and materials can be utilized in values education? What are your suggestions about this subject?
5.	What are your applications related to the values education? Would you explain please?
6.	Do you have any problems in the application of values education? What are the problems? How can these problems be solved, what are your solution suggestions?

Data Analysis

The data gathered from the interviews were analysed by the use of descriptive analysis method. Descriptive analysis; descriptive analysis consists of four stages as creating a framework, processing the data thematic framework, describing the data and interpreting the data (Yıldırım ve Şimşek, 2008). A thematic framework was founded by the researcher for the data analysis. The data were coded by the researcher in this scope. Then the collected data were coded in common themes by comparing each other.

The data were coded in accordance of the investigation by scanning the scripts again and again gathered from the interviews, and the themes were created which explain the coded data. The collected data were organized in a table. The interviewed teachers coded were identified from Ö1 to Ö10. The teachers' opinions were directly cited for the interpretation of the data collected.

Findings

In this section, the findings are presented as a result of the investigation. Teachers' opinions related to values education are demonstrated below in tables.

The information related to where and how the teachers reached the information about the values education applied in the National Education Institutes were presented in Table 2.

Table 2. The information related to where and how the teachers reached the information about the values education applied in the National Education Institutes

Theme (Categories)	Codes	n	%
The sources of the information about the available values education	School (Ö1,Ö2)	2	20
	Internet (Ö3)	1	10
	Personal Means (Ö4,Ö5,Ö8,Ö9,Ö10)	5	50
	Seminar (Ö6,Ö7)	2	20

When the Table 2 is viewed, teachers' opinions about where and how the teachers reached the information about the values education program applied in National Education Institutes are seen as "personal means" with the percentage of %50. Other opinions of the teachers are the school and seminar with %20 and internet with %10. The citations from the opinions of the teachers are given below.

"I had my first opinions with the help of bulletin boards and studies prepared at school. Then I read something about this subject" (Ö2)

"I have reached the information by the help of web site" (Ö3)

"I do not have much information. I have reached my available information as a result of investigations about the subjects." (Ö5)

"In the past it was mentioned a lot, meetings and seminars were applied in school level but I do not think it was effective" (Ö6)

Teachers' opinions about which values should be gained by students in the scope of values education are presented in Table 3.

Table 3. Teachers' opinions about which values should be gained by students in the scope of values education

Theme (Categories)	Codes	n	%
Which values should be gained by students	Love and Respect (Ö1,Ö7,Ö8)	3	30
	Family (Ö2)	1	10
	National and Religious Values (Ö3)	1	10
	Universal Values (Ö4,Ö5,Ö6)	3	30
	Social Ethics (Ö9,Ö10)	2	20

After viewing the Table 3, in terms of teachers' opinions about which values should be gained by the students, there are replies about a %30 ratio of universal (fair, patience, tolerance, helpfulness, honesty, merciful etc.) values and %30 ratio of love and respect values.

Among the other opinions, there are ratios of %20 social ethics, %10 family based values education and %10 national and religious values. The citations of teachers' opinions are demonstrated below.

"Respect... First of all, I think when there is respect somewhere, it is more likely to live in." (Ö1)

"I think the values education should start in the family. If there will be values education at school, this should be in an applicable way. Instead of just giving the students information about values education, we should work in with applicable works to go beyond this position." (Ö2)

“Individuals should be educated according to the national and religious values of this country” (Ö3)
“Fairness, patience, tolerance, helpfulness, human relations are to be performed in this context” (Ö4)
“Social ethics, good person, the rules for the daily life in society, human relations and communication. As we live in a social environment, these properties are very essential to make this environment liveable to me.” (Ö9)

The third question -the teachers do not find the current values education applied at schools as a result of this- is about what can be done at school about this issue and about their suggestions are presented in Table 4.

Table 4. Teachers’ opinions about what should be done at schools about values education

Theme (Categories)	Codes	n	%
Teachers’ suggestions about values education	A specific lesson (Ö1)	1	10
	Long term social responsibility projects (Ö2,Ö3,Ö5,Ö6,Ö7,Ö8,Ö9)	7	70
	Model example (Ö4)		
	Seminar for families (Ö10)	1	10
		1	10

When Table 4 is viewed, teachers’ opinions about what should be done at schools about values education are mainly about the category of long term social responsibility projects with the ratio of %70. Other opinions of the teachers are a specific values education lesson with the ratio of %10, a model example for the children category with the ratio of %10 and family seminars with the ratio of %10. The citations of teachers’ opinions are demonstrated below.

“I don’t think it is enough. Because it is very difficult for teachers to spare time for the value education. May be it is very productive if there is a specific lesson named as values education.” (Ö1)

“It is not enough. It should be promoted by social activities.” (Ö2)

“It is not enough. There should be mostly applicable activities.” (Ö6)

“It is not enough. Teachers and students should apply the values mutually in daily life. Model examples should be constructed.” (Ö4)

“The application of the values are also very essential. It is not helpful at all not to obey them after spelling the values verbally. What is more, municipality organizations should give seminars to the families about the values education. Education starts in the family and continues in the society. If telling a lie, stealing or unchastity has become normal, they become normal in the family and society at last. In order to prevent these situations, the families should be honest and bad examples in TV series should be distracted. These behaviours should not drum into the brain and not be normal.” (Ö10)

Teachers’ opinions about the question related to values education which teaching methods and techniques or equipment and materials should be used are presented in Table 5.

Table 5. Teachers’ opinions about the question related to values education which teaching methods and techniques or equipment and materials should be used.

Theme (Categories)	Codes	n	%
Which teaching methods and techniques should be used	Video (Ö1,Ö6)	2	20
	No idea (Ö2,Ö3,Ö5,Ö10)	4	40
	Everything (Ö4)	1	10
	Game, drama (Ö7)	1	10
	Application Activities (Ö8,Ö9)	2	20

Viewing the Table 5, it is found that teachers do not have any idea about which teaching methods, techniques and equipment and materials should be used at the ratio of %30. Other opinions are respectively videos at the ratio of

%20, application activities at the ratio of %20, and games at the ratio of %10. The citations of teachers' opinions are demonstrated below.

"Interactive flat board can be used. Films or videos can be watched about the values" (Ö1)

"I do not think that I have enough information to suggest any teaching methods, techniques, equipment or materials about this subject and I am not expert about it" (Ö2)

"It should be spontaneous. Every kind of facility can be used for this education, as long as teachers and parents are eager for it" (Ö4)

"Games." (Ö7)

"Instead of equipment and materials, application activities are more helpful" (Ö8)

Teachers' opinions about what kind of activities they apply in the scope of values education are presented in Table 6.

Table 6. Teachers' opinions about what kind of activities they apply in the scope of values education

Theme (Categories)	Codes	n	%
What kind of activities	Discussions (Ö1)	1	10
	MEB framework curriculum (Ö2)	1	10
	No answer (Ö3,Ö5,Ö10)	3	30
	Trips (Ö4,Ö7,Ö9)	3	30
	Direct instruction (Ö6,Ö8)	2	20

After viewing the Table 6, teachers' opinions about the applications related to values education are mostly trips with the ratio of %30 and no answer about the application related to the values education with the ratio of %30. Other opinions are respectively direct instruction with the ratio of %20, creating a proper discussion environment with the ratio of %10 and applying the framework curriculum of National Education with the ratio of %10.

"To be honest I cannot spare much time for it. When I have time in the classroom, I try to apply mutual discussions as it needs to be." (Ö1)

"I try to include values education into my lessons by the use of framework curriculum prepared by National Education" (Ö2)

"I include the activities in a verbal instruction" (Ö8)

"We go trips and visits about the subject" (Ö9)

Teachers' opinions about the problems encountered during the values education applications were presented in Table 7.

Table 7. Teachers' opinions about the problems encountered during the values education applications

Theme (Categories)	Codes	n	%
Encountered problems	Time (Ö1,Ö9)	2	20
	Lack of knowledge (Ö2)	1	10
	No idea (Ö3,Ö5,Ö8)	3	30
	Teacher's attitude (Ö4,Ö6)	2	20
	Value study (Ö7)	1	10
	Negative environment (Ö10)	1	10

After viewing the Table 7, teachers' opinions about the problems encountered during the values education applications are %30 no idea, %20 time problem, %30 teachers' different approaches to values education, %10 teachers' lack of knowledge, %10 value conflicts and %10 continuous negative effects on children of the environments. The citations of teachers' opinions are demonstrated below.

“There should be more investigations and studies about this subject. When you have a detailed information, it would be easy to apply it. I have observations about that teachers do not have enough information about this subject and they do not know how to manage the process of values education.” (Ö2)

“Everyone should give the same or similar attention to values education. When it is ignored, there will be ne acquisitions for the students and teachers” (Ö4)

“Values studies.” (Ö7)

“Time problem is available. Assigning the students in the scope of social responsibility activities can be sometimes problematic.” (Ö9).

“...especially respect to woman should be acquired because the woman is an essential person who grows the child that is the base of the society and shapes the family.” (Ö10)

Result Discussion And Suggestions

This study is aimed to determine the opinions of teachers related to values education. According to the answers given in the current investigation, it is concluded that the teachers' knowledge about values education is gained by the help of their own means. The question that which values should be acquired by the students is replied by the teachers as love, respect, fairness, cooperation and honesty. What is more, the teachers suggest long term social responsibility projects to be organized related to values education subject. It is pointed out that the teachers do not have enough knowledge about what teaching methods, techniques, equipment or materials should be used in order to teach values education. According to the present examination, it can be understood that teachers generally instruct directly to teach values. The teachers build consensus about the problems encountered during values education applications. The idea of that the direct instruction method is not enough related to the problems during the applications and the presence of the teachers who has no idea about the issue come into prominence.

When it comes to the investigations performed about values education, Yiğittir and Öcal (2011) examined the opinions of 83 high school history teachers from different provinces in their study. According to their investigation, history teachers are eager to teach their students national values like “patriotism and love of nation, historical consciousness, sensitiveness to historical and cultural heritage, national and divine values, cooperation, respect, independence, respect to The Turkish National Anthem and Turkish flag”. The history teachers attended to the study are understood that they use different instructional methods to teach values education like inspiration, case study and book analysis, documentary and short films, trips to historical places and museums, biography examination, research, modelling.

In the study of Çengelci, Hancı and Karaduman (2013), they aimed to determine the opinions of teachers and students about values education in a primary school environment. Teachers proposed some suggestions related to teaching of values education process, school staff and school-family-society cooperation. Students thinks that mostly honesty value is tried to be instructed in their school. It is pointed out that students confirmed less the items about school cleaning and creating classroom rules. Ogelman and Sarıkaya (2015) aimed to show the opinions of pre-school teachers about the values education in their investigation. According to their study results, when it comes to values education, teachers firstly thinks the concepts like respect, love, tolerance, responsibility, cooperation, honesty, helpfulness and kindness. The problems encountered by the teachers during the values education are children's developmental situations (short attention span, lack of abstract thinking, readiness etc.), lack of support from families, lack of material, book, curriculum, teachers (self-esteem, lack of knowledge) and lack of time. Moreover, teachers claimed that it is necessary to inform families about the issue, include values education in preschool curriculum, promote teachers with materials about values education and give seminars to teachers.

Consequently, when the researches performed so far are examined in detail, all the surveys connect the same points. In this context according to the result of the current survey, it can be suggested that school staff and teachers are to be informed about teaching methods, techniques and materials to be used in values education and also rearrangements in the curriculum is to be applied.

References

- Akbaş, O. (2007). Türk Milli Eğitim sisteminin duyuşsal amaçlarının (değerlerinin) ilköğretim 8. sınıf öğrencilerinde gerçekleşme derecesinin değerlendirilmesi. R. Kaymakcan, S. Kenan, H. Hökelekli, Ş. Arslan, & M. Zengin (Dü.), *Değerler ve Eğitimi Uluslararası Sempozyumu* içinde (s. 673-695). İstanbul: DEM Yayınları.
- Akbaş, O. (2008). Değer Eğitimi Akımlarına Genel Bir Bakış. *Değerler Eğitimi Dergisi*, 6(16), 9-27.
- Aydın, M. Z. (2010). Okulda Değerler Eğitimi. *Eğitime Bakış Eğitim-Öğretim ve Bilim Araştırma Dergisi*(18), 16-19.

- Çelikkaya, H. (1996). *Fonksiyonel Eğitim Sosyolojisi*. İstanbul: Alfa Yayınları.
- Çengelci, T., Hancı, B., & Karaduman, H. (2013, Haziran). Okul Ortamında Değerler Eğitimi Konusunda Öğretmen ve Öğrenci Görüşleri. *Değerler Eğitimi Dergisi*, 11(25), 33-56.
- Dewey, J. (2008). *Okul ve Toplum*. (H. A. Başman, Çev.) Ankara: Pegem Akademi.
- Kenan, S. (2009, Kış). Modern Eğitimde Kaybolan Nokta: Değerler Eğitimi. *Kuram ve Uygulamada Eğitim Bilimleri Dergisi*, 9(1), 259-295.
- Nash, R. (1997). Answering the "virtuecrats": a moral conversation in character education. New York: Teachers College Press.
- Ogelman, H. G., & Sarıkaya, H. E. (2015). Okul Öncesi Eğitimi Öğretmenlerinin Değerler Eğitimi Konusundaki Görüşleri: Denizli İli Örneği. *Sakarya Üniversitesi Eğitim Fakültesi Dergisi*(29), 81-100.
- Ryan, K., & Bohlin, K. (1999). *Building Character in Schools*. San Francisco: Jossey-Bass Publishers.
- Tezcan, M. (1974). *Türklerle İlgili Stereotipler (kalıp yargılar) ve Türk Değerleri Üzerine Bir Deneme*. Ankara: Ankara Üniversitesi Eğitim Fakültesi Yayınları.
- Yazıcı, K. (2006). Değerler Eğitimine Genel Bir Bakış. *Türklük Bilimi Araştırmaları Dergisi*, 499-522.
- Yiğittir, S., & Öcal, A. (2011). Lise Tarih Öğretmenlerinin Değerler ve Değerler Eğitimi Konusundaki Görüşleri. *Karamanoğlu Mehmetbey Üniversitesi Sosyal ve Ekonomik Araştırmalar Dergisi*, 117-124.

Teaching Mathematics With The Use Of The History Of Mathematics: Some Opportunities Offered By The World Of Psychophysics

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Abstract

The history of mathematics may be useful in education and represent a support in mathematics teaching mainly in two directions: on the one hand, arousing the students' interest in mathematics and, on the other hand, stimulating the reflection about mathematical concepts and methods. This work shows how the figure of Gustav Theodor Fechner (1801-1887) and the discipline of psychophysics which he founded should rightly constitute a chapter of the history of nineteenth century mathematics to be adequately re-evaluated also in the context of secondary school and university mathematics teaching (including teacher training). We will focus on the opportunities which a deep analysis of Fechner's contribution can offer in mathematics education of today.

1. Fechner And Psychophysics

Historians of science credit Gustav Theodor Fechner (1801-1887) with having founded the discipline of psychophysics; his work, which was entitled *Elemente der Psychophysik* and published in 1860, is the first official text of this "new" discipline, presented as a complete and mature science.

Owing to his theory, Fechner is recognized as the scholar who developed the first quantitative methodology of psychology. Fechner, in his work, aims constantly to unite psychology and mathematics, conceived as an essential component in achieving a measurement of mental variables. Mathematics plays in Fechner's theory a key role as a tool that can enable the realization of his scientific project and is a fundamental element for the sheer existence of the discipline of psychophysics, applied at a high level.

The figure of Fechner was central to the issue of mental measurement and his contribution (in terms of the measurement model he proposed) had a strong impact on the reality of nineteenth century measurement in its entirety, having influence up to today. So, his figure and work deserve a prominent place in the landscape of (applied) mathematics of that period.

Focusing on Fechner and psychophysics is of interest in so far as they can be adequately re-evaluated also in the context of secondary school and university mathematics teaching (including teacher training). The fascinating example of Fechner, the person, may significantly stimulate students' interest; an analysis of the concepts and methods (e.g., functions and calculus) used by him and by the subsequent scholars who have dealt with psychophysics provides a good aid to see mathematics from a new point of view and in a new work environment (particularly engaging, concerning our human nature, and different from the traditional approaches: Regarding the interaction of the domains of mathematics education and the history of mathematics in the process of mathematics teaching, see, e.g., Furinghetti & Radford, 2008, and Fenaroli, Furinghetti & Somaglia, 2014).

1.1 Fechner, A Fascinating Figure

Fechner's conception of psychophysics stems from his education, as a physicist and a philosopher, and his life and personality: The study of his figure and the origin of his thought is fundamental for a correct interpretation of his psychophysical theory, in which science and philosophy fuse, and is a very good example for showing (secondary school and university) students how we work when doing (applied) mathematics.

A singularly eclectic figure, when he left school, Fechner attended the Academy of Medicine in Dresden and enrolled at the Faculty of Medicine at the University of Leipzig, where he followed lectures also in logic, botany, zoology, physics, chemistry, pharmacy, anatomy, physiology, obstetrics, and algebra.

Fechner's decision to study medicine soon proved to be an unhappy choice. Although he completed his studies, Fechner did not feel totally fulfilled in this discipline and decided against practising it. Such a negative reaction towards medicine found expression in the satirical contributions which he published under the pseudonym of "Dr. Mises" (see Antonelli & Zudini, 2011). However, none of this undermined Fechner's enthusiasm for science, which remained the fundamental interest of his life.

Fechner was physicist, physician, and philosopher, professor at the University of Leipzig. Initially attracted by the "philosophy of nature" ("Naturphilosophie") - which at that time went against Newton's doctrine, supporting instead the idea of the universe as an animated organism -, he extended his interests to physiology, physics, chemistry, and meteorology. In 1834 he became professor of physics and in 1835 founded the first physics institute in Germany, in the newly-built "Augusteum" in Leipzig. Fechner carried out research mainly on the theory of electricity, electromagnetism and electrical chemistry. Among the first scholars to recognize the importance of Ohm's law (1827), he distinguished himself by using the quantification method and by collecting a great amount

of experimental data, which he then analysed and discussed in his research. In 1832 he published the “Repertorium der Experimental-Physik”, forerunner of the journal “Fortschritte der Physik”, which was founded in 1845 (for more details regarding Fechner’s figure and work see, e.g., Brožek & Gundlach, 1988, Heidelberger, 1993, and Zudini, 2009).

1.2 The Definition Of Psychophysics

The central role which mathematics would have in psychophysics is clear from the very definition of it at the beginning of *Elemente*: Psychophysics is conceived by Fechner as the “exact doctrine” of the “functional or dependence relationships” between body and soul, more generally, between the bodily and spiritual, physical and psychical worlds (Fechner, 1860, vol. I, p. 8).

A first element emerges immediately in this definition: the conception of psychophysics as “exact doctrine”, which is characterized, in particular, as a study of the quantitative links that bind physical stimuli to mental variables (sensations) related to them. The basic idea of the conception is to consider the human perceptual system as a measuring instrument (more precisely as a physical instrument) that allows the quantification of sensory experience.

The philosophical basis for an assumption of this kind is the second major element in the definition of psychophysics: the “functional” conception of the relationships between body and soul, matter and spirit, and, more generally, between the physical and the psychical worlds, which in Fechner takes the form of an “identity view” (“Identitätsansicht”), already presented in the appendix to the second part of the work *Zend-Avesta* (Fechner, 1851; see also Heidelberger, 1993). In *Zend-Avesta, oder über die Dinge des Himmels und des Jenseits. Vom Standpunkt der Naturbetrachtung*, Fechner’s panpsychist philosophy finds expression in the theory of universal animation, which goes back to Friedrich Schelling and has a strong oriental character, and the program of the future discipline of psychophysics is already presented in an embryonic way.

According to the “identity view” by Fechner, matter and spirit are expressions of a single reality which manifests itself at times in one way and at times in another, just as the two sides of the same coin or medal, depending on the (internal or external) observation point from which one looks at it. On the basis of the principle of identity view, Fechner postulates the existence of a general and constant relationship of functional dependence between physical and psychical phenomena, that can be expressed in exact terms, through a law which has, as he intends it, elementary and universal character, similar to that of the law of gravitation. This allows, in Fechner’s theory, quantitative analysis of psychical dynamics and paves the way to realizing his project of a scientific foundation for the disciplines of the mind.

The appendix to the second part of the work *Zend-Avesta* is also important because, as above mentioned, it contains, in an embryonic way, a “new principle of mathematical psychology”, which would be the basis of the future discipline of psychophysics (Fechner, 1851, vol. II, pp. 373-386). Fechner himself remembers the morning of October 22, 1850 (still celebrated today as the birth date of psychophysics) when, while he was in bed, he had the intuition that the relative increase in the physical vital force could be the measure of the increase in the corresponding mental intensity (Fechner, 1860, vol. II, p. 554).

The aim to carry out the experimental measurement of the sensations and the foundation of a quantitative science, which is evident from the very definition of psychophysics as “exact science”, clashes with the (seemingly insurmountable) problem of the inaccessibility of sensations from direct, external observation.

As we will see, Fechner solves this problem by developing a “correlative theory” of the measurement. Instead of a direct measurement, he implements a psychical quantification by indirect means, through physical processes corresponding to the sensation, on the basis of the functional relationship of reciprocity that allows a scholar to choose the observation point which seems the better one (or, ultimately, in this specific case, the only feasible one): The scholar can measure the stimuli correlated to a sensation and determine the thresholds of sensations, using them as a unit of measurement.

1.3 Fechner’s Model Of Measurement

According to Fechner, any exact doctrine has to begin with the measurement of its objects; therefore, it is necessary to show how psychophysics allows the measurement of psychical magnitudes.

Already in 1858, anticipating the treatment of *Elemente*, Fechner had considered the status of measurement in psychology and had noted the problems and the relevant polemics connected with this operation (Fechner, 1858). Fechner was convinced that a quantitative aspect was undeniable in psychical phenomena; the question was to prove the actual correlation between quantity and measure in them.

“Measuring” means describing data through numbers, and therefore using mathematical rules in investigations. Fechner says clearly how this should be done in psychophysics when he affirms, proposing an “Euclidean model of measurement” (Zudini, 2011), that:

In general, the measurement of a magnitude consists in verifying how many times a magnitude of the same kind taken as a unit is contained in it. (Fechner, 1860, vol. I, p. 45)

Sensations are to be measured through the measurement of the stimuli that induce equally perceptible sensations, finding a method for establishing the equality between two given sensations. The specific method adopted by Fechner is the following: Two sensations of the same kind are perceived as different only when the difference between the corresponding physical variables is greater than a minimum value ("differential threshold").

As explained in Zudini (2011), Fechner faces the problem of measurement in two phases: In the first phase, he intends to indicate the conditions, which are necessary and at the same time sufficient, for saying, in general, that a magnitude, both of physical and psychical nature, is measurable - from 1858, he will call these conditions the "general principle of measurement" ("allgemeines Maßprinzip"). With the second phase, Fechner seeks to put into practice the principle of measurement for psychical magnitudes, that is, to find an empirical application of this principle in the psychical field.

1.3.1 The General Principle Of Measurement And Its Application In The Psychical Field

So as to guarantee the possibility of measuring a magnitude, the general principle of measurement sets out a series of conditions, which can be expressed schematically in the following way (Heidelberger, 1993, p. 220):

1. Magnitudes have to be conceived as phenomena that can increase or decrease in a continuous way;
2. There must exist a grade of difference, which can be reproduced or verified in various situations, such that one can decide if it is equal or not to the grade of difference between any other two magnitudes;
3. One can distinguish the conditions under which a magnitude has the value zero.

These conditions determine the possibility of measuring in the sense of "counting equals". In fact, Condition 2 gives a value "difference" that can be compared with other differences and therefore used as a unit for measurement. Any other value can in fact be expressed as consisting of a number n of units, starting from zero (Condition 3).

The general principle of measurement has a clearly theoretical character since it does not explain, for example, how to reproduce or discover the magnitude unit, nor how to proceed to the necessary comparisons between magnitudes. This principle is therefore to be considered in the light of the various types of magnitudes and verified in its validity in every field.

In the case of mental phenomena, according to Fechner, one can see at a glance that Condition 1 is satisfied, insofar as mental phenomena such as consciousness or attention are susceptible to a variation in grade; sensation, feeling, instinct, or volition can be weak or strong. Sensations can therefore be conceived as continuous magnitudes generated according to a gradual process starting from the zero condition.

Condition 2 requires us to be able to estimate the equality of the differences of sensations, which is, in general, difficult to carry out. In the case of sensations that are present at the same time and very different in intensity, a subject is, at most, able to estimate that one is stronger than the other; but to assess the size of the difference between the two is a very different thing. The latter implies that we have successfully derived a scale of sensation strength. To find this kind of scale, we need a unit. The difficulties that recur in this operation come from the very nature of sensations, which cannot be treated as material objects. For example, they cannot be put side by side as one does when estimating the length of two objects; neither is it possible to find a standard that allows for such a comparison.

The question is to find a proper procedure for psychical magnitudes; for this purpose, it is sufficient to exploit two other conditions which are valid for physical standards of measurement and which we can formulate in the following way (Heidelberger, 1993, p. 224):

4. A definition of a standard unit of measurement of physical magnitudes can be obtained by relating this unit to other dimensions, with which it is functionally connected;
5. In order to achieve standards of measurement of physical magnitudes we have to rely on our mental impressions, which are produced in us by the material quantities.

Condition 4 means that, when we measure physical objects, we have to deal not with pure dimensions but with dimensions which are expressed through concrete standards, as happens, for example, in the case of time: Fractions of time are measured not directly through time itself but using an external, concrete standard, such as the movement of the hand of a watch.

It is clear that, when we measure units of time, we have to deal with the units of space with which they are connected, considering as a point of reference both the movements of the heavenly bodies and the hands of the watch. That happens in (classical) physics also for forces: The forces themselves are not measured directly (which is impossible); we measure, instead, magnitudes which are relevant or dependent on them, such as the velocity variation of equal masses, or the differences of masses having the same velocity.

According to this interpretation of measurement, which could be defined as “correlative” (Heidelberger, 1993; Murray, 1993), for the measurement of any dimension Q , we need a directly observable dimension R and a device or apparatus of measurement A , properly calibrated and able to represent the values of R in correlation with those of Q in a unique and monotonic way (i.e., capable of preserving the order of the values of the two dimensions).

In the above quoted case of time, which is measured through the movements of the hands of the watch, we can construct a watch in order to supply such a representation: If we know the length of a distance covered by the hand d , we have at a glance the quantity of correspondent time t , according to the formula (“measurement formula”) $d = c \cdot t$, with c constant.

In the case of sensation, we have to search in an analogous way for a dimension which is correlated to it as space is to time, and that dimension is, according to Fechner and his “identity view,” the external physical stimulus. The apparatus that plays here the role of the watch is the human body, which is able to correlate, as the model of measurement itself demands, the values of intensity of sensation with those of stimulus. We must only find the “measurement formula” that expresses that correlation.

Condition 5 emphasizes the importance of sensorial impressions in the process of constructing standards of measurement of physical magnitudes. Still considering the example of time, if we use a watch, calibrated in minutes, it is evident that we conclude that a minute has passed from the mental impression that the distance covered by the hand is equal to the space between two notches. In the process of derivation of standards of measurement for physical magnitudes, the consciousness of equality of a standard to the measured object is fundamental, and this consciousness depends on the subjective mental impressions which we have of concrete physical quantities. The subjective component is therefore necessary in the process of measurement, but can be made objective, restricting its role to the function of comparison of the correspondences existing between the device of measurement and the measured object.

In the process of measuring physical magnitudes we use mental impressions in order to determine the equality of standards and measured objects; therefore, we determine the magnitude of the physical by connecting the physical with the psychical. In the case of measuring psychical magnitudes, on the other hand, we have to reverse this relation. This is possible only after arranging and calibrating a physical scale in such a way that equal psychical magnitudes result from intervals of equal dimension on the scale, according to a law which allows us to connect increments of stimulus and increments of sensation and to deduce therefore, from the intensity of the stimulus, the intensity of the associated sensation.

In the case of measuring time through a watch, the determination of such a law is simple, since equal intervals of time correspond to equal distances covered by the hand. That does not happen for the measurement of sensation through the stimulus connected with it; in such a case, equal differences in sensation do not correspond to equal differences in the stimulus.

The question is to find a function that expresses the reality of the process. The solution to the problem proposed by Fechner follows, by analogy, the procedure used in (classical) physics for measuring forces: In this case too, we can try to measure the magnitude of the sensation produced by equal stimuli or the magnitude of the stimuli which induce an equal sensation. The first possibility is, however, not practicable in psychophysics, since sensation is not susceptible to direct measurement; therefore, the second possibility is left, which consists of assuming the variable sensation as constant and in measuring the physical stimuli for which it remains constant. Here, the distinction made by Fechner between absolute sensitivity and differential sensitivity comes into play. With the first, he means the organic response to the absolute value of a given stimulus; the second refers, on the other hand, to the response to the relative difference between two stimuli and varies according to the variation of the absolute magnitude of the stimulus.

1.3.2 The Measurement Of Sensations

With such conditions posed for measurement, we have to be able, according to a model which follows Euclid (Zudini, 2011), to find a homogeneous unit of measurement and to determine the number of times in which it is contained in the magnitude to be measured. As time is measured through the hand of the watch and space through the ruler, so we can deal with sensation, using the stimulus for its measurement: We proceed to subdivide sensation into equal sections (i.e., in the equal increments which its growth from zero consists of) and to consider the number of these equal sections as determined by the number of the correspondent increments of the stimulus, which can provoke equal increments of sensation (“Maßprinzip”).

These increments in sensation, determined through physical units of variable magnitude which are able to provoke equal increments in sensation, are assumed as units of measurement.

The sensations, as we know them, satisfy, therefore, in Fechner’s system, the conditions posed for measuring a magnitude. In particular, the fulfilment of those conditions is strictly connected with Fechnerian thought in its totality and achieved on the basis of the parallelism between the physical and psychical and of the functional relation of reciprocity which justifies the scholar in choosing the point of view which he considers more proper (or the only practicable). If we cannot measure sensations directly, nevertheless we can measure the stimuli that provoke them and determine the thresholds of sensations, especially the differential ones, using them as the unit

of measurement; we have to measure sensations through the measure of the stimuli that induce equally noticeable sensations, finding a method for determining the equality of two given sensations.

For this purpose, Fechner uses the results on differential sensitivity obtained years earlier by the physiologist Ernst Heinrich Weber (1795-1878), according to which equal relative increments in stimulus correspond to equal increments in sensation (see Weber, 1834, 1846); he generalizes them and, also with the aim of statistical methods, sets out what he calls “Weber’s law” (“Weber’sches Gesetz”).

1.3.3 Fechner’s Measurement Formula

Starting from Weber’s law, Fechner takes what he considers to be an experimental result - the fact that the just noticeable difference in sensation is constant - and applies the differential and integral calculus to sensation conceived as a phenomenon which increases in time and is susceptible to infinitesimal variations.

Moving from the differential equation:

$$d\gamma = k \frac{d\beta}{\beta}$$

by integrating both members of the equation and imposing the condition of the threshold for the stimulus magnitude - i.e, for the threshold value of the stimulus magnitude, the sensation magnitude is zero -, Fechner obtains his famous logarithmic “measurement formula” (“Maßformel”):

$$\gamma = k \log \frac{\beta}{b}$$

where γ is the sensation magnitude, β the stimulus magnitude, b the threshold value of the stimulus magnitude β (called the “absolute threshold” of the stimulus magnitude), and k is a constant (called “Weber’s constant”, depending on the sensory modality) (see Fechner, 1860, vol. II, pp. 10-13; for in-depth analysis of this formula, see Masin, Zudini & Antonelli, 2009, and its references).

The formula of measurement proposed by Fechner is called, in current psychophysics and, generally, in science, “Fechner’s law” (see Figure 1) and is considered the first explicit, quantitative formulation connecting sensations with stimuli (Algom, 2003).

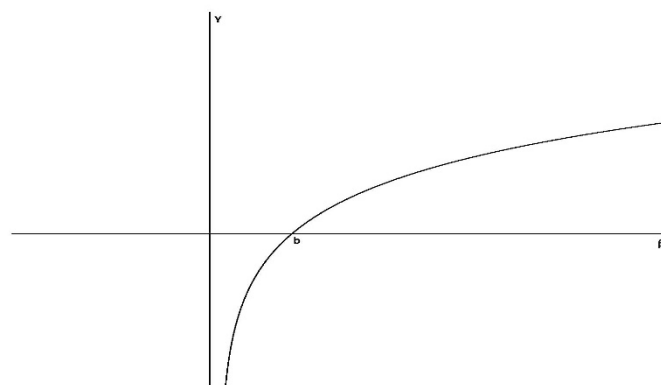


Figure 1. “Fechner’s law”

Fechner arrives at his result giving credit to several scholars who preceded him (see Fechner, 1860, vol. II, pp. 548ff.): first of all, the aforementioned Ernst Heinrich Weber, who, according to Fechner, gave unity to various events observed in the psychophysical sphere and brought new evidence to the discipline, making it an exact and “connected” science. It was he who set out the first clear and, in some way, general enunciation of the psychophysical law, determined by using a method of measurement of sensation in almost all the fields of perception and called by Fechner “Weber’s law”.

According to Fechner, a fundamental role in the development of his psychical measurement theory (“Maßlehre”) was also played by researchers who studied the mathematical (logarithmic) function through which psychical magnitudes are linked to physical quantities in some specific areas: Among these, Daniel Bernoulli is to be mentioned with his determination of the dependency relationship of “moral fortune” on “physical fortune” (see Bernoulli, 1738).

By elaborating all these contributions in the context of a very particular panpsychist philosophy, Fechner comes to the determination of the functional relationship between the physical and mental worlds, between body and soul,

formulating a law which expresses their relationship in precise and quantitative terms and, in this way, achieves a psychical “measurement”.

Fechnerian psychophysics, whose principal result is Fechner’s law, represents therefore a composite theory in which different elements or “ingredients” are harmoniously fused together (Zudini, 2009) according to the following schema (Figure 2):

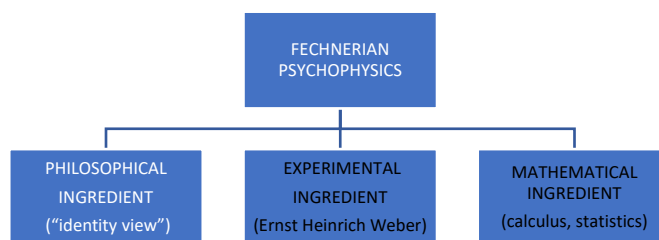


Figure 2. The structural system of Fechner’s psychophysics

The mathematical ingredient, as reported in this scheme, assumes a key role inasmuch as it enables Fechner to treat mathematically mental phenomena and to pursue his aim of building a psychological metric, anchored in the physical world (see Romano, 1976).

2. Fechner’s Heritage

The impact of Fechner’s work was immediately great on the scientific community: For the first time, a rigorous project of empirical and experimental research, which was guaranteed by the possibility of measuring mental phenomena, based upon mathematics, was begun and carried out (see Zudini, 2011).

2.1 The “Fechner Case” And The Debate On It: From Then Up To The Present Day

Fechner’s project was the object of lively discussion, in particular in the Mitteleuropean cultural world (extending to France and Belgium) among scholars from very different disciplines, who dealt with the “Fechner case”: Among them, many scientists of the nineteenth and twentieth centuries, such as Joseph Antoine Ferdinand Plateau, Hermann von Helmholtz, Ernst Mach, Jules and Paul Tannery, Joseph Delboeuf, and David Hilbert, are to be mentioned (see Zudini, 2009, 2011; Antonelli & Zudini, 2012; Zudini & Zuccheri, 2016).

The model of measurement proposed by Fechner became that of reference, which no scholar could neglect: a model to criticize, correct, or confute, in the methodological aspects of its (empirical and mathematical) procedures or even in its psychophysical, physiological, or, in a strict sense, psychological value itself; in certain cases, it was a model to reject in a radical way, on the basis of the assumption that it was impossible to measure sensations and, in general, psychical magnitudes and therefore to make a scientific study on them.

So, as described in Zudini (2011), Fechner’s destiny would be analogous, in a certain way, to that of Euclid, whose model was considered for centuries as the “summa” of geometrical knowledge and of logical rigour, as the correct idealization of the properties of physical space and of the figures of this space, and was then called into question in particular with the advent of non-Euclidean geometries in the nineteenth century. Fechner’s attempt to apply a model of measurement to sensation magnitudes which goes back to Euclid himself (Zudini, 2011) - and the debate that followed - generated ideas, concepts and theories which were destined to have rich developments in the scientific field of the twentieth century and that still animate and are relevant in current psychophysics.

The discussion on Fechner’s work was initially developed from three types of issues: The first concerned the correctness of the law proposed by Fechner on the basis of the experimental data and the mathematical techniques which he used; the second was related to the very nature of the law; the third regarded the possibility of measuring sensations and mental magnitudes in general. In particular, it is to be said that the response given by the cultural world of the French language to Fechner’s psychophysics was negative both from a theoretical and a mathematical point of view, based on the conviction that the application of mathematical models to the psychical sphere required further analysis and experimentation.

As for the first aspect, namely the correctness of the mathematical law obtained by Fechner - the aspect which is the most interesting in this context and on which we focus, also considering the development of psychophysics -, the contribution of Joseph Antoine Ferdinand Plateau (1801-1883), a Belgian physicist and professor at the University of Gand (Ghent), is to be mentioned. Starting from experiments which he conducted on the bisection of sensorial intervals (Plateau, 1872), Plateau, unlike Fechner, derived a power function as psychophysical law (which was also proposed by the German philosopher and psychologist Franz Brentano (1838-1917): See Brentano, 1874). Plateau’s power function would come to the fore again about a century later, in the so-called “modern psychophysics” of the American S. S. Stevens (Stevens, 1957). The latter liked to mention Plateau among those who, in the nineteenth century, had anticipated his power law.

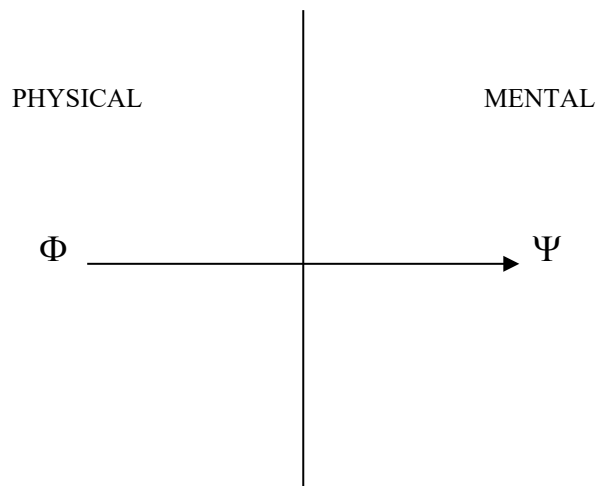
The general form of this law is

$$\psi(I) = kI^a$$

where I is the magnitude of the physical stimulus, $\psi(I)$ is the subjective magnitude of the sensation evoked by the stimulus, a is an exponent which depends on the type of stimulation, and k is a proportionality constant which depends on the units used.

2.2 Toward A “New” Conception Of Mental Measurement

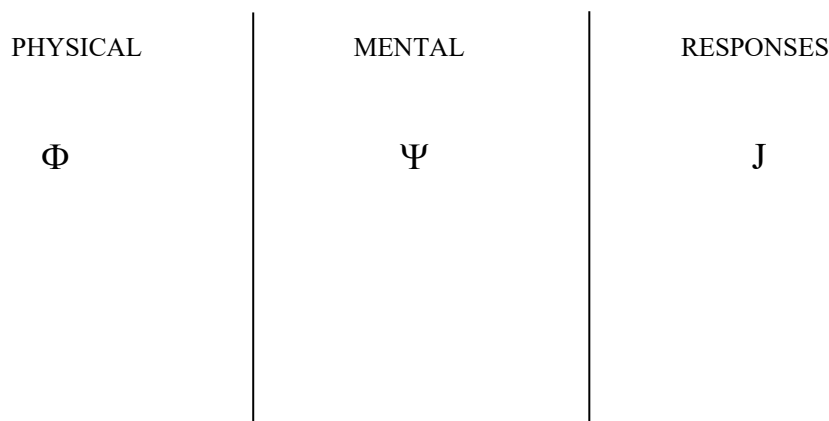
Starting from the 18th century, the question of the possibility of measuring the intensity of mental variables was much discussed. Fechner, Plateau, and other contemporary scholars treated this question considering the two “worlds”, the physical and the mental ones, as arranged according to the following schema:



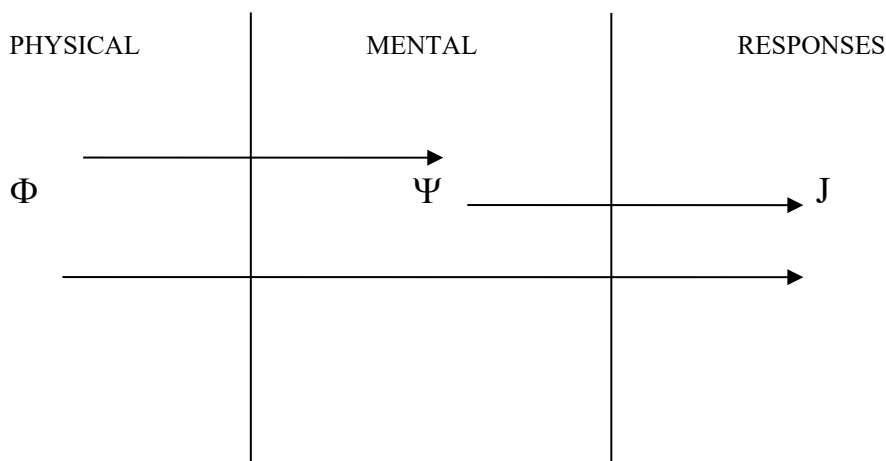
In this schema, a mental variable Ψ corresponds to every physical variable Φ . The problem is then reduced to finding the function (“psychophysical law”) that connects Φ and Ψ .

It is evident that in this formulation, which dominated the history of psychology from Fechner until the 1960s, the problem is somewhat simplified because of the (undoubtedly limited) way of conceiving physical and mental variables. It is clear, in fact, that, for certain mental variables Ψ , there is no physical correspondent Φ . The very search for the function that connects Φ and Ψ creates difficulties, related to the arbitrary nature of the choice of the formula, among the various existing possibilities, and the measurement units used from time to time (see Masin, 2003, 2004).

Starting from the 1960s (Attneave, 1962; Curtis, Attneave & Harrington, 1968), a new way of dealing with the problem was stated, characterized by a decisive “leap in quality”; the schema became more complex, involving a further “world”, that of the responses (of a subject):



Responses played an important role and had to be taken into account, as the world of responses of a subject is accessible, unlike the mental one.



The relationship between Φ and Ψ is what Fechner sought, while the relation between Φ and J is known, since it is possible to measure the variables Φ and the variables J . For a psychologist, it is more important to determine the relation between Ψ and J .

For example, if the relationship between Ψ and J is the identity, we would have

$$J = \Psi$$

as Stevens, essentially, affirmed.

Other authors have believed, on the contrary, that

$$J \neq \Psi$$

A possible hypothesis is that J is equal to Ψ , up to an unknown constant, namely

$$J = a \cdot \Psi$$

with a an unknown constant.

Another possibility, less “good” (from the operative point of view, for those who do research in psychology) than the former, is that

$$J = a \cdot \Psi + b$$

with a and b unknown constants.

Further, it is possible that there are more complex relationships between J and Ψ , namely:

$$J = F(\Psi),$$

with F a non-linear function.

In psychology, scholars are interested in knowing which relationship is the correct one, in order to calculate Ψ .

Today, in the context of mental measurement, the studies by Norman H. Anderson, carried out starting from the 1960s, are an example of interest. Anderson has proposed a theory called “information integration theory” (hereafter, IIT) which “illustrates” the “modern aims” of psychophysics (Masin, 2004).

Through this theory (see, e.g., Anderson, 1981, 1982, 1991), Anderson intends to “enter” into the human mind more than Fechner and others before him did: He “reaches” not only Ψ , but “arrives” at measuring the mental quantities which are generated “before” Ψ , according to a procedure appreciably different from that of classical psychophysics.

Anderson formulates two axioms, the axiom of “purposiveness” and the axiom of “integration”, and starting from these develops, on an inductive basis, his theory. This is proposed as a “unified” theory (Anderson, 1996) and aims at explaining, by using the very concepts of everyday life, the multiplicity of factors that contribute, combining (or indeed integrating) with each other, to the processing of information in various mental processes, in the context of a vision of a human being as an active elaborator of information in order to reach different goals.

IIT gives, according to Anderson (2007), a solution to the age-old problem of measuring the sensations in psychophysics, going beyond the question of determining the “psychophysical law” between stimulus (physical variable) and sensation (mental variable) which was typical of classical psychophysics.

IIT aims not only at measuring the intensity of sensations, but also at discovering the laws governing the process of integrating information in the context of the genesis of the sensations themselves; the measurements of this

information are obtained on the basis of these integration laws (which are said to be simple: additions, multiplications, weighted averages, or combinations of these - hence the idea of a “cognitive algebra” as a tool not only in psychophysics, but in the entire psychology).

IIT can be schematized using a diagram (“functional measurement diagram”) (Figure 3), where the (observable) stimuli, indicated by S_1, S_2, S_3 , on the left side of the diagram, are factors of the (observable) response, denoted by R , on the right side of the diagram.

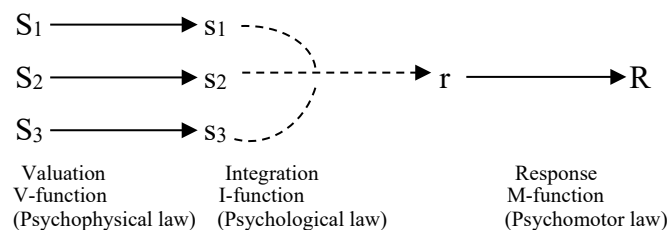


Figure 3. The functional measurement diagram, which is based on Anderson (1981, p. 5)

Between each of the stimuli S_i and R there are three functions: the valuation function (or “psychophysical law”), the integration function (or “psychological law”), and the response function (or “psychomotor law”), in symbols V, I , and M , respectively, representing the transition from S_i to R . The S_i are transformed, through the valuation function V , into the corresponding (not observable) psychological stimuli s_i ; these stimuli s_i combine with each other, through the integration function I , into the unitary, implicit (unobservable) response r , which is then transformed by the response function M into the (observable) R response, according to

$$V(S_i) = s_i$$

$$I\{s_i\} = r$$

$$M(r) = R$$

Three unobservable entities are present in the diagram: the integration function I ; the psychological stimuli s_i , corresponding to the physical ones S_i and internal to the body, often unconscious; the implicit answer r , which can be conscious, but it is also internal to the body.

Functional measurement solves the problem of “the three unobservable entities” through the joint solution of the following three related problems:

1. the measurement of the psychological stimuli s_i ;
2. the measurement of the implicit response r ;
3. the determination of the integration function I .

2.3 Psychophysics And “Virtual Reality”: Looking Ahead To The Future

Today’s psychophysics - obviously evolved from Fechner’s time in terms of physiological and methodological knowledge, as we have briefly seen - is a lively area of research that analyses the perceptual processes by studying the effects of physical stimuli on a subject. These stimuli are constructed by an investigator according to his research needs and have controlled and defined physical properties. Stimuli can be of visual, auditory, tactile and olfactory type.

Psychophysical research is aimed primarily at determining the “perceptual threshold” value below which sensory stimuli are not perceived. Scholars have to systematically vary the magnitude of the stimuli on the basis of different methodologies, in order to define “psychometric” functions, which describe the link between the magnitude in question and the extent of the perception that human beings have of it. Therefore, they proceed, in the context of an “experiment”, collecting “experimental data”, which express, through their numerical value, the perceptions that subjects have according to the variation of the magnitude of the stimuli. An experiment places subjects in a “small virtual reality”: Subjects’ tasks will be to indicate (often simply responding to a question with only two forced answers) their own level of perception of the magnitude in its variation.

With the advent of computers, computational capabilities have been revolutionized: In just a few years, it has become possible to obtain performances that greatly reduce the time required to simulate, analyse and solve “systems”; the number of variables that can be used in the experiments has been significantly increased and the quality of the response of the simulated systems has radically improved. The electronic calculation methods, gradually developed due to technology, have become essential instruments for the realization of “virtual realities”, which are able to simulate systems in almost all their aspects.

In the research field of psychophysics, experiments can actually be considered “small virtual realities”; subjects interact with these and respond on the basis of their own perceptions and cognitions. Using a programming language, combined with graphics and sound libraries, scholars can create virtual environments on the computer with highly realistic graphic and sound details. “Optimal” software tools for the realization of experiments of

visual and acoustic perception with the use of an electronic calculator, and then for the creation of small virtual realities, are “MATLAB” and the “Psychtoolbox” libraries (here the term “optimal” refers to a balance between the high calculation performances obtained and the low production times of the final result: This is possible thanks to “MATLAB”, which makes available almost all the mathematical tools through a very intuitive and simplified language; therefore, one can initialize and process large amounts of data with a minimum design effort. See, e.g., Brainard, 1997, Pelli, 1997, and Shreiner et al., 2012).

Psychophysical experiments require the use of mathematical tools (such as analytic geometry, numerical analysis, trigonometry, Boolean algebra, complex analysis, statistics) primarily for defining and processing the data which are representative of the stimuli and reworking the output data (i.e., the magnitudes related to subjects' responses).

3. Conclusion

Following the way of “mathematization” indicated by Fechner and developed afterwards, psychophysics has elaborated over time increasingly rigorous methods for studying mental events, namely for evaluating and modelling them. These methods have been incorporated into many different disciplines (e.g., sensory systems, cognition, memory, psycholinguistics) and - often being modified to meet the specific needs of each discipline - have contributed, in a significant and successful way, to the state of knowledge in them.

Fechner's project of combining mathematics and psychology to achieve a mathematical treatment of the mind and constituting a mathematical science of humans has therefore borne fruit. We can hazard that psychophysics, as a discipline, has gone beyond the most optimistic expectations of Fechner, who was, after all, a son of the physiological and technical knowledge of his time.

As the present work has shown, in the development of psychophysics, mathematics has always played, from its origins until today, a central role in order to unite the physical world and the mental world - as the name of psychophysics itself suggests.

Those who do psychophysical research can realize it every day. And Fechner deserves to be remembered for his mathematical contribution, just as the psychophysical scholars, members of ISP (“International Society for Psychophysics”), have organized every year, since 1985, a “Fechner Day” in order to discuss psychophysics and its developments or trends. It is no coincidence that, when possible, “Fechner Day” takes place on the anniversary of the intuition, mentioned at the beginning of the present work, that Fechner had on October 22, 1850 - namely, that the relationship between the stimulus and the sensation was capable of being expressed in mathematical terms (specifically, with a logarithmic formula) - and from which psychophysics would originate.

References

- Algom, D. (2003). Psychophysics. In L. Nadel (Ed.), *Encyclopedia of cognitive science*. Volume 3 (pp. 800-805). London: Natura Publishing Group.
- Anderson, N. H. (1981). *Foundations of information integration theory*. New York: Academic Press.
- Anderson, N. H. (1982). *Methods of information integration theory*. New York: Academic Press.
- Anderson, N. H. (1991). *Contributions to information integration theory*. 3 Volumes. Volume I: Cognition. Volume II: Social. Volume III: Developmental. Hillsdale: Lawrence Erlbaum Associates.
- Anderson, N. H. (1996). *A functional theory of cognition*. Mahwah: Lawrence Erlbaum Associates.
- Anderson, N. H. (2007). Unified science based on psychological laws. In S. C. Masin & G. Vidotto (Eds.), *Applications of functional measurement in psychology* (pp. 13-40). *Teorie & Modelli*, 12(1-2), Special issue.
- Antonelli, M., & Zudini, V. (2011). Solving a riddle: A ‘Rätsel’ from Dr. Mises’s *Rätselbüchlein*. In D. Algom, D. Zakay, E. Chajut, S. Shaki, Y. Mama, & V. Shakuf (Eds.), *Fechner Day 2011. Proceedings of the 27th Annual Meeting of the International Society for Psychophysics* (pp. 227-232). Raanana: The International Society for Psychophysics.
- Antonelli, M., & Zudini, V. (2012). From mathematics to psychophysics: David Hilbert and the “Fechner case”. In C. Leth-Steensen & J. R. Schoenherr (Eds.), *Fechner Day 2012. Proceedings of the 28th Annual Meeting of the International Society for Psychophysics* (pp. 174-179). Ottawa: The International Society for Psychophysics.
- Attneave, F. (1962). Perception and related areas. In S. Koch (Ed.), *Psychology: A study of a science*. Study II. Empirical substructure and relations with other sciences. Volume 4. Biological oriented fields: Their place in psychology and in biological science (pp. 619-659). New York: McGraw-Hill.
- Bernoulli, D. (1738). *Specimen theoriae novae de mensura sortis*. *Commentarii Academiae Scientiarum Imperialis Petropolitanae*, 5, 175-192.
- Brainard, D. H. (1997). The Psychophysics Toolbox. *Spatial Vision*, 10, 433-436.
- Brentano, F. (1874). *Psychologie vom empirischen Standpunkt*. Leipzig: Duncker & Humblot.
- Brožek, J., & Gundlach, H. (Eds.) (1988). *G. T. Fechner and psychology*. *Passauer Schriften zur Psychologiegeschichte*, Nr. 6. Passau: Passavia Universitätsverlag.
- Curtis, D. W., Attneave, F., & Harrington, T. L. (1968). A test of a two-stage model of magnitude estimation. *Perception & Psychophysics*, 3, 25-31.

- Fechner, G. T. (1851). *Zend-Avesta oder über die Dinge des Himmels und des Jenseits. Vom Standpunkt der Naturbetrachtung*. Leipzig: Voss. (Reprint Eschborn: Klotz, 1992.)
- Fechner, G. T. (1858). Das psychische Maß. *Zeitschrift für Philosophie und philosophische Kritik*, 32, 1-24.
- Fechner, G. T. (1860). *Elemente der Psychophysik*. Leipzig: Breitkopf & Härtel. (Reprint Amsterdam: Bonset, 1964.)
- Fenaroli, G., Furinghetti, F., & Somaglia, A. (2014). Rethinking mathematical concepts with the lens of the history of mathematics: An experiment with prospective secondary teachers. *Science & Education*, 23(1), 185-203.
- Furinghetti, F., & Radford, L. (2008). Contrasts and oblique connections between historical conceptual developments and classroom learning in mathematics. In L. D. English (Ed.), *Handbook of international research in mathematics education*. 2. Edition (pp. 626-655). New York: Routledge.
- Gundlach, H. (1992). *Entstehung und Gegenstand der Psychophysik*. Berlin: Springer.
- Heidelberger, M. (1993). *Die innere Seite der Natur: Gustav Theodor Fechners wissenschaftlich-philosophische Weltauffassung*. Frankfurt am Main: Klostermann. (English edition *Nature from within: Gustav Theodor Fechner and his psychophysical worldview*. Pittsburgh: University of Pittsburgh Press, 2004.)
- Masin, S. C. (2003). La legge psicofisica: un bilancio storico da Ipparco di Nicea a Norman H. Anderson. *Teorie & Modelli*, 8, 11-29.
- Masin, S. C. (2004). Storia e problemi della psicofisica. *Teorie & Modelli*, 9, 13-27.
- Masin, S. C., Zudini, V., & Antonelli, M. (2009). Early alternative derivations of Fechner's law. *Journal of the History of the Behavioral Sciences*, 45(1), 56-65.
- Murray, D. J. (1993). A perspective for viewing the history of psychophysics. *Behavioral and Brain Sciences*, 16(1), 115-186.
- Pelli, D. G. (1997). The VideoToolbox software for visual psychophysics: Transforming numbers into movies. *Spatial Vision*, 10, 437-442.
- Plateau, J. (1872). Sur la mesure des sensations physique, et sur la loi qui lie l'intensité de ces sensations à l'intensité de la cause excitante. *Bulletins de l'Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique*, 2me Série, 33, 376-388.
- Romano, D. F. (1976). Der Beitrag Herbarts zur Entwicklung der modernen Psychologie. Eine geschichtskritische Analyse. In F. W. Busch & H.-D. Raapke (Eds.), *Johann Friedrich Herbart. Leben und Werk in den Widersprüchen seiner Zeit. Neun Analysen* (pp. 89-103). Oldenburg: Holzberg.
- Shreiner, D., Sellers, G., Kessenich, J., & Licea-Kane, B. (2012). *OpenGL Programming Guide*. Boston: Addison-Wesley Professional.
- Stevens, S. S. (1957). On the psychophysical law. *Psychological Review*, 64(3), 153-181.
- Weber, E. H. (1834). *De pulsu, resorptione, auditu et tactu. Annotationes anatomicae et physiologicae*. Lipsiae: Koehler.
- Weber, E. H. (1846). Der Tastsinn und das Gemeingefühl. In R. Wagner (Ed.), *Handwörterbuch der Physiologie, mit Rücksicht auf physiologische Pathologie*. Volume 3 (pp. 481-588). Braunschweig: Vieweg.
- Zudini, V. (2009). I numeri della mente. Sulla storia della misura in psicologia. Trieste: EUT.
- Zudini, V. (2011). The Euclidean model of measurement in Fechner's psychophysics. *Journal of the History of the Behavioral Sciences*, 47(1), 70-87.
- Zudini, V., & Zuccheri, L. (2016). The contribution of Ernst Mach to embodied cognition and mathematics education. *Science & Education*, 25(5-6), 651-669.

Teaching Medical Terminology: Implications For English For Medical Purposes Courses Of Instruction

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Abstract

English for Medical Purposes (EMP) has intrigued the researchers to study the different aspects of it including medical terminology. Majority of studies have emphasized the needs for training the learners in medical terminology, as it derives from Latin or Greek origin and is based on word root and affixation principles. However, there are a few empirical studies which have addressed this issue from learner-centered approach, particularly at Turkish EFL context. The present study discusses the effect of activities for teaching medical terminology conducted with L1 Turkish speakers. The study employed mainly qualitative-based methodology comprising teacher observations, student reflections, and semi-structured interviews along with pre- and post-test results. The findings suggest that the learners' vocabulary knowledge was improved after the implemented techniques. The paper suggests further implications and recommendations for EMP courses of instruction.

Introduction

The role of English as a lingua franca is surely eminent not only in global communication, but also in education, academic fields and print publications. Consequently, its role in English teaching has been reflected in English for Specific Purposes (ESP), where it has been applied to business, technology, computer science and many other disciplines. Similarly, the role of English also in medicine is increasing fast, as most of the publications, medical textbooks, journals and conferences are growing firmly in English (Chia et.al, 1999; Hwang & Lin, 2010). Concomitantly, English for Medical Purposes (EMP) has been branched out under ESP. Apart from academic demands, English has become vital at workplace, particularly in health care settings as well. For example, there is growing number of healthcare professionals (e.g., nurses, pharmacists, doctors) working in English speaking countries, or people from different countries visiting a specific country for health care services.

In terms of Turkey, a large number of citizens from different countries visit here for medical or health tourism purposes. According to the report by the Ministry of Health of Turkey Republic (2012),

“health tourism refers to travelling from the place of residence to another place for the purpose of protection and development of health and treatment of diseases, and benefiting from health and tourism opportunities by staying at the place of destination for minimum 24 hours. A person who travels for the aforementioned purposes is called “health tourist”. p. 5.

This necessitates the role of English to be important in health industry which also requires training health professionals in English to communicate their ideas to health tourists. Apart from that, the number of international students studying in Turkey is steadily rising, so does the number of international medical faculty students. To meet all these needs, several universities in Turkey have established medical faculties in English to prepare students for academic and workplace conditions. Consequently, this has posed requirements and tasks on parts of both trainers (e.g., universities, teachers) and trainees (e.g., medical students, to be- doctors, nurses, pharmacists) to meet the learners' needs. Considering that ESP is learner - centered approach (Hutchinson & Waters, 1987), researchers have conducted needs analysis to explore the learners' wants and demands in order to furnish them with most suitable methodology.

Literature Review

Needs Analysis

ESP can be defined as "an approach to language teaching in which all decisions as to contents methods are based on the learners' reason for learning" (Hutchinson & Waters, 1987, p. 19). These reasons can be *needs, wishes, wants and lacks* which all group under an umbrella term, *needs*. To meet the learners' needs, researchers in various countries have designed needs analysis, prepared or suggested syllabus and materials addressing these needs (Antic 2009; Karimkhanlouei, 2012; Popa, 2013; Faraj, 2015; Kayaoglu & Akbas, 2016; Celik, 2017; Celik & Topkaya, 2018 and others). The majority of the studies have implemented questionnaire and checked learners' perceptions towards their needs for EMP macro skills (reading, writing, listening and speaking).

When macro skills categorized under sub-skills, studies have paid more attention to EMP-related specific grammar points including present simple, past simple and present perfect tenses, passive voice and modal verbs, as they

have been found frequently used in EMP textbooks and instruction materials (Pavel, 2014; Faraj, 2015). Some of the studies have focused on activities attending to linguistic issues or skills such as grammar and lexicon for EMP (Antic, 2010; Pavel, 2014); moves in medical research papers (Antic, 2007), reading EMP related texts (Alagozlu, 1994; Tasci, 2007; Yeniceri, 2008); medical discourse (Hoekje, 2007), pronunciation (Labov & Hanau, 2005) vocabulary and others.

Vocabulary for EMP

Vocabulary knowledge plays a great role in EMP, because it is based on a specific terminology with Greek or Latin origin. Hence, having sufficient medical terminology knowledge is essential for the one who wants to be in medicine discipline. Since these words are built on affix rules, it is of significance to know not only the word roots but also the affixes. In this regard, studies have considered word formation rules and suggested training the learners in specific medical terminology (Antic, 2009; Pavel, 2014; Piroozan, Boushehri, Fazeli, 2016). To the researcher's knowledge, however, there are a few empirical studies addressing this question. To name a few, those studies address the issues concerning the perception of everyday language and medical terminology among international medical graduates in Australia (Dahm, 2011); discovering meaning of medical terms through word part analysis strategy in Iranian context (Taie, 2015), and checking the effectiveness of course instruction in terms of lay-medical vocabulary and formulaic language in New Zealand context (Wette & Hawken, 2016). Taie (2015) specifically focused on medical terminology and designed a student-centered approach in her study; however, although it showed satisfactory results, it was only limited to 'word parts analysis' (WPAS) technique, where words were split into roots and affixes and students were trained with this technique.

All in all, there is insufficient number of studies investigating the effectiveness of EMP courses of instruction (Ferguson, 2012), and they lack in directly offering student-centered approach, particularly of Turkish L1 speakers as well. Hence, motivated both by the literature and needs of the medical faculty and students at a private university in Turkey, the purpose of this study is to address the needs of L1 Turkish speakers in EMP focused lexical knowledge and train them particularly in medical terminology. The study was guided by a research question that specifically addressed the issue:

What evidence of the effectiveness of an EMP course can be seen from implemented methodology for teaching and learning medical terminology?

Methodology

Participants

The participants of this study were totally 30 students studying at English language preparatory course at a private university in Turkey. They were studying in this one-year course before enrolling at a medical faculty. The language proficiency level of the students was B1+ and B2 classified by a CEFR scale according to the proficiency test administered by the university. As part of a national curriculum, all of them had taken Biology course at a high school, which was also tested by national university entrance exam. As part of this course, students had studied human anatomy as well. In the first semester, the students took courses in grammar, reading and writing and listening and speaking for academic purposes, and content-based medical English. In the second semester, the same courses were followed except for content based English, and Medical Terminology course was added instead. This course was required mandatory, as it was deemed necessary by the medical faculty considering the needs of pre-medical students.

Instrumentation

For the purpose of this study, tests were used to check the learners' prior knowledge on unfamiliar terms related with three body systems, including endocrine system, nervous system, and the eye and ear. These particular systems were chosen randomly. The students were not told that these tests would be used for research purposes. The course period was from January till June, and was offered in 6 sessions a week. After implementing methodological activities and tasks with all chapters for the purpose of this study, posttest on pretested vocabulary knowledge used to check the effect of implementation, in particular how many words students could learn or remember. The test consisted of 90 multiple-choice (MC) questions with four options (answer choices) adapted from Fremgen & Frucht (2016).

Example test:

A medical term that means *polydipsia* is called _____

- A) many thirst
- B) many bacteria
- C) many hair growth
- D) many infected cells

Answer: many (excessive) thirst

Which term means *surgical repair of a nerve*?

- A) neuroplasty
- B) neuropexy
- C) neurorrhaphy
- D) neuropathy

Answer: neuroplasty

Apart from test results, students' reflections, teacher observation notes and semi-structured interview notes with students were collected to check the learners' perceptions respectively.

Design And Procedure

This study used pre-and post-test design to assess the learners' ongoing progress in terminology and implemented certain tasks to fulfill these needs. In the first academic week, students were introduced to general view of medical terminology in five sessions, so that they can have a general idea about word formation in medical terminology. After introduction sessions, the following tasks and methodologies were implemented during the course. It should also be noted that the techniques designed for the purpose of this study were implemented during the entire period of the course; however, the students' vocabulary knowledge was pre- and post-tested on only three body systems which were chosen randomly.

WPAS technique

WPAS (word process analysis) technique (Nation, 2001) deals with teaching vocabulary, and research has demonstrated that it has a successful effect on learning medical terminology as well (Taie, 2015). In WPAS, words were broken down into roots and prefixes/suffixes. For example, *brady* means slow, and when this word is used in combination with different word roots, learners were expected to critically transfer this knowledge across and build the meaning. In other words, for instance, the word *bradycardia* (*brady-* slow; *cardia-heart*) means slow heartbeat, and by already knowing the root and prefix, learners are expected to be able to build the meaning of *bradypnea* (slow respiration rate). This technique is also one of the most common methods offered in medical course-books (Cohen, 2008; Fremgen & Frucht, 2016 and others). These implemented activities helped students to think critically and transfer the already learned prefix/suffix to another term with the same prefix/suffix. It also facilitated the memorization, as there were many terms to learn. Student reflections on WPAS say:

S.B.: *'We should pay attention more to word root, prefix and suffix because they help me to memorize the terms'.*

A.B.: *'Prefix and suffix exercises were helpful because we can see the same parts in different chapters and in different words'.*

Terminology lab

The course was conducted through help of interactive tasks, videos and other visuals. In interactive tasks, they were asked to combine a correct prefix/suffix with given random word roots which were projected on board (Figure 1). In order to understand better and strengthen the vocabulary knowledge, supplementary videos and photos of checking terminology were also projected (Figure 2). Students found these online aids/activities very useful and claimed that they helped them to better learn the terms and recall them later. Moreover, students were also observed that they found traditional way of learning, i.e., only practicing by book, to be boring. On the other hand, technology-aided learning was found to be motivating in practicing the previous learned terms and supplementary to book exercises as well.

S.S.: *'I found it helpful to check my notes in book against the projected materials. Using only book would be boring; therefore, supplementing it with overhead projector, videos and other aids make the lesson enjoyable'.*

D.S.: *'More visuals and repetition through pictures helped me to learn and recall the terms, rather than focusing only on memorization'.*

S.Y.: *'I do not have anything to do with traditional way of teaching, but it won't be useful in terms of learning medical terminology'.*

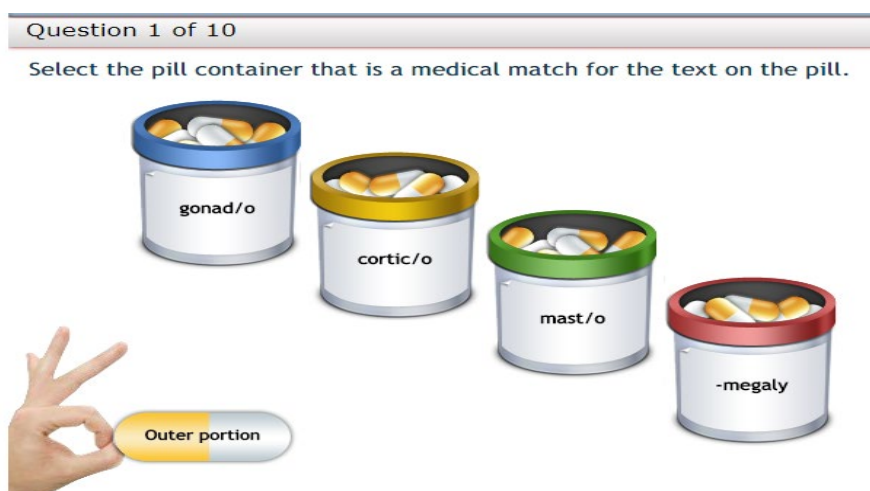


Figure 1. Root/Affix Exercises on Language Lab

Though great majority of the students found technology-aided learning to be helpful for medical terminology, only two of them stated that there is no difference for them. Nevertheless, these students also stressed the essence of visual aids, to be effective.

E.E.: 'Traditional way is OK for me, but more pictures help me to understand the definitions better'.

S.S.: 'Though pictures are helpful for visual-learners, these activities and tasks were helpful for revision and made clear of what we knew or did not know'.

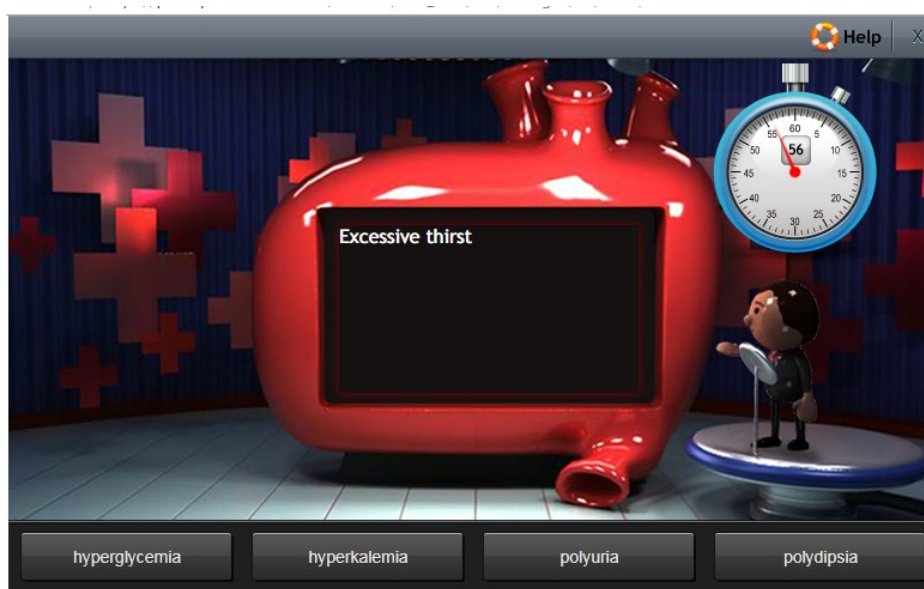


Figure 2. Terminology Exercise on Language Lab

Kahoot quiz-games

One of the interactive activities implemented in class was through online game called Kahoot (www.kahoot.com). It is a game-based learning platform and has been successfully implemented in schools and educational institutions as educational technology. Kahoot offers a lot of quizzes on medical terminology definitions. These quiz-games were used as revision during the classes. Also, it was a project requirement for students to prepare their own Kahoot quizzes (Figure 3). Hence, one group of students was randomly assigned a particular chapter and prepared online quiz on that medical terminology list (30 questions) supplemented with pictures. After checked by teacher, these quizzes were answered by a whole class. It was expected that this game would facilitate learning medical

terminologies. Students claimed that they motivated and participating in this quiz-game while preparing, sharing and competing with each other when answering it. Moreover, this interaction and preparation helped them to recall the definitions of terms in post-tests.

M.D.: *'These games helped to better concentrate on and recall the definitions'.*

M.B.: *'These quizzes not just make us only memorize, but understand and internalize'.*

A.T.: *'There are so many terms, but these projects facilitated learning them, and the test became manageable'.*

D.Z.: *'I learnt a lot while preparing my own quiz and answering my friends' questions too which helped me be successful in test'.*

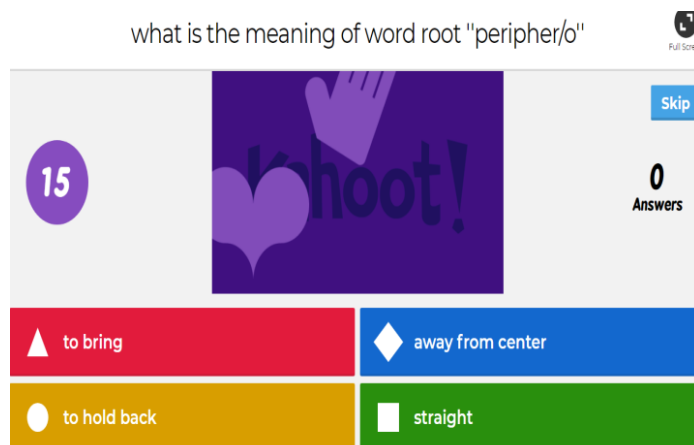


Figure 2. An Example of Kahoot Quiz-Game Prepared by Students

'Research' project

As part of the project, the other group was randomly assigned chapters and asked to list affixes/roots and definition of terms (e.g., certain pathology or condition) supplemented with pictures (Figure 4). After checked by the instructor, these projects were also shared in the class for learning and revision purposes.

E.S.: *'This project was helpful because I did not only learn the words like a robot'.*

S.B.: *'When preparing and finding so many interesting facts made me better memorize the terms. It was interesting to find different diseases related to my chapter'.*

S.O.: *'I was so excited to see our medical terminologies in other sources. I was happy that I recognized these words in tests'.*

Y.Y.: *'It saves time to learn new information from our friends' projects'.*




Term	WPAS	Definition	
Gingivitis	Gingiv/o: gums -itis: inflammation	-a common and mild form of gum disease that causes irritation, redness and swelling of gingiva.	<div>Healthy Gums</div>  <div>Gingivitis</div> 
Nephromegaly	nephr/o: kidney -megaly: enlargement	-enlargement of kidney.	

Figure 3. Student's Project on Medical Terminology

Research articles

In the other implemented activity, random research papers published by medical doctors in English were chosen. It must be noted that instructor chose these articles with moderate language difficulty, as students at this level found it hard to read articles with difficult language. In these activities, students read introduction and summary parts of articles, found terminologies and checked the meanings. They checked their knowledge of already learned words which was also of a revision and self-assessment character, which was claimed by students to be real and natural.

N.C.: *'It is important to check terms in papers because it is more real. It is not just a list of words to memorize'.*

E.B.: *'It prepares us to faculty classes from another perspective too. Because we will see such papers at faculty lessons'.*

E.S.: *'When I read these articles I better understand and try not to forget the words'.*

Results And Discussion

For the purpose of this study, paired-sample t-test was conducted to compare the difference between pre- and post-tests results by using SPSS (Table 1 and Table 2). There was a significant difference in the scores for pre-test 1 (M=8.18, SD=3.9) and post-test 1 (M=24.5, SD=4), $t(27) = -15.7$, $p < 0.05$; pre-test 2 (M=7.2, SD=3.7) and post-test 2 (M=24.3, SD=4.9), $t(28) = -16.4$, $p < 0.05$; and pre-test 3 (M=9.5, SD=5.5) and post-test 3 (M=24.8, SD=4.8), $t(26) = -12$, $p < 0.05$ respectively.

Table 1. Descriptive statistics for pre- and post-tests 1, 2, 3.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test 1	8.18	28	3.97	.75
	Post-test 1	24.57	28	4.05	.76
Pair 2	Pre-test 2	7.24	29	3.70	.68
	Post-test 2	24.38	29	4.96	.92
Pair 3	Pre-test 3	9.56	27	5.52	1.06
	Post-test 3	24.85	27	4.87	.93

Table 2. Paired samples t-test for pre- and post-tests 1, 2 and 3.

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
		Lower	Upper	Lower	Upper	Lower			
Pair 1	Pre-test1	-16.39	5.52	1.04	-18.53	-14.25	-15.71	27	.000
	Post-test1								
Pair 2	Pre-test2	-17.13	5.61	1.04	-19.27	-15.00	-16.43	28	.000
	Post-test2								
Pair 3	Pre-test3	-15.29	6.58	1.26	-17.90	-12.69	-12.06	26	.000
	Post-test3								

Hence, it can be claimed that both test results and qualitative data gathered during this study show that the implemented methodology was successful and vocabulary knowledge has developed. Also, as students claimed and as the teacher observed, the activities did not focus on rote memorization, but rather strengthening the memorization of terms by transferring their knowledge to real-life like tasks. Moreover, the methodology did not feature *'robot-way of learning'*, as stated by one of the students, rather it focused on trying to find solution on how to enable the students to internalize the learned terms. It should also be noted that, as observed and reflected by all students, their prior knowledge on Biology was of great importance to remember some subjects and terms. This appeared to facilitate the process of associating new knowledge with prior knowledge which requires critical skills on students' parts. Nevertheless, the study bears some drawbacks as well.

Limitations

The study cannot be claimed without its limitations. Given that the methodology implemented for this research focused on enabling the students to internalize the learning process of medical terms, it would be ideal to check to what extent students can recall this vocabulary after some time, i.e., at the faculty. Further follow-up analysis can be carried out with a content teacher as part of adjunct teaching. Moreover, students can be checked to what extent they apply or produce the learned terminology in communication skills in medical context, as this scope bears one of the essential issues for EMP (Wette & Hawken, 2016; Dahm, 2011).

Conclusion And Implications

This study attempted to learn the effectiveness of implemented methodology for teaching and learning medical terminology. Most of the studies have dealt with addressing needs of learners in foreign countries and in Turkey. However, there is a dearth of research on offering pedagogical approach to EMP, particularly to medical terminology knowledge of Turkish L1 speakers. This study can be considered unique as it tried to approach the problem further based on a student-centered approach and suggested pedagogical implementation.

The collected data through pre- and post-tests, students' during- and post-reflection notes, semi-structured interview notes and teacher observations showed that students appeared to be equipped with skills which can also be useful at the faculty. By preparing the projects and applying the learned knowledge into practice, they can be considered to be trained independently which can be called autonomous learning, where teacher played the role of knowledge-transformer, not transmitter. Also, it helped them to think critically and transfer this knowledge into practice which is essential for ESP courses as well (Bahous, 2001). Hence, by applying the learned words to real-life context through projects and interactive techniques, it was found that students can better learn and recall medical words. Besides, it can motivate students, as learning the terminology can be boring, sometimes. In addition to this, this study's methodological approach with transfer skills can also be applied in medical terminology where WPAS technique is impossible to apply for such terms, e.g., *duodenum*, as it was claimed by Taie (2015).

It can also be suggested that similar methodology can be implemented with EFL learners before the mainstream classes. In this context, this class was instructed by the faculty requirement in order to facilitate and familiarize the students with medical terminology before mainstream classes. Similar syllabus can also be applied in other EFL contexts to better prepare the learners with self-confidence and prior knowledge of medical terminology before enrolling at faculty classes. Students and universities can also benefit from such approach, as the number of international students studying at medical faculties is increasing each year. Additionally, gamification-based practices like Kahoot or other projects appeared to enhance the learners' attitudes and motivation towards lessons. Both students' reflections and teacher observation can support it, which are in line with other studies (Yildirim, 2017 and others).

Finally, another important point in EMP context is teaching learners with different or lower language proficiency levels which can make the situation difficult (Eggly, Musial & Smulowitz, 1999; Rivera-Goba & Campinha-Bacote, 2008). Foreseeing this problem, this course was offered in the second semester when learners' language proficiency level was improved up to upper intermediate and a few to advance. Moreover, the ongoing academic and general English courses and pre-content-based English course were facilitating factors in this respect. Therefore, teachers planning to realize such teaching approach should take the learners' language proficiency levels into consideration beforehand.

References

- Alagozlu, N. (1994). *English Language Needs Assessment of the Students of the Medical Faculty of Cumhuriyet University*. Unpublished Master Thesis, Bilkent University.
- Antic, Z. (2007). Forward in Teaching English for Medical Purposes. *Medicine and Biology*, 14(3), p. 141-147.
- Antic, Z. (2009). Towards uniformity in English for medical purpose; evaluation and design. *Language of Medicine*, 137(7-8), p. 454-457.
- Antic, Z. (2010). Analysis of students's errors in English for medical purposes. *Scientific Journal of the Faculty of Medicine in Nis*, 27(3), p. 159-163.
- Bahous, J. (2001). Teach ESP through critical thinking and problem-solving skills. Paper presented at the Meeting of the International Association of Teachers of English as a Foreign Language, Bielefeldm, Germany. Retrieved from <https://eric.ed.gov/?id=ED458801>
- Celik, H., & Topkaya, E.Z. (2018). Professional and personal English language needs analysis of faculty members and postgraduate assistants at faculty of medicine. *Journal of Theory and Practice in Education*, 14(1), 24-35.
- Celik, H. (2017). Perceived language needs of undergraduate medical students enrolled in a consecutively

- running ESP course. *The Journal of Teaching English for Specific and Academic Purposes*, 5(2), p. 209-218.
- Chia, H., Ruth, J., Hui-Lung C., & Floyd, O. (1999). English for college students in Taiwan: A study of perceptions of English needs in a medical context. *English for Specific Purposes*, 18 (2), p.107-119.
- Dahm, M.R. (2011). Exploring perception and use of everyday language and medical terminology among international medical graduates in a medical ESP course in Australia. *English for Specific Purposes*, 30(2011), p. 186-197.
- Eggly, S. Musial, J. & Smulowitz, J. (1999). Research and discussion note. The relationship between English language proficiency and success as a medical resident. *English for Specific Purposes*, 18(2), p. 201-208.
- Faraj, B.M.A. (2015). English for medical education in EFL context. *The Journal of Teaching English for Specific and Academic Purposes*, 3(1), p. 121-148.
- Ferguson, G. (2012). English for medical purposes. In B. Paltridge & S. Starfield (Eds.), *The Handbook of English for Specific Purposes* (p. 243-261). Malden MA: J. Wiley & Sons.
- Fremgen, B. F., & Frucht, S. S. (2016). *Medical Terminology. A living Language*. 6th edition. Pearson.
- Hoekje, B.J. (2007). Medical discourse and ESP course for international medical graduates (IMGs). *English for Specific Purposes*, 26(2007), p. 327-343.
- Hwang, Y., & Siouzi, L. (2010). A study of medical students' linguistic needs in Taiwan. *The Asian ESP Journal* 6(1), p. 35-58.
- Hutchinson, T., & Waters, A. (1987). *English for Specific Purposes. A learning centered approach*. Cambridge: CUP.
- Karimkhanlouei, G. (2012). What do medical students need to learn in their English classes: *Journal of Language Teaching and Research*, 3(3), p. 571-577.
- Kayaoglu, M.N., & Akbas, R.D. (2016). An investigation into medical students' English language needs. *Participatory Educational Research*, 2016(1), p. 63-71.
- Labov, J., & Hanau, C. (2005). Effective pedagogy in improving L2 English speaking doctor's pronunciation. Presentation at the Second Language Research Forum (SLRF), 2005, New York.
- Ministry of Health (2012). *Definitions and Descriptions Regarding Health Tourism*, Turkey. Retrieved from: <http://dosyasb.saglik.gov.tr/Eklenti/462,saglikturizmiingwebpdf.pdf>
- Nation, P. (2001). *Learning vocabulary in another language*. Cambridge: CUP.
- Pavel, E. (2014). Teaching English for medical purposes. *Bulletin of the Transylvania University of Braşov*, 7(56), 2.
- Piroozan, A., Boushehri, E., & Fazeli, R. (2016). A review of English for medical purposes for Iranian EFL learners. *Journal of Advances in English*, 4(2), p. 24-29.
- Popa, D. E. (2013). Medical discourse and ESP courses for Romanian nursing undergraduates. *Procedia – Social and Behavioral Sciences*, 83(2013), p. 17-24.
- Rivera-Goba, M. V., & Campinha-Bacote, J. (2008). Making a connection: The use of storytelling as a strategy to enhance faculty's success with Latina nursing students. *Hispanic Health Care International*, 6(4), p. 205-225.
- Taie, M. (2015). Critical thinking and discovering the meaning of unfamiliar terms through the word parts analysis strategy: A study of Iranian medical students. *English for Specific Purposes*, 40(2015), p. 1-10.
- Tasci, C. (2007). *An analysis of Medical Students' English Language Needs*. Unpublished Master Thesis, Bilkent University.
- Wette, R., & Hawken, S.J. (2015). Measuring gains in an EMP course and the perspective of language and medical educators as assessors. *English for Specific Purposes*, 42(2016), p. 38-49.
- Yeniceri, O. (2008). *Needs Assessment of the prep-class students in the Faculty of Medicine at Ondokuz Mayıs University*. Unpublished Master Thesis. Ondokuz Mayıs University.
- Yildirim, I. (2017). The effects of gamification-based teaching practices on student achievement and students' attitudes toward lessons. *Internet and Higher Education*, 33(2017), p. 86-92.
- Zrnkova, P. (2015). The issue of need analysis and assessment of quality in teaching English for medical purposes. *Procedia – Social and Behavioral Sciences*, 174(2015), p. 2995-3004.

Teaching Probability With Games

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Abstract

By this study, it is aimed to examine the learning environment created for game and simulation based probability teaching. The sample of the study in which the special case study is adopted, is created by 40 teacher candidates who are volunteers from a total of 60 students in a class studying at a state university. The data were collected by presenting the six open ended problems with play, work sheet and simulation activity. The questions asked about the games include making predictions as to whether the game is fair or not, playing games for a few times (with physical objects such money, dice, card drawing etc.) and more times (with simulations) and observing the results, calculating the winning probabilities of players experimentally and theoretically and comparing these. The process of finding out the probability information underlying the games by the prospective teachers was analyzed qualitatively by means of worksheets, simulations and in-class observation, and the ways of thinking, intuitions, estimations, strategies, and opinions about the learning situation of the participants were tried to be determined. The results obtained put forward that the learning situation that was set up simultaneously contributed to the knowledge of probability and probability teaching of the prospective teachers; and that the candidates' opinions about the learning situation are positive.

Teaching Process Management In Healthcare: Impacting Capacity And Quality Of Care

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Abstract

Medical practitioners admittedly receive little in the way of Operations Management or Process-driven training as part of their education. Here we discuss the impact of those gaps in the form of delayed assessment and treatment, queues and waiting lines, and the opportunities presented in a greater operations focus. Several cases are presented, including the use of medical scribes, specific clinic structures centered on particular patient categories, and the application of 'patient-centric' or customer approaches to healthcare. While typically the quality of the outcome (successful treatment) is viewed as the goal of a healthcare transaction, an operations and process focus not only offers the potential to improve that outcome, but to increase the capacity of the healthcare system and lower overall costs.

Keywords: *Healthcare, Operations Management, Efficiency, Capacity*

Introduction

Wait times are increasing within the healthcare system in Canada, resulting in delayed treatment and potentially adverse outcomes for patients (Barua, Esmail & Jackson, 2014). Since 1990, however, more doctors are being trained and graduated into the system (Canadian Institute for Health Information, 2016), indicating there are larger capacity utilization issues leading to the aforementioned delays and bottlenecks. At the same time, Canada ranks poorly when compared to other OECD countries with respect to the cost and quality of care provided by its healthcare system (Advisory Panel on Healthcare Innovation, 2015)

This paper, presented in a narrative and allegorical format, outlines a number of examples of both current care and opportunities for improvement within the system potentially available through an adjustment to educational and leadership perspectives within the healthcare field. The intended audiences for this research are practitioners and administrators within healthcare and leaders of education in healthcare institutions.

Background

In 2008, Gary experienced severe abdominal pain while on a fishing trip with his grandsons, pain that was bad enough he cut the trip short and went to the hospital. After two days and a series of tests, he was diagnosed with an aortic aneurysm. The cardiologist informed him the aneurysm was not large enough to repair, but they would keep an eye on it, and if it grew to 5mm in size, they would deal with it then. Gary was 68-years-old at the time (Cross & Rowe, 2017).

Six years later, following a series of semi-annual check-ups, the surgeon informed Gary that the aneurysm had reached 5mm in size, basically the point when it was considered risky, so they would schedule him in for surgery as soon as possible. No travelling, no lifting, and take it easy, he was told. Three months later, Gary had not heard anything, so he checked in. The cardiologist's office informed him they had him on the list and he should receive a call soon. After six months, and nine months, same story. Finally, a year after confirming they had to deal with the problem, Gary was brought in for surgery, and an endo-vascular 'Y'-shaped stent was inserted through the top of his legs into his aorta. Capacity issues while he was in the hospital prevented Gary from getting a bed in the surgical recovery area, so he was sent home the next day. Thankfully, Gary recovered fully and completely, and six months later was moving well with no after-effects of either the aneurysm or his surgery.

Let us look at this from a higher level. Perhaps the first five years of Gary's ordeal were not what the medical community would consider urgent. Once the diagnosis had reached 'dangerous', however, Gary's stress level obviously increased, and he worried, 'could this rupture today? Tomorrow? Should we drive to Toronto to see the grandkids? Can we go on that family vacation? Can I shovel the driveway?' Presumably, the aneurism was increasing in size as he continued to wait for surgery. The stress of the situation and indeed, waiting a full year for surgery, may have caused other issues, and reduced Gary's activity level, possibly leading to other long-term health issues or complications. This is a lot of 'could haves' and 'maybes', but studies have connected delays in service to increased impact on patient health (Barua, Esmail & Jackson, 2014).

Many defend the healthcare system in Canada, praising its universal access and quality of care as being world-class and admired by our nation's peers. For all it's accolades, and perhaps unfair comparisons to the U.S. healthcare system, Canadian healthcare really does not compare well when ranked against other OECD nations. In one study, Canada ranks 9th of 11 OECD countries in both access to care and quality of care, while spending \$4,522 per capita, compared to the United Kingdom, for example, which ranks 1st of 11 and spends \$3,405 per capita (Advisory Panel on Healthcare Innovation, 2015). We are spending more for slower healthcare in Canada.

It is believed that Canadian medical schools are world class, and graduate superb practitioners at all levels. The authors' own support and treatment from doctors and nurses within the system, though thankfully infrequent, has been wonderful, and any doctor met over the years personally or professionally has been excellent. The issue here isn't the people; it is the process. There is a capacity problem, not unlike what many plants and businesses face, so perhaps we should be turning to some shop floor and business style solutions.

This is not an argument for the generation of more doctors into the system, the equivalent of adding more machines in a production plant, if you will forgive the crude comparison. In fact, over the past 9 years this approach to improve operations has been pursued, resulting in more physicians per person than ever— 228 doctors per 100,000 population (Canadian Institute for Health Information, 2016). While the number of practitioners may remain as part of the capacity issue, the increasing supply points to an alternative constraint. This is a systemic issue - the immediate opportunity within healthcare is in the area of efficiency, process and shop floor style operational excellence.

Research Methodology

Direct interviews and observations (researcher following physicians' rounds) were conducted in healthcare environments with physicians, executives, administrators and patients in different hospital departments. Information and examples were collected across multiple institutions and analyzed for similarities around the premise of operations management exposure within medical education. Questions regarding prior exposure to process and operations management training were not asked until after the initial interviews and observations were completed.

Supporting data was collected through a literature review of publicly available population-wide studies and institution-specific examples. These examples are presented and discussed herein.

Conclusions – The Impact Of An Operations Focus

Here are two premises: First, faster is cheaper. A patient that is processed and treated sooner will consume fewer resources in the healthcare system, where a quicker diagnosis yields earlier and presumably shorter treatment times, a lower burden on system capacity, and reduced public or insurance-supported healthcare spending. For the patients, this means a more complete recovery in many cases, less time off work and therefore less impact on families and employers. None of this is new or surprising, but seldom achieved. Second: Slow is expensive and dead. That is, the reverse of the first point must also be true. Delayed admittance, examination and treatment will consume more resources and capacity, increase the time it takes for recovery to the point of potential long-term or permanent consequences, and have a broader impact on the patient and their family. A 2014 Fraser Institute study of the impact of increasing wait times on women's health found that across 12 major medical specialties, estimated wait times have risen from 9 weeks in 1993 to 18 weeks in 2013. Worse, there is a direct connection between extended wait times and increased patient mortality (Barua, Esmail & Jackson, 2014).

If one applies an efficiency, or even a Lean approach to the problem, what would that mean? Quite simply, it would mean our practitioners and their supporting systems such as scanning and diagnostic equipment would spend less time on non-value-added activities, and more time in the room with patients. Doctors would spend less time with charts, forms and administrative activity, and more time as a practitioner. Machines that are a bottleneck in the system, such

as an x-ray, MRI or CT scan would spend less time sitting idle, where few run 6 or 7 days now (a related constraint here is the technicians and radiologists to operate the equipment).

An important question at this point is, whose job is it to manage operational efficiency in a hospital or clinic? Certainly Administrators are charged with improving costs and capacity utilization in their hospital. Some Masters in Hospital Administration programs include a component or course in Operations Management. Introducing a 'Lean Initiative' in a medical facility, however, would likely garner a mixed reaction at best. Past experience has led many to misunderstand what Lean is really about. Lean is not head count reduction. Lean has nothing to do with layoffs and *doing more with less*. Lean is about reallocating resources around the organization in ways that create more value for customers, and in this case, patients.

The deficiency in healthcare education is not complicated – that education is simply missing one key component. In defense of medical practitioners and our medical schools, doctors receive very little exposure or training in the areas of process operations and efficiency. Doctors queried on the subject indicate they may have had a class or two on the subject in third or fourth year, but that is it. Hospital Administration programs offer a bit more in this area, but collectively, hospital and clinic environments are *busy and hectic*, and deal with life-saving situations throughout the day. Justifiably, they are focused on the here and now, and not finding ways to improve the system's flow.

The purpose of this paper is to advocate for two things: a greater application of process and operations management tools in the interest of increasing capacity in the healthcare system, and longer term, the inclusion of these tools in medical and administrative training. These are simple, straightforward processes that can free up capacity, reduce lead times, and improve the output of healthcare, not only in Canada but any country. Some small component of operations management education and training will do several things within the field that will ultimately drive meaningful improvements in efficient healthcare operations¹. Practitioners and administrators will see their practices and clinics differently, ask questions and consider how to better manage those clinics. Even small increases in education and time spent will facilitate a curiosity and ideally an initiative to facilitate and drive improvement.

Many institutions, in fact, have already begun thinking and working this way. Following are three concrete and varied examples of the application of an operations focus within healthcare, all of which reduced lead-time and the consumption of resources within the system. That is, *patients were treated faster and costs were reduced*. Each example was approached from a different perspective, including the use of an outside consultant, exposure to a solution through a conference attended by a curious physician, and the ability to question why a clinic was managed the way it was.

An Outside Consultant

Virginia Mason Medical Center in Seattle took a hard look at its scheduling and waiting lines roughly 15 years ago. Healthcare is a business, and if queues are too long, patients will eventually go elsewhere, and that clinic gets paid to treat the patient. In 2002, leadership at VMMC worked with Toyota process gurus, both in Japan and back in Seattle, to eliminate their dozens of waiting rooms around the hospital through the creation of more accurate scheduling (e.g. is this a 10- or 20-minute procedure?), process assessment (do we have the tools and information necessary to complete this successfully?) and information technology (digital records and multiple sources of access to that information). Essentially, VMMC changed the way they approach healthcare by transitioning away from batch production methods and into a flow production method from both a patient and provider perspective, not unlike a factory production process. From a patient standpoint, they eliminated batching by removing waiting rooms, assigned patients an electronic tracker with their patient information at check in, and sent patients directly to treatment areas. From a provider perspective, management identified that the key to improving efficiency wasn't in getting doctors to provide direct patient care faster, it was managing their time when they are not with patients or their *indirect* care time better. They identified that if they could get doctors to complete paperwork and pressing administrative tasks as they encountered them, the system would benefit. Indirect patient care was improved by adding a layer in the process and employing a process specialist called a flow manager. The flow manager prioritizes work for doctors and provides direction as to what indirect care should be completed after leaving direct care and before resuming direct care with another patient. The additional process prevents batching of indirect care, improves the flow of operations, increases the time spent with patients, and reduces the costs to serve patients (Crounse & Pettinger, 2011). This transition from

¹ Healthcare Operations here is considered the overall management of clinical care in a healthcare environment, and not specifically those procedures carried out in a hospital operating room or theatre.

batch to flow modules through process redesign was enabled through an additional element – Information Technology. The IT element gave employees graphical visibility into the location and status of all providers, patients, and equipment. The flow manager could then make informed decisions to prioritize the most pertinent tasks while preserving the flow of the system. While waits decreased, the number of patients processed increased, and VMMC reduced costs by \$12 million over 6 years (Company files, 2017). Subsequent phases of effort continue to reduce or automate the indirect, or less value-added work that still exists within the system.

These improvements are beyond the scope of most basic operations courses, and certainly outside the focus of medical practitioners and administrators. That being said, the process starts with the recognition by hospital leadership that the status quo will no longer serve customer needs, and then their willingness to seek help.

Conference Attendance

Dr. Peter Graves had been an Emergency Room physician for 20 years, and had long appreciated the ability that department offers to tend to acute injury and illness in a hospital space like no other. What he found perpetually frustrating was the length of time patients had to wait for treatment (often measured in hours), and the increasing burden of paperwork associated with patient charting. While attending a medical conference in the United States, he sat in on a presentation on medical scribes. Scribes were people trained to work with physicians while they assessed and treated patients in settings like the ER, and complete patient charts concurrently with the attending physician treating the patient. Graves realized the benefit of the process, and secured approval at Queensway Hospital in Ottawa where he worked to run a trial using medical scribes in their Emergency Room (Cross & Rowe, 2017). Following his trial, the process was then piloted with a number of doctors in the Emergency Room, and has subsequently been rolled out to several other departments in the hospital. In the traditional process, a doctor would take notes and records while with the patient, after wrapping up with a patient, or at the end of a long shift in the ER. Working with a scribe frees up more of their time to practice medicine and create value in the system; doctors dictate their notes and comments to the scribe while working with the patient, and then review, edit and sign the notes once the examination or treatment is finished. The impact and results of this process are numerous: doctors using a scribe report an increase of 30% to 40% in their capacity over a shift, where they may see 30 patients per shift with a scribe versus 21 without (Cross & Rowe, 2017). The quality of care through the process (both perceived and actual) is higher, as a result of the patient receiving the doctor's complete attention while in the room together. Accuracy and detail on the medical records is improved, as the process is done live and concurrently with treatment, rather than after the shift as in many situations. The big win for the hospital and its patient community? Waiting lines are down at Queensway, and revenues are up through increased earnings associated with higher patient flow.

How do we create the most value in our assets? Any plant manager will tell you she wants her machines up and running. An airline only makes money when its planes are in the air, a logistics provider when its trucks, trains or ships are en route, and an oil field service when their rigs are drilling. In this case, doctors create the most value while they are assessing and treating patients, and an MRI machine while it is scanning a patient. Idle time in a hospital is a waste of resources.

The Permission to Question

Mount Sinai Hospital in Toronto recently took a process-centric look at their geriatric care facility, when the director, Dr. Samir Sinha, asked the paradigm-breaking question, 'are we a hotel, or a hospital? We don't get breakfast in bed at home; why should we provide it in a hospital?' Patients in most wards are traditionally given meals in bed, yet we know that prolonged bed rest promotes dysfunction (Grant, 2016). In Sinai's new Acute Care for Elderly (ACE) strategy, patients are encouraged to move around far more often. Seniors are clustered in the ACE ward, where they are provided with non-slip socks, beds are kept at lower heights to reduce falls, and they eat in common areas to encourage socialization and movement. Phones are muted in this non-paging environment. More movement and interaction during the day means the patients are content and sleep better at night. All of this leads to a quicker recovery and discharge for patients, reducing cost of care per patient by 23% and saving the hospital over \$6 million in 2014 (Grant 2016). Early discharge also resulted in more capacity within the ACE ward as well as the indirect benefit of patients spending less time in the hospital with a lesser risk of contracting unrelated infections and diseases. 17 other hospitals and healthcare providers in Canada and Iceland are now applying Sinai's ACE model.

A primary goal of the healthcare institution, its practitioners and administration is to provide quality care for their patients. That is a given. Beyond that, however, workers at all levels need to appreciate their responsibility to question, and realize there are better ways to complete any type of work; we just haven't discovered that improvement yet. This

is the essence of the Toyota Way – *do the work this way, until we figure out a better way to do it. Part of your job is to think about how we can improve things.*

Summary

Canada's healthcare system has issues, but the people are not the problem. Practitioners commit countless hours and tireless energy throughout their training and careers in the interests of a healthier Canada. There are numerous challenges and areas of study and focus within healthcare today, and some are far more complicated than others. As the examples above illustrate, however, there are significant opportunities with small enhancements to healthcare education, potentially leading to significant improvements to capacity utilization and the patient experience with the healthcare system.

References

- Advisory Panel on Healthcare Innovation, (2015) *Unleashing Innovation: Excellent Healthcare for Canada*. Rep. Ottawa: Health Canada, Print.
- Barua, B., Esmail, N., Jackson, T. (2014) *The Effect of Wait Times on Mortality in Canada*, The Fraser Institute
- Cross, B., and Rowe, M. (2017) *The Pace of Canadian Health Care: Lessons from the Shop Floor*, Smith Insight, Select Paragraphs Reprinted with Permission
- Canadian Institute for Health Information (2016) *Physicians in Canada, 2015: Summary Report*. Ottawa, ON: CIHI
- Crouse, W. and Pettinger, K., (2011), *Health Tech Today: Virginia Mason and Versus RTL*. Perf. Health Tech Today. Microsoft, 4 Apr. 2011. Web. <<https://www.youtube.com/watch?v=MobNaBYOGjE>>.
- Grant, K., (2016), *Hospital sets example in caring for seniors*, Globe and Mail, December 23, 2016
- Grant, K.. (2016), *Toronto's Mount Sinai Hospital Sets Example for Caring for Elderly Patients*, The Globe and Mail Health Reporter, 22 Dec. 2016. Web
- Virginia Mason Medical Center, Company Information, (2017) Virginia Mason Production System, Fast Facts, https://www.viriniamason.org/workfiles/pdfdocs/press/vmps_fastfacts.pdf

Acknowledgements

The Authors gratefully acknowledges funding support for this research from Smith School of Business, and the support of Research Assistant Matthew Rowe, and Editor Alan Morantz

Teaching The Georgian Verbal Forms Derived From Nouns To Foreign Students

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Abstract

In the Georgian language the derivation of the verbal forms from nouns is based on the structures of active and passive voices.

1. [...] + R + THM
2. R + THM

The mentioned models are common to the forms of the both voices. In the first structure ς -prefix is used in the active voice, and \omicron - prefix in passive. These types of verbs are known as *verbe denominale* in the linguistic literature. In general, relatively few studies have been conducted as regards the constructions of such verbs. (D. B. Gerds, S.A. Marlett). In the Georgian language the nouns and adjectives are verbalized in most of the cases. The nouns can be borrowed from the lexical funds of the Georgian as well as other languages. The paper reviews the models of DVNs, thus illustrating the corresponding patterns borrowed from the Georgian and Turkish languages.

Technology Integration of Preservice Teachers as Both Teacher and Student

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Abstract

The purpose of the paper was to analyze preservice teachers' development in terms of ISTE Standards for both student and teacher in technology-integrated course named as 'Teaching Principles and Techniques' for third-year teacher candidates. Case study method was implemented, and a survey was arranged by using ISTE standards for both students and teachers. A sample of 95 respondents from the same school and enrolled the same course of the same instructor. The data of the survey were analyzed with SPSS. The results showed that the participants got higher scores as teachers standards than student standards.

Introduction

The way of how people learn and practice are impacted in technology driven world which changes the ways we work, communicate, and live. In response to current needs of the 21st century, learners and educators have confronted with technology in educational environment to learn, use, and produce. International Society for Technology in Education (ISTE) determined the standards for the stakeholders of education to transform teaching and learning (ISTE, 2016). Particularly, the transformation process proceeds with technology integration in teacher education programs. With this transformation, teacher candidates gained the opportunity to develop themselves as a teacher to integrate technology in their future classrooms in addition to empowerment as connected learners and digital citizens. This paper aimed to analyze preservice teachers' development in terms of ISTE Standards for both student and teacher in technology-integrated course named as 'Teaching Principles and Techniques' for third-year teacher candidates.

Context of the Study

The course, implemented in three sessions with the same instructor, was designed as technology- integrated course; in which Edmodo, a learning management system, was the course webpage, projects were needed to use technology to do, and bi-weekly reflections on their development were the assignments. All course requirements were planned to develop the teacher education program to meet ISTE Standards. A survey, as data collection tool, was prepared to measure their development by following both ISTE-S and ISTE-E. In total, 95 preservice teachers were participated in the study at the end of the semester to capture their pure development after the course over. There were 56 women (58,9%) and 39 men (41,4%) all of whom had the average age of 23. Details n demographics of the participants were represented in Table 1.

Table 1.
Demographics of the participants

	Min	Max	Mean	Sd
Age	20	36	23,03	3,164
GPA	1,80	3,70	2,80	0,41
Courses in the Semester	5	18	12,14	3,21
Total Education Courses	3	6	3,56	0,86
Pervious Education Courses	1	2	1,27	0,44

Data Analysis

To analyze data, paired sample t-test, which compares the mean of two matched groups of people or cases, or compares two different mean of a single group (Ross & Wilson, 2017) was employed in IBM SPSS 23. Teacher candidates' perspectives on their technological development as student was categorized as empowered learner, digital citizen, knowledge constructor, innovative designer, computational thinker, creative communicator, and global collaborator. As educators, teacher candidates represented their perspectives on technology in terms of learner, leader, citizen, collaborator, designer, facilitator, and analyst.

Results

Means and standard deviations of these sub-dimensions of ISTE Standards for learners and educators are reported in Table 2.

Table 2.
Mean and Standard Deviation of Sub-scales

	Mean	Sd
<i>Educators</i>		
Empowered Professional		
Learner	3,93	0,76
Leader	4,07	0,75
Citizen	4,07	0,78
Learning Catalyst		
Collaborator	4,02	0,78
Designer	4,06	0,82
Facilitator	3,86	0,76
Analyst	4,16	0,84
<i>Students</i>		
Empowered learner	4,10	0,70
Digital Citizen	4,03	0,79
Knowledge Constructor	4,06	0,84
Innovative Designer	3,89	0,81
Computational Thinker	3,81	0,86
Creative Communicator	3,94	0,87
Global Collaborator	4,01	0,94

The mean scores indicated that the participants highly scored themselves as analyst educators after the course when compared with other standards specified as ISTE-E. On the other hand, the participants indicated their empowered learner characteristic when compared to others in ISTE-S. In order to understand significance of the mean differences between ISTE-E and ISTE-S scores of participants, paired sample t-test was conducted. It revealed no-significant difference between total scores of the standards for learners and educators ($t = -0,94$, $df = 93$, $p < .34$). The non-significant difference indicated that technology integration into the course, which focuses on development of their pedagogical knowledge as teacher candidates, contributed them on both them as learner and their teacher knowledge. Although the aim of the course is to subsidize teacher pedagogy knowledge through technology, they had the opportunity to enhance technology integration knowledge in terms of ISTE standards for educators.

Conclusion

This paper has significance on to explain the teacher education programs on teacher candidates both as teacher and student. While educational institutions were looking for ration implications (Bucci, Cherup, Cunningham, & Petrosino, 2010), such implications' contribution on preservice teachers lead the way to develop teacher education programs. In the field teachers do not use technology effectively because of their lack of education, probably (Kay, 2007; Kim & Baylor, 2008). On the other hand, this study implies that teacher candidates have chance to develop themselves as both future teachers and current students at the teacher education system in Turkey.

References

- Bucci, T. T., Cherup, S., Cunningham, A., & Petrosino, A. J. (2003). ISTE standards in teacher education: A collection of practical examples. *The Teacher Educator*, 39(2), 95-114.
- ISTE (2016). ISTE STANDARDS Education technology standards to transform learning and teaching. Retrieved from: <https://www.iste.org/standards>
- Kay, R. (2007). A formative analysis of how preservice teachers learn to use technology. *Journal of Computer Assisted Learning*, 23(5), 366-383.
- Kim, C., & Baylor, A. L. (2008). A virtual change agent (VCA) to motivate pre-service teachers to integrate technology. *Journal of Educational Technology and Society*, 11(2), 309-321.
- Ross, A., & Willson, V. L. (2017). Paired Samples T-Test. In *Basic and Advanced Statistical Tests* (pp. 17-19). SensePublishers, Rotterdam.

“Televizyon Dizilerinde Sunulan Polis İmajının Üniversite Gençliği Üzerinde Oluşturduğu Polis Algısı: Dicle Üniversitesi İletişim Fakültesi Örneği”

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Özet

Algı, duyuyla alınılan, beyin tarafından işlenen, bellekte depolanan ve fiziksel veya zihinsel bir tepki biçimini üreten enformasyondur (Mutlu, 2012). Küreselleşen kültür ve yeni medya ile oluşturulan popüler kültürün, etkin yayım aracı olan televizyon, gösterilen programlar, yayınlanan diziler ile insanlarda farklı algı yaratabilecek bir pozisyonadadır. Göstererek ve duyurarak tek yönlü iletişim sağlayan televizyon, bu gücü ile yeni trendler oluşturabilir hem istenileni hem istediğini sunabilir ve insanları istediği yönde manipüle edebilir.

Gerek ülkemizde gerek dünyada iç güvenlik denilince ilk akla gelen kurum olan Emniyet Teşkilatı ya da polis ise suç ve ceza spektrumunda suçu önleyen, suçu çözen, olarak yer almaktadır. Özellikle ülkemizde polisin yüklendiği başka sorumluluklar da bulunmaktadır. Çok fazla branş ve uzmanlık alanına ayrılan polis teşkilatı trafikten teröre kadar birçok alanda hizmet vermekte ve bu süreçte sürekli vatandaşla temas etmektedir. Öte yandan her ilden gelen 300 bine yakın personele sahip emniyet teşkilatı milletin bağrından çıkmıştır ve milletin kendisidir.

Bu bağlamda ülkemizde her zaman iyisiyle kötüsüyle doğrusuyla yanlışıyla gündemde olan Polis Teşkilatının, insanların zihinlerinde nasıl anımlandırıldığı, Polis imajının ve algısının ne olduğu, Polis Teşkilatını çeşitli hikayeler üzerinden anlatan polisiye televizyon dizilerinin bu imaj ve algının oluşmasında ne denli etkili olduğu ve dizilerde yaratılan “Polis” kavramının ülkemizdeki üniversite gençliği üzerinde nasıl bir iz bıraktığına Dicle Üniversitesi İletişim Fakültesi öğrencileri baz alınarak bu çalışmada değinilmiştir.

Anahtar Kelimeler: Algı, polis, polis algısı, televizyon, dizi.

Giriş

Günümüz dünyasında 4. güç olarak kabul edilen medya, 19.yy’da başladığı serüveninde, 20.yy’da gelenekselleşmiş ve daha sonra, çok mesafe kat ederek, bugün, gelenekselin dışında, gelişen yeni medya ile insan hayatında vazgeçilmez bir hal almıştır. Ülkelerin kendilerine özgü kültürleri, gelişen medya aracılığı ile sınırları aşarak globalleşmiş ve ortak kültür ortaya çıkmaya başlamıştır. Bu süreçte medyada başat rol, önceden beri hem görsel hem de işitsel duylara hitap eden televizyonun olmuştur.

Görüntü ve sesin birlikteliğiyle televizyon; diğer kitle iletişim araçlarına oranla, mesajları kitlelere iletmede daha etkili ve evreni kişinin ayağına getiren bir araçtır. Denilebilir ki ondan önceki diğer kitle iletişim araçlarından hiçbirisi kişiyi olaylara bu denli tanık etmemiş; gerek ses, gerek görüntü olarak, çoğunlukla anında, olay ve kişilerle karşılaştırmamıştır. Bu bakımdan televizyonun, hangi amaca ağırlık verirse versin, kişiyi sürekli olarak kendine baktıran bir araç olarak kabul edilmesi, zorunludur (Aziz, 1975: 198).

Bir noktada televizyon haber, eğlence, spor, magazin, belgesel programları ve dizilerle kitlelere farklı alternatifleri sunmanın dışında; kültürel aktarım ve etkileşim aracıdır. Televizyon, çeşitli sosyal değerlere nüfuz ederek düşünce üzerinde en etkili olmakta; aynı zamanda sosyal davranış için tavsiye ya da yol gösterme biçiminde çeşitli olanakların kaynaklarına işaret etmektedir. Yani sosyal davranışlara referans oluşturmaktadır (Önür, 2001: 7).

İzleyicileri eğlendirmek, zamanlarını geçirmelerini sağlamak haricinde daha farklı görevleri de olan kitle iletişim araçları zaman içerisinde gösterdiği gelişmeyle çok güçlü bir hal almıştır. Öyle ki bu durum basın daha doğru deyişle medya ile bağlantısı olan medya da çalışan insanların da güçlenmesini beraberinde getirmiştir. Medya tarafından kat edilen yol ve sonucunda ulaşılan bu güç, medya takipçilerinin kısaca izleyicilerin tutum ve davranışlarını değiştirebilir, ya da yeni tutum ve davranış oluşturabilecek boyutlara ulaşmıştır.

Kitle iletişim araçlarının oluşturulan bu etki yalnızca bireysel bazda değil tüm toplum yönünü değiştirebilir. Kitle iletişim araçlarının ya da medyanın, toplumun dinamiklerini, dengesinin, yapısını değiştirebilme yeteneği toplumsal ilişkileri yeniden yaratma, yeniden yapılandırma, yeniden konumlandırma ve yorumlama gücünü kendine sağlamıştır.

Arslan (2004), medyanın bu şekillendirme ve değiştirme etkisinin bireyler ve genel anlamda toplum boyutuyla da sınırlı kalmayıp, toplumsal ve siyasi yapı içinde etkin bir konuma sahip olan siyasi liderleri ve meşru hükümetin politikalarını da kapsayacak boyutlara ulaşabildiğini belirtmektedir.

Kitle iletişim araçlarının toplumsal bazda sağladığı çok önemli hizmetlerden olan bireylerin ve toplumun sosyalleşmesini ve iletişim ihtiyaçlarını karşılama özelliği yadsınamaz bir gerçek olsa da bununla birlikte bardağın boş tarafını görmekte de fayda vardır. Toplumlar için büyük faydalar sağlayan kitle iletişim araçları, istenildiği takdirde çok güçlü bir propaganda aracı, bunun da ötesinde kitleleri yönlendirebilecek çok güçlü bir silah olarak

da kullanılabilir. Medyanın kontrolünü elinde bulunduran kişi, grup ya da güçler, iletileri kendi çıkarları doğrultusunda tahrif (deforme) edip değiştirebilirler. Böylece toplumun düşünce yapısını, ideolojisini, kanaatlerini şekillendirme gücünü tekellerinde alabilirler ve kitle iletişim araçlarını kültür asimilasyonu sömürü ve kültürel sömürü aracı olarak kullanabilirler.

Kitle iletişim araçlarını en fazla göz önünde olanı şüphesiz televizyondur ve televizyonun etkileriyle ilgili en çarpıcı örnek ise son dönemde gitgide artan televizyon dizileridir. Özellikle, günümüzde Türk televizyon izleyicilerinin bakış açısını değerlendirdiğimizde diğer toplumlara göre farklılık gösterdiği dizilerdeki karakterleri gerçek hayatla özdeşleştirerek benimsediği görülmektedir.

İnsanlık tarihine baktığımızda ise; ilk insandan bu yana güvenlik, insan için en temel ihtiyaçlardan biridir. İnsan yaratılışı gereği, özgürlük ve bağımsızlık istemekte, insanlığından gelen temel hak ve hürriyetlerini sorunsuz ve kendi içinde sınırsız yaşayabilmek için öncelikle güvende olmasının gerekliliğini bilmektedir. Günümüzde güvenlik denilince ilk akla gelen meslek grubu olan Polisler ve Polislik mesleğinin ülkemizde Emniyet Teşkilatı kurulduğundan bu yana oluşturduğu hem kurumsal hem de polis bazlı imajı, her dönem insanlarda farklı algılanmış, hem dönemin getirdiği ortam ve süreç hem de yine o dönemde medya yoluyla oluşturulan ya da sunulan imajlar çerçevesinde bir polis zihinlerde yaratılmıştır.

İnsanlar günlük hayatında sürekli olarak polisi görmekte, duymakta veya hissetmektedir. Özellikle ülkemizin yüzölçümü olarak olmasa da nüfus olarak yoğunluğu polis yetki alanındadır. Şehir ve ilçe merkezlerinin asayişinden sorumlu emniyet teşkilatı 24 saat hizmet vermektedir. Öyle ki, 14.07.1934 tarihinde resmi gazetede yayınlanarak yürürlüğe girmiş olan 2559 sayılı Polis Vazife ve Salahiyet Kanununda yer alan ilk iki maddedeki;

Madde 1 – Polis, asayiş amme, şahıs, tasarruf emniyetini ve mesken masuniyetini korur. Halkın ırz, can ve malını muhafaza ve ammenin istirahatini temin eder.

Yardım isteyenlerle yardıma muhtaç olan çocuk, alil ve acizlere muavenet eder. Kanun ve nizamnamelerinin kendisine verdiği vazifeleri yapar (PVSK, 1934).

Madde 2 – (Değişik: 16/7/1965 - 694/2 md.)

Polisin genel emniyetle ilgili görevleri iki kısımdır.

a) Kanunlara, tüzüklere, yönetmeliklere, Hükümet emirlerine ve kamu düzenine uygun olmayan hareketlerin işlenmesinden önce bu kanun hükümleri dairesinde önünü almak,

b) İşlenmiş olan bir suç hakkında Ceza Muhakemeleri Usulü Kanunu ile diğer kanunlarda yazılı görevleri yapmak (PVSK, 1934) ve yine 12.06.1937 tarihinde yürürlüğe giren 3201 sayılı Emniyet Teşkilatı Kanunu 1. Maddesindeki “Memleketin umumi emniyet ve asayiş işlerinden Dahiliye Vekili mesuldür. Dahiliye Vekili bu işleri, kendi kanunları dairesinde hareket eden Emniyet Umum Müdürlüğü ile Umum Jandarma Komutanlığı ve icabında diğer bütün zabıta teşkilatı vasıtası ile ifa ve lüzum halinde İcra Vekilleri Heyeti karar ile ordu kuvvetlerinden istifade eder.”(ETK, 1937) tanımı bu durumu gözler önüne sermektedir ve polis trafikten teröre kadar birçok konuyla doğrudan ilgilenmektedir.

Daha çok ideolojik görüş ve kar/zarar marjına göre oluşan polis algısı özellikle son dönemde terörle mücadele ve terörle mücadeleyi konu alan haber, reklam ve dizilerle algının yönünü pozitif çevirmiştir ki 2-14 Kasım 2016 tarihleri arasındaki Polis Özel Harekât alımına yapılan başvuru sayısı 285 bin (AA, 2016) olarak kayıtlara geçmiştir.

İşte, medyanın kültür yaratma gücü, kültürün popüler bir hal alması, televizyonun bu popüler kültürü oradan oraya aktaran ve imaj algısı oluşturabilen fenomenliği perspektifinde, ülkemizde yayınlanan polise dizilerin Türk Polis Teşkilatının imajını nasıl sunduğu ve Üniversite gençliği üzerinde nasıl bir Polis algısı yarattığı konusu ele alınmıştır.

Araştırmanın Amacı

Tarihsel ve sosyolojik olarak baktığımızda suç olgusu ve suç ile mücadele önemini korumaktadır. Toplumdaki bireylerin birbirleriyle uyum içinde varlıklarını sürdürebilmeleri için, herkesin tabi olacağı bir takım kuralların geçerli olması elzemdir. Kuralların toplumu birliktelik boyutunda uyumlu kılması toplumsal yapının devamı açısından önemlidir. Bu nedenle kurallar toplumsal alanın her aşamasında kendini göstermiştir. Bu kurallar ise gerek yazılı yani formel (Anayasa, kanun, yönetmelik gibi) gerekse sözlü yani informal (Örf, adet, gelenek, değerler gibi) geçmişten bugüne süreç içinde meydana gelen kanaatlerin kaynaklığında şekillenmiştir.

Günümüz literatüründe suçlar hem hazırlanış hem işleniş hem de sonuç bakımından çok çeşitlilik göstermektedir. Suçların bu denli çoğalmasına karşın her geçen gün suçlarla mücadele için toplumlar nazarında devletler yeni stratejiler belirlemiş ve yeni yaptırımlar ortaya koymuştur. Ancak suçun işlenmesi karşılığindeki maddi ya da manevi getiri de insanları yeni suç işleme tekniklerine ve yeni suç alanlarına yöneltmiştir.

İnsanın doğası gereği meraklı ve problem çözmeyi sever yapısı, suçun bu denli çok ve güncel olması karşısında, suça karşı olmakla birlikte suça, suçun işlenişine ve çözümüne de bu denli meraklı olmasına neden olmaktadır.

Gündelik hayatta maruz kalınmasa bile suçun sürekliliği herkes tarafından bilinmektedir ve suçla mücadele eden, suçu önleyen ya da suçun kim tarafından, neden, nasıl, nerede işlendiğini, suç delillerini, suçlular arasındaki ilişkiyi çözen bir kesim “Polis” halkın her zaman gözü önündedir. Ailesinde, yakınında ya da çevresinde polis olarak

görev yapan birisi olmayan insanlara için “polis” kavramının içi çevresinden duydukları, ideolojik düşünceleri, yazılı ve görsel basın tarafından doldurulmaktadır.

Hayatın her anında yer alan kitle iletişim araçları ve özellikle televizyon, insanların haber alması, eğlenmesi, öğrenmesi gibi çeşitli amaçlarla kurulmuştur. Bu amaçları ile birlikte insanlara hoşça vakit geçireceği ve görmek istediğini, duymak istediğini verecek programlar da yer almaktadır. Öyle ki, medya toplumdaki en etkin güç merkezlerinden biridir. Sosyal davranış şekillendirici, yol göstericidir ve yapıcıdır. Yani davranışları oluşturabilen bir olgudur. Kitle iletişim araçları bu haliyle, tutum ve davranışları, kanaatleri ve benliği etkileyebilen en etkin olgudur.

İşte bu süreçte televizyon bu yöndeki en güçlü iletişim aracıdır. Herhangi bir şehirde gerçekleşen olay anlık olarak çok uzaklardaki bir insana –genel yayın politikası çerçevesinde gösterilmek istenildiği şekilde- gösterilmektedir. Bunun dışında suç fenomeninin bu kadar ilgi uyandırması televizyon yapımcılarını da o tarafa yönlendirmiştir. Bugün ekranlara baktığımızda sabah kuşağında cinayet, kaçma ve kaçırma, tecavüz, intihar gibi olayların sunucular ve farklı dallarda uzmanlar ile olay içerisindeki şahıslar tarafından çözümlenmeye çalıştığı programlar ve akşam saatlerinde oynayan polisiye dizilerle doludur.

İnsan doğumuyla beraber algılamaya başlamaktadır ve algıladığı her figürü aynı zamanda kendine göre anlamlandırmaktadır. Anlamlandırma sürecinde çevresel faktörle ve uyaranlar çok etkilidir. Kimi zaman ihtiyaçlar kimi zaman rol modeller belirler algıyı. Zihinsel ve fiziksel gelişim sürdükçe algılar değişebilmekte yeni algılar ve algı odakları oluşmaktadır.

Bu süreçte yine alınan eğitim, girilen sosyal ortam ve çevre, okunan kitap dinlenen müzik gibi birçok etken algının oluşmasına ya da değişmesine neden olmaktadır. Çalışmamızda ki ana konu olan polis ve polislik ise insan fiili hayata dahil olmaya başladığı anda insanın hayatına doğrudan ya da dolaylı olarak girmektedir.

Kimisinin aile ferdi polistir, kimisi adli bir olayda polisle temas haline girmiştir, kimisi polise ihtiyaç duymuştur. Çünkü polis hayatın her alanında. Sabah trafiğinde de polis vardır, futbol maçında da polis vardır, sokaklarda, dağlarda da polis vardır. Kiminin gözünde kahraman, kiminin gözünde düşman, kiminin gözünde paralı asker kiminin gözünde egemen gücün çıkarlarını savunan memurdur polis ama bunun yanında her haneye girmiş milletin kendisidir polis.

Bu çalışmadaki amaç ise, polis ve polislik bu kadar hayatın içinde iken eğitimi tamamlayacak ve hayata atılacak üniversite öğrencilerinin çocuklarından gençliklerine kendi bilinçlerinden oluşturdukları polis figürünün siyasi düşünceleri ve yaşamışlıklarından sonra televizyonda izledikleri diziler ile nasıl bir hal aldığını ve oluşan algıyı ortaya çıkarmaktır.

Araştırmanın Önemi

İnsanoğlu yaradılışı ile birlikte çoğalmaya, çoğalmayla birlikte toplu yaşamaya, toplu yaşamayla birlikte ise toplumsallaşmaya başladı. Bu süreçte beslenme ve beslenmeyi sağlayan üretim birincil derecede önemliken zamanla güvenlik sorunları yani suç ortaya çıktı. İnsanın sosyal çevresinden başlayarak, psikolojik etkenler, ekonomik gerekçeler, kalıtsal rahatsızlıklar, aile yapısı, madde bağımlılığı ve fiziksel ihtiyaçlarının birçoku suçların oluşmasına neden oldu.

Suçların oluşması ile ortaya çıkan güvenlik ihtiyacı sonrası toplumlar belli normları hayata geçirerek suçla mücadele etmeye başladı. Ancak toplumsal normlar ve daha sonraları ortaya çıkan yazılı kanunlar ve yaptırımlar suçun işlenmesini engellemedi. Psikolojik, sosyolojik, ekonomik ya da fiziksel nedenler insanları sürekli olarak suça teşvik etmiş ve önceleri basit suçlarla başlayan bu süreç modern çağda suçlarında çeşitlenmesine ve suç yollarının da artmasına neden olmuştur.

Suç ve suçluyla mücadelede etkin rol oynayan polis ise, bir meslek olarak insanların her zaman ilgisini çekmiştir. Hem devlet gücünü ve otoritesini temsil, hem görevin kutsal olduğu vatani bir görev olduğu görüşü polislik mesleğini diğer mesleklerden diğer sınıflardan ayırmıştır. Bu bakış açısı polisliği sürekli göz önünde tutmaya neden olmuş ve toplumsal yapı polisliğe saygınlık kazandırmıştır. Suç ve suçlu ile yapılan amansız mücadele ve terörizme verilen onca şehit halkın içinden gelen polisi yine halkın gözünde yüceltmiş ve bu durum yazılı ve görsel basının ilgisini çekerek nice kitap, dergi, foto-roman, dizi, film ve programlarda polisin konu edinilmesini sağlamıştır.

Bu süreçte polisi göz önüne alan ve gözler önüne seren en güçlü iletişim aracı televizyondur. Özellikle son dönemde yaşanan olaylar sonucu artan milliyetçilik ve bunun getirisi reytingi hedefleyen televizyon kuruluşları polis imajından son noktaya kadar yararlanmakta bu esnada polis için farkında olarak ya da farkında olmadan bir polis algısı oluşturmaktadır. Bunun dışında suç ve suçlu merakı televizyon yapımcılarını yine o tarafa yönlendirmiştir. Bugün ekranlarda haberler dışında da sürekli olarak gündüz veya akşam kuşağı fark etmesizin polisiye ile karşılaşmaktadır.

Gündelik yaşamda asayişin sağlanması, trafiğin düzenlenmesi ve de en önemlisi terörle mücadelenin etkin şekilde yürütülmesini sağlayan, halkın esenliğini ve huzurunu hedef edinen herkes ailesi ile mutlu bir hayat sürsün diyerek kendi ailesini babasız bırakan, ülkenin her noktasında günün 24 saati görev yapan polisler ve polislik mesleğinin oluşturduğu imaj ve insanlarda oluşturduğu algı kişisel farklılık oluşturduğu kadar özellikle bazı bölgelerde de farklı bakış açılarıyla karşılanmaktadır.

Bölücü terör örgütü tarafından “sözde” başkent ilan edilerek sivil ayaklanmanın hedeflendiği, Devletin başlattığı ve başrolde polisin yer aldığı hendek operasyonlarının yürütüldüğü Diyarbakır’da son 40 yılda oluşturulan polis algısı ve operasyonlardan sonra oluşan algı, polislik mesleğine dışarıdan bakan, ideolojik olarak karşı çıkan ve özellikle stratejik bir konumu olan Diyarbakır Dicle Üniversitesi İletişim Fakültesi öğrencilerinin polis algısını görebilmek açısından önemlidir.

Kuramsal Çerçeve

“Televizyon Dizilerinde Sunulan Polis İmajının Üniversite Gençliği Üzerinde Oluşturduğu Polis Algısı: Dicle Üniversitesi İletişim Fakültesi Örneği” konulu çalışmada temel alınacak kuram olarak “Gündem belirleme” kuramı tercih edilmiştir.

Gündem belirleme kuramı toplumun, çeşitli güncel sorunlarının önemini algılamasını açıklamaya çalışan bir kitle iletişim kuramıdır. Özünde, toplumun konuların önemini algılamasını, iletişim araçlarının konuları ele alış biçimiyle açıklamaya çalışır. İnsanlar dünyada neler olup bittiğini kitle iletişim araçları vasıtasıyla takip ederler. Medya günlük hayatta meydana gelen kimi olaylara daha fazla ilgi gösterir, bazılarını ise daha az ilgi gösterirken kimisini görmezden gelebilir. Toplamlar medyanın verdiği bilgiler doğrultusunda bilgilenmektedir. İnsanlar, medyanın kurmuş olduğu gündem sayesinde olayların hangi önemde olduklarını öğrenirler (Yaylagül, 2006). Medyanın önem verdiği konular, halkın da önemli olarak algılayacağı konulardır. Medyanın önemsemediği konular ise daha önemsiz olarak algılanacaktır. Gündem belirleme kuramı öncelikle kitle iletişim araçlarının gündemi belirleme yetisini açıklayacak şekilde formülendirilmiştir. Medyanın gündem belirleme görevi yaptığını savunan görüş, Cohen’in (1963) çalışmasından çıkarılmış ve McCombe, Shaw ve diğerleri (1973) tarafından geliştirilmiştir. Bu görüşe göre, kitle iletişim araçları halka “ne düşüneceklerini söylemede” çoğu kez başarılı olmayabilir; fakat izleyicilerine “ne hakkında düşüneceklerini” anlatmada başarılıdır (Erdoğan ve Alemdar, 2005). Öte yandan, medya dünyayı bizim için şekillendirme gücüne sahiptir ve bu yönde uğraşır. Bunu yaparken de bir düşüncenin alacağı şekli belirlemeksizin toplum için gündem hazırlarlar.

McCombs ve Shaw (1993), gündem belirleme hipotezinin 25 yıllık geçmişine ilişkin değerlendirmelerinde, bu araştırma geleneğinin sonuçlarını araştıran yeni araştırmaların, iletişim araçlarının bize sadece ne hakkında düşüneceğimizi anlatmakla kalmadığını, onu nasıl düşüneceğimizi ve bunun sonucunda da ne düşüneceğimizi anlattığını belirtmektedir.

Medyanın etkileri üzerine yoğunlaşan gündem belirleme kuramı bu etkinin ortaya çıkışı ve topluma etki süreci ile gündemdeki konunun önemine, toplumun bahse konu olguyla bağına ve gündem konusunun toplumdaki dinamiklerle ilişkilendirilmesine bağlantılı olarak yürür. Özellikle de siyasal iktidarlar çoğu zaman toplumun ilgisini kendi yapıp ettiklerinden uzak tutmak için kitle iletişim araçları aracılığıyla toplumun bir takım yapay gündemlerle meşgul olmasını isteyebilirler. Böyle durumlarda etkinin en kısa sürede ortaya çıkmasına yönelik ilgi çekici konuların kitlelere aktarılmasına özen gösterilir (Güngör, 2013).

İletişim araçlarının gündem belirleme yetisini Rogers ve Dearing (1988), bu araçların insanların ne hakkında düşüneceklerini, neyi önemli olarak algılayacaklarını etkileme eğilimi olarak tanımlanmaktadır. Onlara göre, gündem “ belli bir zaman noktasında önem hiyerarşisine göre sıralanmış konular ve olaylar listesidir.”. Shaw (1977) ise, olaylar, “zaman ve uzamla sınırı ayrı olgular”, konular ise, “birbiriyle bağlantılı olaylar dizisi” olarak tanımlanabilir demektedir. (Mutlu, 2012).

Medyanın, günlük hayatta toplumun gündemini oluşturmaya, istenilen birtakım konuları izleyici kitlelere göstererek ilgiyi o konuya çekmesi gündem belirleme kuramının başlıca savıdır. Toplum da kitle iletişim araçlarının sunduğu konuya ilgi gösterirse kısa süre içerisinde o konuyla ilgili toplumda birtakım fikirlerin ortaya çıktığı, o düşünceler doğrultusunda da bir kamuoyu oluştuğu gözlemlenir. Toplum gündemine sunulan konu önemine ve tartışılabilirlik özelliğine göre de aynı anda taraftar veya muhalif çeşitli kamuoylarının doğmasına yol açabilir. Diğer yandan moral değerlerle ilgili ya da duygu dünyasına seslerin konuların izleyici kitlelerce çok çabuk algılandığını ve kısa sürede de yaşama geçirildiğini söylemek yanlış olmaz. Özellikle de insanlarda korku ve panik yaratacak özellikteki konuların kısa sürede insanların ilgisini çekerek onarlı belli tavır, davranış ve tutum alışlara yönelttikleri bilinmektedir (Güngör, 2013).

Kitle iletişiminin gündem belirleme düşüncesinin özünde, toplumun bu konulardaki düşüncelerinin medyanın sunduklarıyla etkilendiği varsayımının bulunduğunu belirten Erdoğan ve Alemdar (2005). Medyanın olaylara verdiği önceliklerin, seyirciler tarafından öğrenildiğini, gündem belirlemenin zaman içinde uzanan bir öğrenme süreci olduğunu medyanın önceliklerinin halkın öncelikleri olduğunu ifade etmektedir.

Problem Cümlesi

Televizyon dizilerinde sunulan polis imajı Dicle Üniversitesi İletişim Fakültesi öğrencileri üzerinde nasıl bir polis algısı oluşturmaktadır?

Evren ve Örneklem

Çalışmada evren olarak Diyarbakır Dicle Üniversitesi İletişim Fakültesi, örneklem olarak ise 141 öğrenci tercih edilmiştir.

Veri Toplama Aracı

Veri toplama aracı olarak araştırmada anket tekniği kullanılacaktır.

Veri Analizi

Verilerin analizinde SPSS analiz programında yüzde tekniği kullanılacaktır.

Varsayımlar

1. Tüm öğrenciler polisiye dizi izlemektedir.
2. Tüm öğrenciler polislik mesleğini saygın görmektedir.

Sınırlılıklar

Bu araştırma;

- 1- Dicle Üniversitesi İletişim Fakültesini kapsamaktadır.
- 2- Veri toplama aracı olarak çalışmada anket yöntemi kullanılmıştır. Anket İletişim fakültesinde öğrenim gören 141 öğrenci üzerinde uygulanmıştır ve verilen cevapların güvenilirliği ile sınırlıdır.

Tanımlamalar

Algı: Bir şeye dikkati yönelterek o şeyin bilincine varma, idrak (TDK, 2017).

İmaj: Görüntü (TDK, 2017).

Yöntem

“Televizyon dizilerinde sunulan polis imajının üniversite gençliği üzerinde oluşturduğu polis algısı: Dicle Üniversitesi İletişim Fakültesi örneği” konulu çalışma da veri elde etme tekniklerinden anket yöntemi tercih edildiği için araştırma yöntemi olarak “nicel araştırma yöntemi” ile çalışılacaktır.

Araştırma deseninin nitel ya da nicel olması çalışmanın giriş bölümünde başlayan problem cümlesi, sorular ve hipotezlerin biçimlenmesi ile şekillenmektedir. Örnek olarak, problem cümlesi hipotezle biten bir araştırma ancak niceliksel bir desen olabilir. Eğer problem cümlesi araştırma soruları ile biterse bu sefer araştırma deseni soruların karakterine göre nicel ya da nitel olabilmektedir ve bu durumda hangi araştırma deseninin uygulanacağına araştırmacının karar vermesi gerekmektedir.

Nicel araştırma genellikle fizik, kimya, biyoloji gibi doğa bilimlerinin yanında sosyal bilimlerde de yoğun bir şekilde kullanılmaktadır. Daha çok sayısal veriler ve istatistiklere dayanan nicel araştırma yöntemi diğer araştırma yöntemlerine nazaran kendine has özellikler barındırmaktadır.

Nicel araştırma yöntemlerinin tipik özellikleri şu şekildedir;

- Ölçüm ve sayısallaştırma (örn. Elde edilen bilgi ve veri sayıya dönüştürme) esastır. Ölçümün doğruluğu ve kesinliği aranır.
- Davranışa odaklanır (örn. İnsanların ne dediği ve ne yaptığı).
- Bu bilimsel yaklaşım, doğa bilimindeki aynı genel ilkelere bağlıdır.
- Daha önceden var olan teori, fikir ve kavramların test edildiği tümdengelim mantığı kabul edilmiştir.
- Araştırma sürecinin ilk başlarında araştırma deseni detaylı olarak daha öncesinden belirlenmiştir.
- Ölçümün geçerliği (istenilen ölçümü göstermesi) ve güvenilirliği (zaman içinde farklı gözlemler ile tutarlı olması) önemlidir.
- Yöntemin detaylı tanımı yapılır; böylece çalışmanın çoğaltması yapılabilir (aynı çalışma tekrar edilebilir böylece bulgular kontrol edilebilir).
- Verilerin istatistiksel analizi beklenir.
- Bulguların genellenmesi aranır (daha geniş grupların örneği olması için çalışılan katılımcıların örneklemelerini gerektiren çoğunlukla istatistiksel genellenebilirlik formunda).
- Tarafsızlık aranır, araştırmacı ve katılımcılar arasındaki mesafe korunur.
- Standartlaşma için kontrol ve doğruluk aranır. Bu genellikle bağlamsızlaştırmayı içerir (örn. Bağlamda araştırılan durumu ayıklama ya da bağlamanın muhtemel etkilerini göz ardı etmek). İstenilen standartlaşmayı yakalamak için biraz yapaylığa gereksinim duyulabilir.
- Değerlerden bağımsız ve tarafsız bir pozisyon aranır.

Nicel araştırma paradigması tarihsel olarak pozitivizm ile yakından ilişkilidir (Robson, 2015’den çeviren Nayır, 2015).

Literatür Taraması

Çalışmada konu ile ilgili olarak yapılan literatür taramasında öncelikli olarak değerlendirmeye Soydan ve Aslan (2014) yaptıkları araştırma alınmıştır. Söz konusu araştırmada araştırmacılar iletişim ve kitle iletişim araçlarına değinerek özetle iletişimin; birbirlerine nesneler, olaylar, olgularla ilgili değişimleri ileten, bunlarla ilgili bilgileri aktaran, aynı olaylar, olgular, nesneler ve sorunlar karşısında benzer yaşam tecrübelerinden kaynaklanan yine benzer duygular taşıyarak bunları ifade eden bireylerin oluşturduğu topluluk ya da toplum yaşamı içinde gerçekleştirilen davranış, yargı, tutum, duygu, düşünce bildirimleri olarak tanımlamaktadır.

Günümüzde hem toplumsal varoluşu, hem de sosyalleşmeyi yaratmak ve bu ortaklığı sürdürebilmek için kitle iletişim araçlarına ihtiyaç duyulduğunu ifade eden araştırmacılar genellikle kitle iletişim araçlarından bir bütün olarak söz edildiğini, ancak; radyo, televizyon, yazılı basın, haber ajansları gibi farklı işlevleri yerine getiren çalışma alanları bulunduğunu ifade etmişlerdir.

Kitle iletişim araçlarının ortak özelliğinin zamanla toplumda alışkanlığa ve ihtiyaca dönüşerek toplumda bir talebin oluşmasına neden olmasını gösteren araştırmacılar, bir başka ortak özelliklerinin ise olayları aynı anda sınıf, cinsiyet ya da kimlik gözetmeksizin toplumun her kesimine aynı anda ulaştırabilmesi olarak belirtmektedir (Soydan ve Alpaslan, 2014).

Yine aynı araştırmacılara göre, medya her çeşit bilgiyi bireylere ve topluluklara aktaran bilgilendirme, eğitime gibi temel sorumluluklara sahip hem görsel, hem de işitsel araçların tümü şeklinde tanımlanabilmektedir.

Artık medya, hayatın her alanında bilgilendirici ve yönlendirici bir güç olarak yer almaktadır. Özellikle teknolojik gelişmelerin bu alanda kullanılmasıyla birlikte, medya her yerde ve her zaman en kötü ve ağır koşullarda bile iletişim kurmayı sağlamaktadır. Medyanın temel işlevleri arasında yer alan bilgilendirme, kültürel devamlılık, toplumsallaştırma ve kamuoyu yaratma işlevleri insanları medyaya daha çok bağımlı kılmaktadır.

Söz konusu araştırmacılara göre, medyayı yazılı basın ve görsel-işitsel medya olarak ele alırsak, haber, bilgi ve yorumları gazete ve dergi gibi basılı bir şekilde topluma ulaştıran medya türü yazılı basın, radyo, televizyon gibi daha çabuk bir yoldan topluma ulaştıran medya türü de görsel medya olarak adlandırılmaktadır.

Çalışma konusu ile ilgili değerlendirmeye alınan ikinci araştırmada Büyükbaykal (2005); kitle iletişim araçlarını, günümüzün yaygın deyişiyle medya, kullandığı sözel ve göstergesel dil ve tüm gündelik pratikleri, spordan siyasete, sanattan eğlenceye bireyin içinde biçimlendiği, kendini yeniden ürettiği toplumsal olguları anlamlandırmakta ve tanımlamaktadır. Bugün yaşadığımız dünya araştırmacıya göre gittikçe medyanın yapılandığı bir dünya haline gelmektedir. Toplumsal yaşam bir bakıma televizyon kanalları, radyo, sinema, gazete ve bilgisayarlar tarafından şekillenmektedir. Medya sadece haber ve eğlence programları yoluyla insanları beslemekte aynı zamanda, insanlara bir yaşam tarzı kazandırmaktadır.

Yine Büyükbaykal'a göre (2005), bilgi, düşünce ve davranışların aktarılması süreci olan iletişim olgusu insanlık tarihi kadar eski bir olgudur. İnsanların öğrenmek ve bilmek gereksinimleri ise radyo, televizyon, gazete, dergi, kitap, reklam, telefon, telgraf ve bilgisayar gibi kitle iletişim araçları sayesinde karşılanmaktadır. Bu araçlar herhangi bir bilgiyi, kısa sürede geniş kitlelere hızlı bir biçimde ulaştırabildikleri için günlük yaşamda son derece önemli bir yere sahiptir. Günümüzde çok sayıda insan ekonomik, sosyal, kültürel ve siyasal gelişmeler hakkında bilgi edinebilmek amacıyla kitle iletişim araçlarından faydalanmaktadır.

Geleneksel iletişim sürecinde yer alan öğeler kitle iletişim sürecinde de bulunmasına karşılık; araştırmacıya göre kitle iletişimi, kullanılan araçlar, iletilen haber ve bilgilerin içeriği ve seslenilen kişiler yönünden farklılık ve özellikler taşır. Kitle iletişim araçları kullanımı yoluyla yapılan iletişimde ise, iletişim kişiler arasında değildir. Bir topluluk içerisinde türdeş olmayan ve tek tek özellikler kesin olarak bilinmeyen bir kitleye, bu iş için geliştirilmiş araçlar ile bir kaynaktan seslenilir. İletişim basın, radyo, televizyon gibi bu iş için özel olarak öngörülmüş kurumlar aracılığıyla gerçekleşmektedir. Haberin yayımı, kültürün yayılması, kişiler ya da gruplar arasında rastlantısal buluşmalara bağlı değildir. Aksine, sürecin işlemesi için isteme dayanan bir yaklaşım ve bu amaçla geliştirilen kurumlar aracılığıyla gerçekleşmektedir. Haberin yayımı, kültürün yayılması, kişiler ya da gruplar arasında rastlantısal buluşmalara bağlı değildir. Aksine sürecin işlemesi için isteme dayanan bir yaklaşım ve bu amaçla geliştirilen kurumlar söz konusudur..

İncelenen Baran ve Baran'a (2014) ait üçüncü çalışmada ise, son yıllarda insanların belki de en fazla vakit ayırdıkları eğlence aracı haline gelen teknolojinin insanlığa sunduğu en önemli araçlardan biri olan televizyon (TV) yoluyla insanlar yorgunluğunu atmakta boş zamanlarının önemli bir kısmını yarışma, dizi, magazin vb. TV programlarını izleyerek geçirmektedirler. Reklam, dizi, magazin vb. programlarla insanların bilinçaltına etki ederek onları tüketime sevk eden televizyon, seyircileri, yarışma, magazin, dizi, reklam vb. programlarda karşılaştıkları ünlüler gibi yaşamaya, giyinmeye özendirilmektedirler.

Televizyon araştırmacılara göre, zaman içerisinde iletişim işlevinin dışında daha farklı özellikleri içerisinde barındıran bir hal almıştır. TV'nin zaman içerisinde artan bu etkinliği pazarlama akademisyenlerinin ve uygulamacılarının da dikkatini çekmiştir. Pazarlamacılar gerek reklam kuşaklarıyla gerekse diziler, magazin programları, yarışmalar vb. programlar aracılığıyla tüketicilere ulaşmaya çalışmaktadırlar. Bu noktada pazarlamacılar TV programlarında futbolcular, mankenler, sanatçılar gibi ünlüleri kullanarak tüketicilere kendi ürünlerini kullanmaları halinde ünlülerin sahip olduğu prestije sahip olabilecekleri mesajını vermektedirler. TV programlarında geçen ürün ya da markaların satın alınamaması psikolojik, ekonomik, toplumsal bir takım sonuçları beraberinde getirmektedir statü kaybı gibi görülmektedir.

Baran ve Baran'a göre (2014), Tüketiciler kullandıkları ürün ve markalar aracılığıyla karşısındakilere sosyal statü ve sınıfsal bakımdan mesajlar verirler ve herhangi bir nedenle bu ürün ya da markaları kullanamayan tüketiciler bu mesajlar sonunda bu ürün ve markaları kullanabilmek için bir takım bedeller ödemeye kendilerini hazırlarlar. Bu nedenle de toplumsal olarak sosyolojik birtakım sorunların ortaya çıkmaktadır.

Çalışmada dördüncü ve beşinci inceleme olarak değerlendirilen ve iki farklı araştırması kaynak olarak kullanılan Kırtepe (2014) ise, televizyon dizilerini konu alarak; toplum genelinde televizyonda en çok izlenen program

türünün televizyon dizileri olduğunu belirtmiştir. Bu program türü birçok yönden diğer program türlerinden farklı olduğunu dile getirerek insanın günlük hayattaki yaşam akışının bir benzerinin dizi senaryolarında işlenmekte olduğunu ifade etmiştir. Bu özellikler ile televizyonun bir kitle iletişim aracı olarak sahip olduğu vasıfların bir arada bulunması dizi filmlerin izlenme oranının fazla olmasına, toplumda kolayca kabul görmesine ve etkisinin artmasına zemin oluşturmaktadır.

Araştırmacıya göre, dizileri ve diziler hakkındaki değerlendirmeleri önemli kılan birçok nokta vardır. Tekrar, merak, mesajının kolaylıkla birçok yere ulaşabilmesi ve kültürel unsurları içermesi bunların başlıcalarıdır. Bu unsurların dizileri ve onlarla ilgili değerlendirmeleri ve araştırmaları önemli hale getirdiği söylenebilir. Çünkü bunlar toplum ve diziler arasında meydana gelen sürekli bir veri aktarımına altyapı oluşturur. Hatta bu bağlantının kimi zaman bağımlılık denecek bir seviyeye ulaştığı belirtilmelidir. Böylece bir taraftan dizilerin varlığı ve devamlılığı sağlanırken diğer taraftan toplumda mevcut olan değişim döngüsünün istenilen yönlerde gerçekleşmesine zemin oluşturulabilmektedir.

Kırtepe'ye göre (2014), televizyon yayınları içerisinde en çok takip edilen program türü televizyon dizileridir. "Bölümler hâlinde yayımlanan ve çoklukla aralarında konu bütünlüğü olan film, dizi, televizyon dizisi" şeklinde de tanımlanmaktadır (TDK, 2010'dan aktaran, Kırtepe, 2014). Farklı şekillerde telaffuz edilse de televizyonda gösterilen ortak konular farklı olayların bütünleştirilmesinden oluşan drama şeklinde tasarlanan anlatılara dizi olarak adlandırılabilir. Ana karakter ve ortak mekanlardan oluşan diziler farklı konular içeren bölümlerden oluşur. İzleme alışkanlıklarının değişmesi ve dizilerdeki çeşitliliğin artmasını sağlamaktadır.

Çalışmacıya göre, diziler birçok yönden televizyonda yer alan diğer program türlerinden farklı özelliklere sahiptir. İnsan yaşamını anlatan televizyon dizilerinde, toplumsal hayatın akışına uygun ve benzer konular sunulmaktadır. Bu özellikler dizilerin birey üzerindeki etkisinin artmasına, izlenme oranının yükselmesine ve toplumda kabullenilmesine katkıda bulunmaktadır. Bunun yansımaları seyirciler üzerinde çeşitli noktalarda gözlenebilmektedir. İnsanların toplumu oluşturan diğer üyelerle olan sosyal ilişkileri, davranışları ve diyalogları bu yansımaya gözler önüne sermektedir. Öyle ki insanlar dizilerdeki kahramanlar gibi konuşmaya, şakalaşmaya, hitap etmeye, giyinmeye ve tüketmeye başlamıştır. Dizilerde yer alan repliklerin kullanılması, oyuncuların takılarının/kullandıkları eşyalarının moda haline gelmesi vb. gibi birçok noktada bu görülebilir.

Yine Kırtepe'ye göre (2014), diziler sosyal hayatın ekrana aktarılmasıdır. Bu aktarım nedeniyle diziler, toplumsal yapının göstergesi olarak görülebilir. Toplumsal yapıda yer alan olması gereken ve ya istenen unsurlar dizilerde kendisine yer bulabilmektedir. bireyler arası ilişkileri, bireyin toplum içerisindeki sosyal konum ve statüsünü, bakış açısını, ekonomik faaliyetler çerçevesinde insanın yerini, vb. sosyo-kültürel yaşantıda bulunan birçok şeyi dizilerde görmek mümkündür.

Bu nedenle televizyon dizilerinde sunulan konuların toplumda kendine yer bulması çok kolay ve kaçınılmazdır. Diziler vasıtasıyla topluma aktarılan olgular toplum tarafından değerlendirilmektedir. Kullanılan isimler bile toplum üyelerinin düşüncelerinde ve o ismi taşıyanlara bakış açılarında değişiklikler meydana getirebilmektedir. Televizyon dizileri toplumda istenilen değişikliklerin toplumun gündemine taşınması için bir araç olarak kullanılabilmektedir. Toplumda kendine yer bulan konular, tartışılmaya, konuşulmaya, olumsuz ve olumlu yönleriyle değerlendirilmeye başlanmaktadır. böylece gündeme giren veya girdirilen olaylar toplumsal kabule veya yapılacak itirazlara engellenmesine imkân sağlamaktadır. Bu şekilde dizi film programları toplumun herhangi bir konudaki tavrının ve algılamalarının oluşumunda etkin rol oynamakta ve arzu edilen şekilde izleyicide değişimlerin meydana gelmesini sağlayabilmektedir.

İnsanlık tarihinin başlamasıyla birlikte güvenlik, insanlar için daima öncelikli konulardan biri olmuştur. Güvenliğin temin edilmediği yerlerde özgürlükten, demokrasiden ve insan haklarından söz etmek oldukça güçtür. Bu nedenle günümüz dünyasındaki az gelişmiş ve gelişmekte olan ülkelerin öncelikli hedeflerden biri de güvenliktir (Halil, 2013'den aktaran Kırtepe, 2014).

Çalışmada değinilen altıncı araştırmada ise Halil'e (2013) göre, insanlık tarihinin başlamasıyla birlikte güvenlik, insanlar için daima öncelikli bir konu olmuştur. Zira dünya çok çeşitli tehlikelerle doludur. İnsanlar doğal afetleri, vahşi hayvanları, kısaca kendinden başka her şeyi bir tehdit unsuru olarak gördüğünden, kendini korumak için barınaklar, evler ve çeşitli aletler yaparak asgari bir güvenli yaşam sağlamaya çalışmıştır.

Batıda Rönesans ile başlayan ve 18. yüzyıl Aydınlanma Dönemi ile devam eden milliyetçilik, şehirleşme, bilim, teknik, sanayileşme ve endüstrinin gelişmesiyle modern toplum, modern devlet anlayışını ortaya çıkarmıştır. Ancak bu düşüncenin son dönemlerde yerini postmodern anlayışına bıraktığı görülmektedir.

Araştırmacıya göre, modern ve demokratik toplumların temel ihtiyaçlarının başında da huzur ve güvenlik gelir. Güvenliğin temin edilmediği yerlerde özgürlükten, demokrasiden ve insan haklarından söz etmek oldukça güçtür. Bu nedenle günümüz dünyasındaki gelişmiş ve gelişmekte olan ülkelerin öncelikli hedefi yine güvenliktir.

Güvenlik kurumları, toplumun huzur ve güvenliğini sağlamak için kurulmuşlardır. Günümüzün modern ve demokratik toplumlarında iç güvenlik hizmetlerinden sorumlu kolluk teşkilatları bir görev gücü olarak değil, güvenlik hizmeti sunan bir servis olarak algılanmaktadır (DPT, 2007).

Ülkemizde güvenlik ihtiyacı kolluk olarak polis ve jandarma tarafından karşılanmaktadır. Polis bu görevini 2559 sayılı polis vazife ve salahiyet kanunu ile gerçekleştirir. Polis demokratik düzen içinde, kanun hâkimiyetinin sağlanması ve korunması, yurt içinde huzur ve nizamın temini, vatandaşların can, mal, ırz güvenliğinin sağlanması

ve korunması, suç işlemeye yönelik davranışların önlenmesi, sanıkların yakalanarak adalete teslim edilmesi görevlerini yerine getirir (Resmî Gazete, 1934).

Çalışma konusundaki yedinci araştırma olan Demirbaş ve Demir'e göre (2014), bir kurumun toplumun çeşitli kesimlerince nasıl algılandığı, söz konusu kurumun gerçek imajını oluşturmaktadır. Doğru imaj oluşturabilme yöntemi, doğru ve güvenilir bilgilerin üretilmesi ve hedef kitlelere zamanında aktarılabilmesidir. Kurumla ilgili halkın gözündeki imajın her zaman olumlu olması gerekmez, önemli olan doğru olmasıdır.

Bu nedenle halkın polis algısının belirlenmesi gerekir. Polis imaj ve algısı; toplumun, polisi ve polisin çalışmalarını nasıl değerlendirdiği, polisle çalışmaya gönüllü olup olmadığı ve suça karşı hassasiyetini belirlemeye çalışmak, bu doğrultuda yöntemler ve stratejiler geliştirmek, uygun stratejiler belirleyebilmek için toplumun cinsiyet, yaş, ekonomik durum veya eğitim gibi farklılık gösteren kesimlerinde polise ve polisliğe genel bakış açısı farklılıklarının, polisle işbirliği yapma eğiliminin ve suça karşı hassasiyetin seviyesinin bilinmesi önemlidir.

Araştırmacılar, polis teşkilatlarının toplumun desteğini almadan ve toplumla işbirliği yapmadan istenen yüksek performansı gösteremeyeceği ve suça mücadelede başarılı olamayacağı ifade etmektedir. Bu sebeple, polis teşkilatları toplumla yakınlaşmak, işbirliği sağlamak ve toplumun desteğini almak için çaba sarf etmektedir.

Polisin görevini yaparken toplumdan alacağı destek önem arz etmektedir. Bunu sağlamanın yöntemlerinden bir tanesinin, kurumun empati yapması, değerlendirmesi ve hatalarıyla yüzleşme cesareti göstermesinden geçtiği araştırmacılarca düşünülmektedir. Öyle ki polisin, halkı oluşturan bazı kesimler nezdinde nasıl algılandığının ölçülmesi önemlidir.

İncelenen sekizinci çalışmada Aslan ve Olgun'a göre (2009), toplumda suçları başarılı bir şekilde ortaya çıkarmak ve önlemek için toplum ile polis arasında verimli bir ilişki zaruridir. Hukuk ve düzenin temsilcisi olarak polis önemlidir. Toplum ise, hem suç ve suçluları kontrol etme teşebbüslerinde hukuku uygulayan temsilcilere destek noktasında bir kaynaktır, hem de suç mağdurlarının kaynağıdır. Kendisini başkalarının gözüyle denetlemeyen bir polis teşkilatının hizmet kalitesini artırması, hizmet sunduğu topluma entegre olması ile suça mücadelede ve toplumun huzur ve güvenliğini sağlamada toplumu yanında görmesinin oldukça zor olacağı değerlendirilmektedir. Araştırmacı için, polisin çalışmalarının sadece 'adli' olaylarla sınırlı kalması, polis ile toplumun arasındaki iletişimin kurulamamasına neden olmaktadır. Polisin başarısı, toplumun katılımı ile doğrudan orantılıdır denilebilir. Polisin görevi kamu düzenini sağlamaktır. Bu görevi yerine getirirken hizmet ettiği toplumun onay, güven ve saygısını kazanmak zorundadır. Diğer bir anlatımla polis, hukuksal meşruiyet ile toplumsal meşruiyeti kazanmalıdır. Öte yandan bir kişinin, ürünün veya bir kurumun halkın gözündeki konumu veya algılanma biçimi olan imaj, aynı zamanda bir kuruluşun kişiliğini de meydana getirmektedir. Bu kişiliğin, kuruluşun yönetici ve çalışanlarının ürünü olduğu söylenebilir. Bu yüzden de çoğu kez kurum imajı ile özdeşleşmektedir. Üretilen mal ve hizmet ve kuruluş çalışanları sıklıkla değişse bile imaj genellikle kalıcı olmakta ve değişmesi uzun zaman almaktadır. Bu sebeple polisin imajının ne olduğu zaman zaman ölçülmelidir.

Polisin halkla kurduğu ilişki kalitesinin artmasını savunan bu yaklaşımlar ile birlikte, polis ve halk arasında ilişkinin niteliğini, vatandaşın polis hizmetlerinden beklentisi ve memnuniyet düzeyini anlamaya yönelik yapılan araştırmaların sayısında artış yaşanmıştır. Yapılan bu araştırmalarda, halkın polisten beklentileri ve polis algısı, polisin vatandaş algısı, bu algıyı şekillendiren kültürel değerler ve polis hizmetlerinde vatandaş memnuniyetini etkileyen faktörler üzerinde durulmuştur.

Çalışmada incelenen dokuzuncu araştırma da Gülnar'a göre (2017), gündem belirleme üç aşamada gerçekleşmektedir. Birinci aşama, McCombs ve Shaw tarafından gerçekleştirilen 1968 Chapel Hill araştırmasıyla ortaya çıkmıştır. İkinci aşama 1976 Amerika Başkanlık Seçimleri esnasında Weaver ve diğerleri tarafından araştırılmıştır. Üçüncü aşama ise ilk kez 2010 yılında McCombs, Lei Guo ve Hong Tien Vu tarafından araştırılmış ve "An Expanded Perspective on Agenda-Setting Effects. Exploring the Third Level of Agenda Setting" (Gündem belirleme etkileri üzerine genişletilmiş bir perspektif. Üçüncü aşama gündem belirlemeyi araştırmak) isimli makaleyle ortaya atılmıştır.

Geleneksel gündem belirleme modeli olarak da isimlendirebileceğimiz birinci aşama gündem belirleme, özetle, insanların "ne hakkında" düşüneceklerinin medya tarafından belirlenebileceği üzerinde durmaktadır.

Araştırmacıya göre, ikinci aşama gündem belirleme modeli, özetle, kitle iletişim araçlarının insanların yalnızca "ne hakkında düşüneceklerini" değil aynı zamanda "ne düşüneceklerini" de belirlediği hipotezi üzerine inşa edilmiş bir modeldir. Üçüncü aşama ise, gündem belirlemenin entelektüel babası olarak kabul edilen Walter Lippmann'ın (The World Outside and The Pictures in Our Heads (Dışarıdaki dünya ve zihinlerimizdeki resimler) tanımlamasından hareketle açıklarlar. Lippmann'ın "zihnimizdeki resimler" tanımlaması bağlamında ilk aşama gündem belirleme etkilerinin cevapladığı soru şudur: "Bu resimler neyle ilgilidirler?". İkinci aşama gündem belirleme çalışmaları ise "Bu resimlerin baskın karakteristikleri nelerdir?" sorusunu cevaplar. Yazarlar son yıllarda yapılan araştırmaların ardından "Zihnimizdeki resimler nelerdir?" sorusunun cevabını vermeye çok yaklaştığını belirtirler. İşte bu aşama gündem belirlemenin üçüncü aşaması olarak nitelendirilmektedir.

Araştırmacı bu üç aşama dışında gündem birleştirmeye değinerek, bireylerin kişisel gündemlerinin bireyin içerisinde bulunduğu cemaat veya mensup bulunduğu grup ile ilişkisine odaklanır. Dolayısıyla gündem birleştirmenin temel hipotezini, bireylerin bir gruba dahil olduklarında kendi/bireysel gündemleri ile grup gündemlerinin birleştiğini ifade ederek açıklamaktadır.

Araştırma konumuzda son olarak değindiğimiz çalışma Atabek'e göre (1998), haberler çevredeki karmaşık ve değişik özelliklere sahip olaylar arasından izleyiciler veya okuyucular için seçilerek belirli gazetecilik kuralları çerçevesinde tanımlanırlar. İzleyicilerin doğrudan deneyimlerinin ötesindeki dünya ile ilgili olarak hangi konulara ilgi göstereceklerini belirlemede haberler önemli işleve sahiptir. Gazete editörlerinin veya televizyon yayıncılarının gündelik işlerini yaparken yayınlanacak haberleri seçmesi ve haberlerin gazete veya televizyondaki konumlarını belirlemesi, izleyicilerin dünyayı algılayış biçimleri üzerinde etkiler yapar.

Yine araştırmacıya göre, kitle iletişim araçları doğrudan deneyimlerimizle öğrenemediğimiz ya da içinde yer almadığımız olayları nasıl algılayacağımızı belirlemede çok önemli bir role sahiptir. Her gün seçilen ve sunulan haberlerle o gün hangi konuların önemli olduğuna ilişkin algıları etkiler. Kitle iletişim araçları sahip oldukları bu etki sayesinde kamunun düşünme ve tartışma gündemini düzenlemede önemli bir işlev görür. Kamu gündeminin belirlenmesi, kitle iletişim araçlarının belirli haber konularını vurgulayarak izleyicilerin gündemlerini belirlemesidir.

Bulgular

1) Maddelere ait frekans ve yüzdelere

Bu bölümde her bir maddenin frekans ve yüzdelik değerlerine yer verilmiştir.

Tablo 1.M1-Genel olarak polise güveniyorum

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	11	7.8	7.8
Katılmıyorum	14	9.9	17.7
Kararsızım	23	16.3	34.0
Katılıyorum	46	32.6	66.7
Kesinlikle Katılıyorum	47	33.3	100.0
Toplam	141	100.0	

Tablo 1’de “M1-Genel olarak polise güveniyorum” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %7.8’i kesinlikle katılmıyorum, %9.9’u katılmıyorum, %16.3’ü kararsızım, %32.6’sı katılıyorum ve %33.3’ü kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 2.M2-Polise saygı duyuyorum

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	8	5.7	5.7
Katılmıyorum	7	5.0	10.6
Kararsızım	11	7.8	18.4
Katılıyorum	47	33.3	51.8
Kesinlikle Katılıyorum	68	48.2	100.0
Toplam	141	100.0	

Tablo 2’de “M2-Polise saygı duyuyorum” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %5.7’si kesinlikle katılmıyorum, %5’i katılmıyorum, %7.8’i kararsızım, %33.3’ü katılıyorum ve %48.2’si kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 3.M3-Gerektiğinde polise destek veririm

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	6	4.3	4.3
Katılmıyorum	8	5.7	9.9
Kararsızım	11	7.8	17.7
Katılıyorum	38	27.0	44.7
Kesinlikle Katılıyorum	78	55.3	100.0
Toplam	141	100.0	

Tablo 3’de “M3-Gerektiğinde polise destek veririm” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %4.3’ü kesinlikle katılmıyorum, %5.7’si katılmıyorum, %7.8’i kararsızım, %27’si katılıyorum ve %55.3’ü kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 4.M4-Polisin genel olarak imajı olumludur

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	14	9.9	9.9
Katılmıyorum	14	9.9	19.9
Kararsızım	21	14.9	34.8
Katılıyorum	47	33.3	68.1
Kesinlikle Katılıyorum	45	31.9	100.0
Toplam	141	100.0	

Tablo 4’de “M4-Polisin genel olarak imajı olumludur” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %9.9’ı kesinlikle katılmıyorum, %9.9’ı katılmıyorum, %14.9’u kararsızım, %33.3’ü katılıyorum ve %31.9’u kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 5.M5-Polislik kolay bir meslektir

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	60	42.6	42.6
Katılmıyorum	49	34.8	77.3
Kararsızım	16	11.3	88.7
Katılıyorum	13	9.2	97.9
Kesinlikle Katılıyorum	3	2.1	100.0
Toplam	141	100.0	

Tablo 5’te “M5-Polislik kolay bir meslektir” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %42.6’sı kesinlikle katılmıyorum, %34.8’i katılmıyorum, %11.3’ü kararsızım, %9.2’si katılıyorum ve %2.1’i kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 6.M6-Polislik saygın ve itibarlı bir meslektir

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	6	4.3	4.3
Katılmıyorum	9	6.4	10.6
Kararsızım	17	12.1	22.7
Katılıyorum	48	34.0	56.7
Kesinlikle Katılıyorum	61	43.3	100.0
Toplam	141	100.0	

Tablo 6’de “M6-Polislik saygın ve itibarlı bir meslektir” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %4.3’ü kesinlikle katılmıyorum, %6.4’ü katılmıyorum, %12.1’i kararsızım, %34’ü katılıyorum ve %43.3’ü kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 7.M7-Polislik hiç bir şey olamayanların tercih ettiği meslektir

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	50	35.5	35.5
Katılmıyorum	43	30.5	66.0
Kararsızım	20	14.2	80.1
Katılıyorum	19	13.5	93.6
Kesinlikle Katılıyorum	9	6.4	100.0
Toplam	141	100.0	

Tablo 7’de “M7-Polislik hiç bir şey olamayanların tercih ettiği meslektir” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %35.5’i kesinlikle katılmıyorum, %30.5’i katılmıyorum, %14.2’si kararsızım, %13.5’i katılıyorum ve %6.4’ü kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 8.M8-Çocuğumun polis olmasını isterim

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	29	20.6	20.6
Katılmıyorum	16	11.3	31.9
Kararsızım	43	30.5	62.4
Katılıyorum	26	18.4	80.9
Kesinlikle Katılıyorum	27	19.1	100.0
Toplam	141	100.0	

Tablo 8’de “M8-Çocuğumun polis olmasını isterim” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %20.6’sı kesinlikle katılmıyorum, %11.3’ü katılmıyorum, %30.5’i kararsızım, %18.4’ü katılıyorum ve %19.1’i kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 9. M9-Polisin görevini yaparken adil ve tarafsız olduğunu düşünüyorum

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	18	12.8	12.8
Katılmıyorum	21	14.9	27.7
Kararsızım	35	24.8	52.5
Katılıyorum	38	27.0	79.4
Kesinlikle Katılıyorum	29	20.6	100.0
Toplam	141	100.0	

Tablo 9’da “M9-Polisin görevini yaparken adil ve tarafsız olduğunu düşünüyorum” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %12.8’i kesinlikle katılmıyorum, %14.9’u katılmıyorum, %24.8’i kararsızım, %27’si katılıyorum ve %20.6’sı kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 10. M10-Polis işkence ve kötü muamele yapmaz

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	21	14.9	14.9
Katılmıyorum	14	9.9	24.8
Kararsızım	30	21.3	46.1
Katılıyorum	44	31.2	77.3
Kesinlikle Katılıyorum	32	22.7	100.0
Toplam	141	100.0	

Tablo 10’da “M10-Polis işkence ve kötü muamele yapmaz” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %14.9’u kesinlikle katılmıyorum, %9.9’u katılmıyorum, %21.3’ü kararsızım, %31.2’si katılıyorum ve %22.7’si kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 11. M11-Polisler rüşvet almazlar

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	18	12.8	12.8
Katılmıyorum	18	12.8	25.5
Kararsızım	38	27.0	52.5
Katılıyorum	35	24.8	77.3
Kesinlikle Katılıyorum	32	22.7	100.0
Toplam	141	100.0	

Tablo 11’de “Polisler rüşvet almazlar” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %12.8’i kesinlikle katılmıyorum, %12.8’i katılmıyorum, %27’si kararsızım, %24.8’i katılıyorum ve %22.7’si kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 12. M12-Polisler kendilerini halkın üstünde görmekte-dirler

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	37	26.2	26.2
Katılmıyorum	28	19.9	46.1
Kararsızım	29	20.6	66.7
Katılıyorum	32	22.7	89.4
Kesinlikle Katılıyorum	15	10.6	100.0
Toplam	141	100.0	

Tablo 12’de “M12-Polisler kendilerini halkın üstünde görmekte-dirler” maddesine ait frekans ve yüzdeler yer almaktadır. Katılımcıların %26.2’si kesinlikle katılmıyorum, %19.9’u katılmıyorum, %20.6’sı kararsızım, %22.7’si katılıyorum ve %10.6’sı kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 13. M13-Emniyet teşkilatı personeli eğitimidir

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	13	9.2	9.3
Katılmıyorum	9	6.4	15.7
Kararsızım	26	18.4	34.3
Katılıyorum	54	38.3	72.9
Kesinlikle Katılıyorum	38	27.0	100.0
Toplam	140	99.3	

Tablo 13’de “M13-Emniyet teşkilatı personeli eğitimidir” maddesine ait frekans ve yüzdeler yer almaktadır. Katılımcıların %9.2’si kesinlikle katılmıyorum, %6.4’ü katılmıyorum, %18.4’ü kararsızım, %38.3’ü katılıyorum ve %27’si kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 14. M14-Emniyet teşkilatı en güvenilir kurumdur

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	15	10.6	10.6
Katılmıyorum	8	5.7	16.3
Kararsızım	26	18.4	34.8
Katılıyorum	48	34.0	68.8
Kesinlikle Katılıyorum	44	31.2	100.0
Toplam	141	100.0	

Tablo 14’de “M14-Emniyet teşkilatı en güvenilir kurumdur” maddesine ait frekans ve yüzdeler yer almaktadır. Katılımcıların %10.6’sı kesinlikle katılmıyorum, %5.7’si katılmıyorum, %18.4’ü kararsızım, %34’ü katılıyorum ve %31.2’si kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 15. M15-Medya polisi kötü göstermektedir

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	10	7.1	7.1
Katılmıyorum	32	22.7	29.8
Kararsızım	41	29.1	58.9
Katılıyorum	39	27.7	86.5
Kesinlikle Katılıyorum	19	13.5	100.0
Toplam	141	100.0	

Tablo 15’de “M15-Medya polisi kötü göstermektedir” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %7.1’i kesinlikle katılmıyorum, %22.7’si katılmıyorum, %29.1’i kararsızım, %27.7’si katılıyorum ve %13.5’i kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 16. M16-TV dizileri polisi olduğundan farklı göstermektedir (olumlu)

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	6	4.3	4.3
Katılmıyorum	15	10.6	14.9
Kararsızım	32	22.7	37.6
Katılıyorum	56	39.7	77.3
Kesinlikle Katılıyorum	32	22.7	100.0
Toplam	141	100.0	

Tablo 16’da “M16-TV dizileri polisi olduğundan farklı göstermektedir (olumlu)” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %4.3’ü kesinlikle katılmıyorum, %10.6’sı katılmıyorum, %22.7’si kararsızım, %39.7’si katılıyorum ve %22.7’si kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 17. M17-TV dizileri polise olan sempatiyi artırır

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	3	2.1	2.1
Katılmıyorum	11	7.8	9.9
Kararsızım	22	15.6	25.5
Katılıyorum	75	53.2	78.7
Kesinlikle Katılıyorum	30	21.3	100.0
Toplam	141	100.0	

Tablo 17’de “M17-TV dizileri polise olan sempatiyi artırır” maddesine ait frekans ve yüzdelere yer almaktadır. Katılımcıların %2.1’i kesinlikle katılmıyorum, %7.8’i katılmıyorum, %15.6’sı kararsızım, %53.2’si katılıyorum ve %21.3’ü kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 18. M18-Polisiye diziler arttıkça polis olma isteği de artmaktadır

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	6	4.3	4.3
Katılmıyorum	14	9.9	14.2
Kararsızım	15	10.6	24.8
Katılıyorum	65	46.1	70.9
Kesinlikle Katılıyorum	41	29.1	100.0
Toplam	141	100.0	

Tablo 18’de “M18-Polisiye diziler arttıkça polis olma isteği de artmaktadır” maddesine ait frekans ve yüzdeler yer almaktadır. Katılımcıların %4.3’ü kesinlikle katılmıyorum, %9.9’u katılmıyorum, %10.6’sı kararsızım, %46.1’i katılıyorum ve %29.1’i kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 19. M19-Polislerin dizilerdeki gibi olmasını istiyorum

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	13	9.2	9.2
Katılmıyorum	30	21.3	30.5
Kararsızım	33	23.4	53.9
Katılıyorum	42	29.8	83.7
Kesinlikle Katılıyorum	23	16.3	100.0
Toplam	141	100.0	

Tablo 19’da “M19-Polislerin dizilerdeki gibi olmasını istiyorum” maddesine ait frekans ve yüzdeler yer almaktadır. Katılımcıların %9.2’si kesinlikle katılmıyorum, %21.3’ü katılmıyorum, %23.4’ü kararsızım, %29.8’i katılıyorum ve %16.3’ü kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

Tablo 20. M20-Polisiye dizilerden sonra polislere bakış açım değişti

	Frekans	Yüzde	Yığılmalı Yüzde
Kesinlikle Katılmıyorum	17	12.1	12.1
Katılmıyorum	46	32.6	44.7
Kararsızım	35	24.8	69.5
Katılıyorum	29	20.6	90.1
Kesinlikle Katılıyorum	14	9.9	100.0
Toplam	141	100.0	

Tablo 20’de “M20-Polisiye dizilerden sonra polislere bakış açım değişti” maddesine ait frekans ve yüzdeler yer almaktadır. Katılımcıların %12.1’i kesinlikle katılmıyorum, %32.6’sı katılmıyorum, %24.8’i kararsızım, %20.6’sı katılıyorum ve %9.9’u kesinlikle katılıyorum seçeneğini işaretlemişlerdir.

2) Maddelere ait tanımlayıcı istatistikler

Bu bölümde her bir maddeye ait ortalama, standart sapma, basıklık (kurtosis) ve çarpıklık (skewness) değerlerini içeren tanımlayıcı istatistikler yer almaktadır.

Tablo 21. Maddelere ilişkin tanımlayıcı istatistikler

	n	Ort	Ss	Çarpıklık	Basıklık
M1. Genel olarak polise güveniyorum	141	3.74	1.24	-0.81	-0.32
M2. Polise saygı duyuyorum	141	4.13	1.12	-1.47	1.51
M3. Gerekğinde polise destek veririm	141	4.23	1.09	-1.54	1.68
M4. Polisin genel olarak imajı olumludur	141	3.67	1.29	-0.79	-0.46
M5. Polislik kolay bir meslektir	141	1.94	1.05	1.07	0.41
M6. Polislik saygın ve itibarlı bir meslektir	141	4.06	1.09	-1.21	0.86
M7. Polislik hiç bir şey olamayanların tercih ettiği meslektir	141	2.25	1.25	0.74	-0.54
M8. Çocuğumun polis olmasını isterim	141	3.04	1.38	-0.11	-1.12
M9. Polisin görevini yaparken adil ve tarafsız olduğunu düşünüyorum	141	3.28	1.30	-0.31	-0.95
M10. Polis işkence ve kötü muamele yapmaz	141	3.37	1.34	-0.50	-0.87
M11. Polisler rüşvet almazlar	141	3.32	1.31	-0.34	-0.91
M12. Polisler kendilerini halkın üstünde görmektedirler	141	2.72	1.35	0.14	-1.24
M13. Emniyet teşkilatı personeli eğitilidir	140	3.68	1.21	-0.88	-0.01
M14. Emniyet teşkilatı en güvenilir kurumdur	141	3.70	1.26	-0.87	-0.17
M15. Medya polisi kötü göstermektedir	141	3.18	1.14	-0.09	-0.81
M16. TV dizileri polisi olduğundan farklı göstermektedir (olumlu)	141	3.66	1.07	-0.65	-0.13
M17. TV dizileri polise olan sempatiyi artırır	141	3.84	0.92	-0.94	0.89
M18. Polisiye diziler arttıkça polis olma isteği de artmaktadır	141	3.86	1.08	-1.03	0.48
M19. Polislerin dizilerdeki gibi olmasını istiyorum	141	3.23	1.22	-0.21	-0.95
M20. Polisiye dizilerden sonra polislere bakış açım değişti	141	2.84	1.18	0.24	-0.86

Tablo 21’de ölçek maddelere ilişkin ortalama, standart sapma, basıklık ve çarpıklık değerleri yer almaktadır. Ölçek maddelerine ilişkin ortalamalar incelendiği zaman; en yüksek ortalamanın 4.23 ortalaması ile “M3. Gerekğinde polise destek veririm” maddesine, en düşük ortalamanın ise 1.94 ortalama ile “M5. Polislik kolay bir meslektir” maddesine ait olduğu görülmektedir.

Ölçek maddelerine ilişkin basıklık ve çarpıklık değerleri incelendiği zaman; çarpıklık değerlerinin -1.54 ile 1.07 aralığında olduğu, basıklık değerlerinin ise -1.24 ile 1.68 aralığında olduğu görülmektedir. Bu değerler ölçek maddelerinin her birinin normallik varsayımını karşıladığını göstermektedir.

3) Güvenirlilik

Ölçeğin güvenirlik çalışması kapsamında iç tutarlık katsayısına (Cronbach's Alpha) bakılmıştır. Tablo 22'de görüldüğü gibi ölçeğin iç tutarlılık katsayısı 0,85 bulunmuştur. Bu değer ölçeğin yüksek derecede güvenilir olduğunu göstermektedir.

Tablo 22. Güvenirlik Değerleri

Cronbach's Alpha	n
0.851	20

4) Cinsiyetlere göre polis algısının karşılaştırılması

Bu bölümde bireylerin cinsiyetlerine göre polis algılarının farklılaşıp farklılaşmadığını öğrenmek amacıyla yapılan t testi yer almaktadır.

Tablo 23. Bireylerin cinsiyetlerine göre polis algısını araştırmak için yapılan t testi

Madde	Cinsiyet	n	\bar{x}	Ss	t	Sd	p
M1. Genel Olarak Polise Güveniyorum	Erkek	74	3.62	1.21	-1.169	139	0.24
	Kadın	67	3.86	1.27			
M2. Polise Saygı Duyuyorum	Erkek	74	4.08	1.09	-0.595	139	0.55
	Kadın	67	4.19	1.16			
M3. Gerekğinde Polise Destek Veririm	Erkek	74	4.16	1.12	-0.820	139	0.41
	Kadın	67	4.31	1.06			
M4. Polisin Genel Olarak İmajı Olumludur	Erkek	74	3.49	1.29	-1.827	139	0.07
	Kadın	67	3.88	1.26			
M5. Polislik Kolay Bir Meslektir	Erkek	74	2.13	1.08	2.404	139	0.02*
	Kadın	67	1.72	0.98			
M6. Polislik Saygın ve İtibarlı Bir Meslektir	Erkek	74	3.93	1.11	-1.423	139	0.16
	Kadın	67	4.19	1.06			
M7. Polislik Hiç Bir Şey Olamayanların Tercih Ettiği Meslektir	Erkek	74	2.42	1.19	1.718	139	0.09
	Kadın	67	2.06	1.29			
M8. Çocuğumun Polis Olmasını İsterim	Erkek	74	2.92	1.43	-1.121	139	0.26
	Kadın	67	3.18	1.31			
M9. Polisin Görevini Yaparken Adil ve Tarafsız Olduğunu Düşünüyorum	Erkek	74	3.16	1.22	-1.100	139	0.27
	Kadın	67	3.40	1.38			
M10. Polis İşkence ve Kötü Muamele Yapmaz	Erkek	74	3.23	1.34	-1.300	139	0.20
	Kadın	67	3.52	1.33			
M11. Polisler Rüşvet Almazlar	Erkek	74	3.17	1.32	-1.376	139	0.17
	Kadın	67	3.48	1.28			
M12. Polisler Kendilerini Halkın Üstünde Görmektedirler	Erkek	74	2.90	1.26	1.756	139	0.08
	Kadın	67	2.51	1.43			
M13. Emniyet Teşkilatı Personeli Eğitimlidir	Erkek	73	3.49	1.28	-1.915	138	0.06
	Kadın	67	3.88	1.09			
M14. Emniyet Teşkilatı En Güvenilir Kurumdur	Erkek	74	3.59	1.27	-0.991	139	0.32
	Kadın	67	3.81	1.26			
M15. Medya Polisi Kötü Göstermektedir	Erkek	74	3.04	1.23	-1.501	139	0.14
	Kadın	67	3.33	1.02			

M16. TV Dizileri Polisi Olduğundan Farklı Göstermektedir (olumlu)	Erkek	74	3.62	1.12	-0.439	139	0.66
	Kadın	67	3.70	1.03			
M17. TV Dizileri Polise Olan Sempatini Artırır	Erkek	74	3.74	1.03	-1.269	139	0.21
	Kadın	67	3.94	0.78			
M18. Polisiye Diziler Arttıkça Polis Olma İsteği de Artmaktadır	Erkek	74	3.72	1.07	-1.651	139	0.10
	Kadın	67	4.01	1.08			
M19. Polislerin Dizilerdeki Gibi Olmasını İstiyorum	Erkek	74	2.97	1.26	-2.651	139	0.01*
	Kadın	67	3.51	1.12			
M20. Polisiye Dizilerden Sonra Polislere Bakış Açım Değişti	Erkek	74	2.72	1.20	-1.278	139	0.20
	Kadın	67	2.97	1.15			

Tablo 23'te bireylerin cinsiyetlerine göre polis algısının farklılaşıp farklılaşmadığını araştırmak için yapılan t testi bulunmaktadır. Ölçekte yer alan 20 maddeden her biri cinsiyete göre ayrı ayrı analiz edilmiştir.

Yapılan analiz sonucunda "M5. Polislik Kolay Bir Meslektir" maddesinde cinsiyetlere göre anlamlı farklılık olduğu görülmektedir ($t_{(139)}=2.404$, $p<0.05$). Cinsiyetlere ilişkin ortalamalar incelendiği zaman, erkeklerin ($\bar{x}=2.13$), kadınlara göre ($\bar{x}=1.72$) göre polislik mesleğini anlamlı oranda daha kolay buldukları görülmektedir.

Bunun yanında "M19. Polislerin Dizilerdeki Gibi Olmasını İstiyorum" maddesinde de cinsiyete göre anlamlı farklılık görülmektedir ($t_{(139)}=-2.651$, $p<0.05$). Cinsiyetlere ilişkin ortalamalar incelendiği zaman, kadınların ($\bar{x}=3.51$) erkeklere ($\bar{x}=2.97$) göre, polislik mesleğinin dizilerdeki gibi olmasını anlamlı oranda daha fazla istedikleri görülmektedir.

Ölçekte yer alan diğer maddelerde cinsiyetlere göre anlamlı farklılık görülmemektedir ($p>0.05$)

5) Yaş göre polis algısının karşılaştırılması

Bu bölümde bireylerin yaş gruplarına göre polis algılarının farklılaşıp farklılaşmadığını öğrenmek amacıyla yapılan t testi ve Anova yer almaktadır.

Tablo 24. Yaş gruplarına göre polis algısını karşılaştırmak için yapılan t testi

Madde	Yaş	n	Ort	Ss	t	Sd	p
M1. Genel Olarak Polise Güveniyorum	20 +	78	3.76	1.19	0.20	139	0.84
	17-19	63	3.71	1.31			
M2. Polise Saygı Duyuyorum	20 +	78	4.14	1.04	0.07	139	0.94
	17-19	63	4.13	1.22			
M3. Gerektiğinde Polise Destek Veririm	20 +	78	4.26	1.09	0.27	139	0.79
	17-19	63	4.21	1.11			
M4. Polisin Genel Olarak İmajı Olumludur	20 +	78	3.62	1.29	-0.60	139	0.55
	17-19	63	3.75	1.29			
M5. Polislik Kolay Bir Meslektir	20 +	78	1.73	0.88	-2.64	139	0.01*
	17-19	63	2.19	1.19			
M6. Polislik Saygın ve İtibarlı Bir Meslektir	20 +	78	4.13	1.02	0.86	139	0.39
	17-19	63	3.97	1.18			
M7. Polislik Hiç Bir Şey Olamayanların Tercih Ettiği Meslektir	20 +	78	2.31	1.15	0.63	139	0.53
	17-19	63	2.17	1.36			
M8. Çocuğumun Polis Olmasını İsterim	20 +	78	2.97	1.32	-0.65	139	0.51
	17-19	63	3.13	1.45			
M9. Polisin Görevini Yaparken Adil ve Tarafsız Olduğunu Düşünüyorum	20 +	78	3.23	1.19	-0.46	139	0.64
	17-19	63	3.33	1.43			
M10. Polis İşkence ve Kötü Muamele Yapmaz	20 +	78	3.45	1.34	0.79	139	0.43
	17-19	63	3.27	1.33			
M11. Polisler Rüşvet Almazlar	20 +	78	3.36	1.26	0.40	139	0.69
	17-19	63	3.27	1.37			
M12. Polisler Kendilerini Halkın Üstünde Görmektedirler	20 +	78	2.76	1.26	0.39	139	0.70
	17-19	63	2.67	1.47			
	20 +	77	3.64	1.16	-0.46	138	0.65

M13. Emniyet Teşkilatı Personeli Eğitimlidir	17-19	63	3.73	1.27			
M14. Emniyet Teşkilatı En Güvenilir Kurumdur	20 +	78	3.73	1.15	0.37	139	0.71
	17-19	63	3.65	1.40			
M15. Medya Polisi Kötü Göstermektedir	20 +	78	3.18	1.16	0.02	139	0.98
	17-19	63	3.17	1.13			
M16. TV Dizileri Polisi Olduğundan Farklı Göstermektedir (olumlu)	20 +	78	3.72	1.04	0.72	139	0.47
	17-19	63	3.59	1.12			
M17. TV Dizileri Polise Olan Sempatini Artırır	20 +	78	3.87	0.89	0.50	139	0.62
	17-19	63	3.79	0.97			
M18. Polisiye Diziler Arttıkça Polis Olma İsteği de Artmaktadır	20 +	78	3.83	0.97	-0.30	139	0.76
	17-19	63	3.89	1.21			
M19. Polislerin Dizilerdeki Gibi Olmasını İstiyorum	20 +	78	3.04	1.20	-2.06	139	0.04*
	17-19	63	3.46	1.22			
M20. Polisiye Dizilerden Sonra Polislere Bakış Açım Değişti	20 +	78	2.72	1.14	-1.33	139	0.18
	17-19	63	2.98	1.22			

Tablo 24'te bireylerin yaş gruplarına göre polis algısının farklılaşıp farklılaşmadığını araştırmak için yapılan t testi bulunmaktadır. Ölçekte yer alan 20 maddeden her biri yaş gruplarına göre ayrı ayrı analiz edilmiştir.

Yapılan analiz sonucunda "M5. Polislik Kolay Bir Meslektir" maddesinde yaş gruplarına göre anlamlı farklılık olduğu görülmektedir ($t_{(139)}=-2.64$, $p<0.05$). Yaş gruplarına ilişkin ortalamalar incelendiği zaman, 17-19 yaş arasındaki bireylerin ($\bar{x}=2.19$), 20 yaş ve üstü bireylere ($\bar{x}=1.73$) göre polislik mesleğini anlamlı oranda daha kolay buldukları görülmektedir.

Bunun yanında "M19. Polislerin Dizilerdeki Gibi Olmasını İstiyorum" maddesinde de yaş gruplarına göre anlamlı farklılık görülmektedir ($t_{(139)}=-2.06$, $p<0.05$). Yaş gruplarına ilişkin ortalamalar incelendiği zaman, 17-19 yaş arasındaki bireylerin ($\bar{x}=3.46$) 20 yaş ve üstü bireylere ($\bar{x}=3.04$) göre, polislik mesleğinin dizilerdeki gibi olmasını anlamlı oranda daha fazla istedikleri görülmektedir.

Ölçekte yer alan diğer maddelerde yaş gruplarına göre anlamlı farklılık görülmemektedir ($p>0.05$).

Bu bölümde bireylerin yaş gruplarına göre polis algılarının farklılaşıp farklılaşmadığını öğrenmek amacıyla yapılan ANOVA yer almaktadır.

Tablo 25. "M1-Genel olarak polise güveniyorum" maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M1. Genel Olarak Polise Güveniyorum	17 yaş (1)	34	3.82	1.22
	18 yaş (2)	13	3.31	1.55
	19 yaş (3)	16	3.81	1.33
	20 yaş (4)	15	3.33	1.40
	21 yaş ve üstü (5)	63	3.86	1.12
	Toplam	141	3.74	1.24

Tablo 25'de "M1-Genel olarak polise güveniyorum" maddesine ait tanımlayıcı istatistikler yer almaktadır. "M1-Genel Olarak Polise Güveniyorum" maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 3.82; 18 yaşındaki bireylerin 3.31; 19 yaşındaki bireylerin 3.81; 20 yaşındaki bireylerin 3.33 ve 21 yaş ve üstü bireylerin 3.86'dır. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 26. "M1-Genel Olarak Polise Güveniyorum" maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Yaş	Gruplar arası	6.095	4	1.52	0.991	0.41
	Grup içi	209.196	136	1.54		

Toplam	215.291	140
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Tablo 26’da yaş gruplarına göre “M1-Genel Olarak Polise Güveniyorum” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)}=0.991$; $p<.05$).

Tablo 27. “M2-Polise Saygı Duyuyorum” maddesine ait tanımlayıcı istatistikler

Yaş	n	Ort	Ss
M2. Polise Saygı Duyuyorum			
17 yaş (1)	34	4.24	1.10
18 yaş (2)	13	3.85	1.57
19 yaş (3)	16	4.13	1.20
20 yaş (4)	15	3.73	1.49
21 yaş ve üstü (5)	63	4.24	0.89
Toplam	141	4.13	1.12

Tablo 27’de “M2-Polise Saygı Duyuyorum” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M2 - Polise Saygı Duyuyorum” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 4.24; 18 yaşındaki bireylerin 3.85; 19 yaşındaki bireylerin 4.13; 20 yaşındaki bireylerin 3.73 ve 21 yaş ve üstü bireylerin 4.24’dır. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 28. “M2-Polise Saygı Duyuyorum” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
	Gruplar arası	4.518	4	1.13		
Yaş	Grup içi	171.922	136	1.26	0.893	0.47
	Toplam	176.440	140			

Tablo 28’de yaş gruplarına göre “M2-Polise Saygı Duyuyorum” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)}=0.893$; $p<.05$).

Tablo 29. “M3-Gerektiğinde Polise Destek Veririm” maddesine ait tanımlayıcı istatistikler

Yaş	n	Ort	Ss
M3. Gerektiğinde Polise Destek Veririm			
17 yaş (1)	34	4.35	0.95
18 yaş (2)	13	4.08	1.19
19 yaş (3)	16	4.00	1.37
20 yaş (4)	15	3.73	1.39
21 yaş ve üstü (5)	63	4.38	0.97
Toplam	141	4.23	1.09

Tablo 29’da “M3-Gerektiğinde Polise Destek Veririm” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M3-Gerektiğinde Polise Destek Veririm” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 4.35; 18 yaşındaki bireylerin 4.08; 19 yaşındaki bireylerin 4.00; 20 yaşındaki bireylerin 3.73 ve 21 yaş ve üstü bireylerin 4.38’dır. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 30. “M3-Gerektiğinde Polise Destek Veririm” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Yaş	Gruplar arası	6.798	4	1.70	1.440	0.22
	Grup içi	160.478	136	1.18		
	Toplam	167.277	140			

Tablo 30’da yaş gruplarına göre “M3-Gerektiğinde Polise Destek Veririm” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4, 136)}=1.440$; $p<.05$).

Tablo 31. “M4-Polisin Genel Olarak İmajı Olumludur” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M4. Polisin Genel Olarak İmajı Olumludur	17 yaş (1)	34	3.79	1.22
	18 yaş (2)	13	3.54	1.56
	19 yaş (3)	16	3.81	1.28
	20 yaş (4)	15	3.33	1.50
	21 yaş ve üstü (5)	63	3.68	1.24
	Toplam	141	3.67	1.29

Tablo 31’de “M4-Polisin Genel Olarak İmajı Olumludur” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M4-Polisin Genel Olarak İmajı Olumludur” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 3.79; 18 yaşındaki bireylerin 3.54; 19 yaşındaki bireylerin 3.81; 20 yaşındaki bireylerin 3.33 ve 21 yaş ve üstü bireylerin 3.68’dir. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 32. “M4-Polisin Genel Olarak İmajı Olumludur” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Yaş	Gruplar arası	2.782	4	0.69	0.411	0.80
	Grup içi	230.211	136	1.69		
	Toplam	232.993	140			

Tablo 32’de yaş gruplarına göre “M4-Polisin Genel Olarak İmajı Olumludur” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4, 136)}= 0.411$; $p<.05$).

Tablo 33. “M5-Polislik Kolay Bir Meslektir” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
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M5. Polislik Kolay Bir Meslektir	Bir 17 yaş (1)	34	2.12	1.20
	18 yaş (2)	13	2.85	1.14
	19 yaş (3)	16	1.81	1.05
	20 yaş (4)	15	2.07	0.96
	21 yaş ve üstü (5)	63	1.65	0.84
	Toplam	141	1.94	1.05

Tablo 33’de “M5-Polislik Kolay Bir Meslektir” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M5-Polislik Kolay Bir Meslektir” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 2.12; 18 yaşındaki bireylerin 2.85; 19 yaşındaki bireylerin 1.81; 20 yaşındaki bireylerin 2.07 ve 21 yaş ve üstü bireylerin 1.65’dir. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 34. “M5-Polislik Kolay Bir Meslektir” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p	Post-hoc
	Gruplar arası	17.516	4	4.38			
Yaş	Grup içi	136.910	136	1.01	4.350	0.002	2 > 1, 3, 4, 5 1 > 5
	Toplam	154.426	140				

Tablo 34’de yaş gruplarına göre “M5-Polislik Kolay Bir Meslektir” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre “M5-Polislik Kolay Bir Meslektir” maddesi, istatistiksel olarak anlamlı farklılık göstermektedir. ($F_{(4,136)} = 4.350$; $p < .05$). Gruplar arasındaki farklılığı görebilmek amacıyla post-hoc testlerden Tukey çoklu karşılaştırma testi yapılmıştır. Yapılan test sonucunda 18 yaşındaki ($\bar{x}=2.85$) bireylerin, 17 ($\bar{x}=2.12$), 19 ($\bar{x}=1.81$), 20 ($\bar{x}=2.07$) ve 21 ve üstü ($\bar{x}=1.65$) bireylere göre polisliği daha kolay bir meslek olarak gördüğü görülmektedir. Aynı zamanda 17 yaşındaki ($\bar{x}=2.12$) bireylerin, 21 ve üzeri ($\bar{x}=1.65$) yaştaki bireylere göre polisliği daha kolay bir meslek olarak görmektedir.

Tablo 35. “M6-Polislik Saygın ve İtibarlı Bir Meslektir” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M6. Polislik Saygın ve İtibarlı Bir Meslektir	17 yaş (1)	34	4.15	1.13
	18 yaş (2)	13	3.92	1.38
	19 yaş (3)	16	3.63	1.09
	20 yaş (4)	15	3.73	1.33
	21 yaş ve üstü (5)	63	4.22	0.92
	Toplam	141	4.06	1.094

Tablo 35’de “M6-Polislik Saygın ve İtibarlı Bir Meslektir” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M6-Polislik Saygın ve İtibarlı Bir Meslektir” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 4.15; 18 yaşındaki bireylerin 3.92; 19 yaşındaki bireylerin 3.63; 20 yaşındaki bireylerin 3.73 ve 21 yaş ve üstü bireylerin 4.22’dir. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 36. “M6-Polislik Saygın ve İtibarlı Bir Meslektir” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Yaş	Gruplar arası	6.786	4	1.70	1.435	0.23
	Grup içi	160.760	136	1.18		
	Toplam	167.546	140			

Tablo 36’de yaş gruplarına göre “M6-Polislik Saygın ve İtibarlı Bir Meslektir” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 1.435$; $p < .05$).

Tablo 37. “M7-Polislik Hiç Bir Şey Olamayanların Tercih Ettiği Meslektir” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M7. Polislik Hiç Bir Şey Olamayanların Tercih Ettiği Meslektir	17 yaş (1)	34	1.94	1.23
	18 yaş (2)	13	2.62	1.76
	19 yaş (3)	16	2.31	1.25
	20 yaş (4)	15	2.20	1.21
	21 yaş ve üstü (5)	63	2.33	1.15
	Toplam	141	2.25	1.25

Tablo 37’de “M7-Polislik Hiç Bir Şey Olamayanların Tercih Ettiği Meslektir” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M7-Polislik Hiç Bir Şey Olamayanların Tercih Ettiği Meslektir” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 1.94; 18 yaşındaki bireylerin 2.62; 19 yaşındaki bireylerin 2.31; 20 yaşındaki bireylerin 2.20 ve 21 yaş ve üstü bireylerin 2.33’dır. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 38. “M7-Polislik Hiç Bir Şey Olamayanların Tercih Ettiği Meslektir” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Yaş	Gruplar arası	5.515	4	1.38	0.881	0.48
	Grup içi	212.797	136	1.56		
	Toplam	218.312	140			

Tablo 38’de yaş gruplarına göre “M7-Polislik Hiç Bir Şey Olamayanların Tercih Ettiği Meslektir” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 0.881$; $p < .05$).

Tablo 39. “M8-Çocuğumun Polis Olmasını İsterim” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M8. Çocuğumun Olmasını İsterim	Polis 17 yaş (1)	34	3.32	1.39
	18 yaş (2)	13	2.85	1.52
	19 yaş (3)	16	2.94	1.57
	20 yaş (4)	15	2.73	1.28
	21 yaş ve üstü (5)	63	3.03	1.33
	Toplam	141	3.04	1.38

Tablo 39’de “M8-Çocuğumun Polis Olmasını İsterim” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M8 - Çocuğumun Polis Olmasını İsterim” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 3.32; 18 yaşındaki bireylerin 2.85; 19 yaşındaki bireylerin 2.94; 20 yaşındaki bireylerin 2.73 ve 21 yaş ve üstü bireylerin 3.03’dir. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 40. “M8-Çocuğumun Polis Olmasını İsterim” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Yaş	Gruplar arası	4.804	4	1.20	0.626	0.64
	Grup içi	260.941	136	1.92		
	Toplam	265.745	140			

Tablo 40’da yaş gruplarına göre “M8-Çocuğumun Polis Olmasını İsterim” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 0.626$; $p < .05$).

Tablo 41. “M9-Polisin Görevini Yaparken Adil ve Tarafsız Olduğunu Düşünüyorum” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M9. Polisin Görevini Yaparken Adil ve Tarafsız Olduğunu Düşünüyorum	17 yaş (1)	34	3.50	1.33
	18 yaş (2)	13	3.31	1.60
	19 yaş (3)	16	3.00	1.51
	20 yaş (4)	15	2.93	1.22
	21 yaş ve üstü (5)	63	3.30	1.19
	Toplam	141	3.28	1.30

Tablo 41’de “M9-Polisin Görevini Yaparken Adil ve Tarafsız Olduğunu Düşünüyorum” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M9 - Polisin Görevini Yaparken Adil ve Tarafsız Olduğunu Düşünüyorum” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 3.50; 18 yaşındaki bireylerin 3.31; 19 yaşındaki bireylerin 3.00; 20 yaşındaki bireylerin 2.93 ve 21 yaş ve üstü bireylerin 3.30’dir. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 42. “M9-Polisin Görevini Yaparken Adil ve Tarafsız Olduğunu Düşünüyorum” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Yaş	Gruplar arası	4.740	4	1.18	0.696	0.60
	Grup içi	231.472	136	1.70		
	Toplam	236.213	140			

Tablo 42’de yaş gruplarına göre “M9-Polisin Görevini Yaparken Adil ve Tarafsız Olduğunu Düşünüyorum” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 0.696$; $p < .05$).

Tablo 43. “M10-Polis İşkence ve Kötü Muamele Yapmaz” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M10. Polis İşkence ve Kötü Muamele Yapmaz	17 yaş (1)	34	3.35	1.18
	18 yaş (2)	13	3.46	1.61
	19 yaş (3)	16	2.94	1.44
	20 yaş (4)	15	3.00	1.36
	21 yaş ve üstü (5)	63	3.56	1.33
	Toplam	141	3.37	1.34

Tablo 43’de “M10-Polis İşkence ve Kötü Muamele Yapmaz” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M10-Polis İşkence ve Kötü Muamele Yapmaz” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 3.35; 18 yaşındaki bireylerin 3.46; 19 yaşındaki bireylerin 2.94; 20 yaşındaki bireylerin 3.00 ve 21 yaş ve üstü bireylerin 3.56’dır. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 44. “M10-Polis İşkence ve Kötü Muamele Yapmaz” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Yaş	Gruplar arası	7.334	4	1.83	1.024	0.40
	Grup içi	243.489	136	1.79		
	Toplam	250.823	140			

Tablo 44’de yaş gruplarına göre “M10-Polis İşkence ve Kötü Muamele Yapmaz” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 1.024$; $p < .05$).

Tablo 45. “M11-Polisler Rüşvet Almazlar” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M11. Polisler Rüşvet Almazlar	17 yaş (1)	34	3.44	1.28
	18 yaş (2)	13	2.85	1.52
	19 yaş (3)	16	3.25	1.44
	20 yaş (4)	15	2.80	1.15
	21 yaş ve üstü (5)	63	3.49	1.26
	Toplam	141	3.32	1.31

Tablo 45’de “M11-Polisler Rüşvet Almazlar” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M11-Polisler Rüşvet Almazlar” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 3.44; 18 yaşındaki bireylerin 2.85; 19 yaşındaki bireylerin 3.25; 20 yaşındaki bireylerin 2.80 ve 21 yaş ve üstü bireylerin 3.49’dır. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 46. “M11-Polisler Rüşvet Almazlar” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Yaş	Gruplar arası	9.418	4	2.35	1.397	0.24
	Grup içi	229.221	136	1.68		
	Toplam	238.638	140			

Tablo 46’da yaş gruplarına göre “M11-Polisler Rüşvet Almazlar” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 1.397$; $p < .05$).

Tablo 47. “M12-Polisler Kendilerini Halkın Üstünde Görmektedirler” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M12. Polisler Kendilerini Halkın Üstünde Görmektedirler	17 yaş (1)	34	2.32	1.36
	18 yaş (2)	13	3.15	1.72
	19 yaş (3)	16	3.00	1.37
	20 yaş (4)	15	3.13	1.19
	21 yaş ve üstü (5)	63	2.67	1.27
	Toplam	141	2.72	1.35

Tablo 47’de “M12-Polisler Kendilerini Halkın Üstünde Görmektedirler” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M12-Polisler Kendilerini Halkın Üstünde Görmektedirler” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 2.32; 18 yaşındaki bireylerin 3.15; 19 yaşındaki bireylerin 3.00; 20 yaşındaki bireylerin 3.13 ve 21 yaş ve üstü bireylerin 2.67’dır. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 48. “M12-Polisler Kendilerini Halkın Üstünde Görmektedirler” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
	Gruplar arası	11.786	4	2.95		
Yaş	Grup içi	244.867	136	1.80	1.636	0.17
	Toplam	256.652	140			

Tablo 48’te yaş gruplarına göre “M12-Polisler Kendilerini Halkın Üstünde Görmektedirler” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 1.636$; $p < .05$).

Tablo 49. “M13-Emniyet Teşkilatı Personeli Eğitimidir” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M13. Emniyet Teşkilatı Personeli Eğitimidir	17 yaş (1)	34	3.97	1.09
	18 yaş (2)	13	3.31	1.60
	19 yaş (3)	16	3.56	1.31
	20 yaş (4)	15	3.53	1.12
	21 yaş ve üstü (5)	62	3.66	1.17
	Toplam	140	3.68	1.21

Tablo 49’da “M13-Emniyet Teşkilatı Personeli Eğitimidir” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M13-Emniyet Teşkilatı Personeli Eğitimidir” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 3.97; 18 yaşındaki bireylerin 3.31; 19 yaşındaki bireylerin 3.56; 20 yaşındaki bireylerin 3.53 ve 21 yaş ve üstü bireylerin 3.66’dır. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 50. “M13-Emniyet Teşkilatı Personeli Eğitimidir” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
	Gruplar arası	5.238	4	1.31		
Yaş	Grup içi	197.298	135	1.46	0.896	0.47
	Toplam	202.536	139			

Tablo 50’de yaş gruplarına göre “M13-Emniyet Teşkilatı Personeli Eğitimidir” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 0.896$; $p < .05$).

Tablo 51. “M14-Emniyet Teşkilatı En Güvenilir Kurumdur” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M14. Emniyet Teşkilatı En Güvenilir Kurumdur	17 yaş (1)	34	4.03	1.09
	18 yaş (2)	13	3.15	1.72
	19 yaş (3)	16	3.25	1.57
	20 yaş (4)	15	3.60	1.06
	21 yaş ve üstü (5)	63	3.76	1.17
	Toplam	141	3.70	1.26

Tablo 51’de “M14-Emniyet Teşkilatı En Güvenilir Kurumdur” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M14-Emniyet Teşkilatı En Güvenilir Kurumdur” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 4.03; 18 yaşındaki bireylerin 3.15; 19 yaşındaki bireylerin 3.25; 20 yaşındaki bireylerin 3.60 ve 21 yaş ve üstü bireylerin 3.76’dır. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 52. “M14-Emniyet Teşkilatı En Güvenilir Kurumdur” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Yaş	Gruplar arası	11.195	4	2.80	1.790	0.13
	Grup içi	212.691	136	1.56		
	Toplam	223.887	140			

Tablo 52’de yaş gruplarına göre “M14-Emniyet Teşkilatı En Güvenilir Kurumdur” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 1.790$; $p < .05$).

Tablo 53. “M15-Medya Polisi Kötü Göstermektedir” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M15. Medya Polisi Kötü Göstermektedir	17 yaş (1)	34	3.26	1.08
	18 yaş (2)	13	3.15	1.21
	19 yaş (3)	16	3.00	1.21
	20 yaş (4)	15	2.80	1.21
	21 yaş ve üstü (5)	63	3.27	1.14
	Toplam	141	3.18	1.14

Tablo 53’de “M15-Medya Polisi Kötü Göstermektedir” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M15-Medya Polisi Kötü Göstermektedir” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 3.26; 18 yaşındaki bireylerin 3.15; 19 yaşındaki bireylerin 3.00; 20 yaşındaki bireylerin 2.80 ve 21 yaş ve üstü bireylerin 3.27’dır. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 54. “M15-Medya Polisi Kötü Göstermektedir” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
	Gruplar arası	3.445	4	.86		
Yaş	Grup içi	179.123	136	1.32	0.654	0.62
	Toplam	182.567	140			

Tablo 54’de yaş gruplarına göre “M15-Medya Polisi Kötü Göstermektedir” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 0.654$; $p < .05$).

Tablo 55. “M16-TV Dizileri Polisi Olduğundan Farklı Göstermektedir (olumlu)” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M16. TV Dizileri Polisi Olduğundan Farklı Göstermektedir (olumlu)	17 yaş (1)	34	3.65	1.18
	18 yaş (2)	13	3.69	1.18
	19 yaş (3)	16	3.38	0.96
	20 yaş (4)	15	3.67	1.11
	21 yaş ve üstü (5)	63	3.73	1.03
	Toplam	141	3.66	1.07

Tablo 55’de “M16-TV Dizileri Polisi Olduğundan Farklı Göstermektedir (olumlu)” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M16-TV Dizileri Polisi Olduğundan Farklı Göstermektedir (olumlu)” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 3.65; 18 yaşındaki bireylerin 3.69; 19 yaşındaki bireylerin 3.38; 20 yaşındaki bireylerin 3.67 ve 21 yaş ve üstü bireylerin 3.73’dir. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 56. “M16-TV Dizileri Polisi Olduğundan Farklı Göstermektedir (olumlu)” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
	Gruplar arası	1.630	4	0.41		
Yaş	Grup içi	160.030	136	1.18	0.346	0.85
	Toplam	161.660	140			

Tablo 56’da yaş gruplarına göre “M16-TV Dizileri Polisi Olduğundan Farklı Göstermektedir (olumlu)” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 0.346$; $p < .05$).

Tablo 57.“M17 - TV Dizileri Polise Olan Sempatiyi Artırır” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M17. TV Dizileri Polise Olan Sempatiyi Artırır	17 yaş (1)	34	3.82	1.00
	18 yaş (2)	13	3.77	1.01
	19 yaş (3)	16	3.75	0.93
	20 yaş (4)	15	3.93	0.80
	21 yaş ve üstü (5)	63	3.86	0.91
	Toplam	141	3.84	0.92

Tablo 57’de “M17-TV Dizileri Polise Olan Sempatiyi Artırır” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M17 - TV Dizileri Polise Olan Sempatiyi Artırır” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 3.82; 18 yaşındaki bireylerin 3.77; 19 yaşındaki bireylerin 3.75; 20 yaşındaki bireylerin 3.93 ve 21 yaş ve üstü bireylerin 3.86’dır. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 58. “M17 - TV Dizileri Polise Olan Sempatiyi Artırır” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Yaş	Gruplar arası	0.352	4	0.09	0.101	0.98
	Grup içi	118.896	136	0.87		
	Toplam	119.248	140			

Tablo 58’de yaş gruplarına göre “M17-TV Dizileri Polise Olan Sempatiyi Artırır” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 0.101$; $p < .05$).

Tablo 59. “M18 - Polisiye Diziler Arttıkça Polis Olma İsteği de Artmaktadır” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M18. Polisiye Diziler Arttıkça Polis Olma İsteği de Artmaktadır	17 yaş (1)	34	4.03	1.14
	18 yaş (2)	13	3.77	1.36
	19 yaş (3)	16	3.69	1.25
	20 yaş (4)	15	3.73	1.16
	21 yaş ve üstü (5)	63	3.86	0.93
	Toplam	141	3.86	1.08

Tablo 59’da “M18-Polisiye Diziler Arttıkça Polis Olma İsteği de Artmaktadır” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M18-Polisiye Diziler Arttıkça Polis Olma İsteği de Artmaktadır” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 4.03; 18 yaşındaki bireylerin 3.77; 19 yaşındaki bireylerin 3.69; 20 yaşındaki bireylerin 3.73 ve 21 yaş ve üstü bireylerin 3.86’dır. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 60. “M18-Polisiye Diziler Arttıkça Polis Olma İsteği de Artmaktadır” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
	Gruplar arası	1.800	4	0.45		
Yaş	Grup içi	161.363	136	1.19	0.379	0.82
	Toplam	163.163	140			

Tablo 60’da yaş gruplarına göre “M18-Polisiye Diziler Arttıkça Polis Olma İsteği de Artmaktadır” karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak farklılık görülmemektedir ($F_{(4,136)} = 0.379$; $p < .05$).

Tablo 61. “M19-Polislerin Dizilerdeki Gibi Olmasını İstiyorum” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M19. Polislerin Dizilerdeki Gibi Olmasını İstiyorum	17 yaş (1)	34	3.44	1.31
	18 yaş (2)	13	3.46	1.33
	19 yaş (3)	16	3.50	0.97
	20 yaş (4)	15	3.40	1.18
	21 yaş ve üstü (5)	63	2.95	1.20
	Toplam	141	3.23	1.22

Tablo 61’de “M19-Polislerin Dizilerdeki Gibi Olmasını İstiyorum” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M19-Polislerin Dizilerdeki Gibi Olmasını İstiyorum” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 3.44; 18 yaşındaki bireylerin 3.46; 19 yaşındaki bireylerin 3.50; 20 yaşındaki bireylerin 3.40 ve 21 yaş ve üstü bireylerin 2.95’dir. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 62. “M19-Polislerin Dizilerdeki Gibi Olmasını İstiyorum” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
	Gruplar arası	8.667	4	2.17		
Yaş	Grup içi	200.070	136	1.47	1.473	0.21
	Toplam	208.738	140			

Tablo 62’de yaş gruplarına göre “M19-Polislerin Dizilerdeki Gibi Olmasını İstiyorum” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 1.473$; $p < .05$).

Tablo 63. “M20-Polisiye Dizilerden Sonra Polislere Bakış Açım Değişti” maddesine ait tanımlayıcı istatistikler

	Yaş	n	Ort	Ss
M20. Polisiye Dizilerden Sonra Polislere Bakış Açım Değişti	17 yaş (1)	34	3.03	1.29
	18 yaş (2)	13	2.85	1.34
	19 yaş (3)	16	3.00	1.03
	20 yaş (4)	15	2.93	1.10
	21 yaş ve üstü (5)	63	2.67	1.15
	Toplam	141	2.84	1.18

Tablo 63’de “M20 - Polisiye Dizilerden Sonra Polislere Bakış Açım Değişti” maddesine ait tanımlayıcı istatistikler yer almaktadır. “M20-Polisiye Dizilerden Sonra Polislere Bakış Açım Değişti” maddesine ait ortalamalar incelendiği zaman, 17 yaşındaki bireylerin 3.03; 18 yaşındaki bireylerin 2.85; 19 yaşındaki bireylerin 3.00; 20 yaşındaki bireylerin 2.93 ve 21 yaş ve üstü bireylerin 2.67’dir. Ortalamalar arasında gözlenen bu farklılığın anlamlı olup olmadığını belirlemek amacıyla tek yönlü ANOVA yapılmıştır.

Tablo 64. “M20-Polisiye Dizilerden Sonra Polislere Bakış Açım Değişti” maddesine ilişkin yapılan ANOVA

	Varyansın Kaynağı	Kareler Toplamı	Sd	Kareler Ortalaması	F	p
	Gruplar arası	3.652	4	0.91		
Yaş	Grup içi	191.596	136	1.41	0.648	0.63
	Toplam	195.248	140			

Tablo 64’de yaş gruplarına göre “M20-Polisiye Dizilerden Sonra Polislere Bakış Açım Değişti” maddesini karşılaştırmak amacıyla yapılan ANOVA görülmektedir. Yapılan analiz sonucunda yaş gruplarına göre istatistiksel olarak anlamlı farklılık görülmemektedir ($F_{(4,136)} = 0.648$; $p < .05$).

Sonuç

Kitle iletişim araçlarının tümünü ifade eden genel bir kavram olan medya, izleyici üzerinde etki oluşturmaya çalışan ve hâkim ideolojiyi yaygınlaştıran etkili araçlar olarak değerlendirilmektedir. Dolayısıyla, insanlara kitlesel olarak hitap edebilmek, onları belli bir ürünün tüketimine yönlendirmek ve kendilerine sunulan belli düşünce ve görüşleri onaylamalarını sağlamak amacıyla faaliyet gösteren (Yaylagül, 2008:15) medya belli kurumların ya da belli kurumları temsil eden insanların da toplum tarafından nasıl algılanacağını belirleyebilir veya o algıyı değiştirebilir.

Türkiye’de özellikle çözüm süreci ya da Kürt açılımı olarak adlandırılan ve bir boyutu da karşılıklı eylemsizliğe dayanan dönemin başlangıcı, Gezi Parkı protestoları, 17-25 Aralık Darbe girişimi ve daha sonraki süreçte yaşanan olaylar, PKK’nın 22 Temmuz 2015 tarihinde 2 Polis Memurunu şehit etmesi ve sonrasında Türk Silahlı Kuvvetleri ile Emniyet Genel Müdürlüğünün ortaklaşa yürüttüğü temizlik/hendek operasyonları akabinde hem PKK hem DAESH terör örgütlerince son iki yılda Ankara başta olmak üzere (Gar saldırısı, Merasim sokak saldırısı, Kızılay saldırısı) İstanbul (Taksim, Sultan Ahmet, Sultangazi saldırıları) Bursa, Diyarbakır, Gaziantep, Şanlıurfa gibi illerimizde meydana gelen terör eylemleri ile son olarak Mevcut Hükümeti ve Anayasal Düzeni Yıkma amacıyla FETÖ/PDY tarafından kalkışılan 15 Temmuz Darbe girişiminin ardından, Diyarbakır gibi bu hususta stratejik öneme sahip bir şehirde üniversite eğitimine devam eden öğrencilerin, son yıllarda ülkece yaşanan olaylarda başrol oynayan kurumlardan birisi olan Emniyet Teşkilatına kısaca polise ve polisliğe bakış açısı ile televizyon dizilerinin önceki algıyı nasıl değiştirdiği yönündeki bu çalışma sonuç olarak algının düşünülenin aksine daha olumlu olduğunu, polislik ile ilgili her hangi bir önyargı olmadığını ortaya çıkartırken polisliğin dizilerdeki gibi olmasının istenildiği yönünde bir gerçeği de gözler önüne sermiştir.

Kaynakça

- Alemdar, K. ve Erdoğan, İ. (2005). Öteki kuram. Ankara: Erk Anadolu Ajansı. (2016). Özel hareket polisliği için rekor başvuru.
- Arslan, A. (2004). Medyanın toplumsal gücü. Tokat
- Arslan, M. ve Olgun, A. (2009). Üniversite öğretim elemanları ve öğrencilerinin polis ve polislik mesleği ile ilgili algılamaları: Erciyes Üniversitesi örnekleme. Polis Bilimleri dergisi. Is. 11. Vol. 2.
- Atabek, N. (1998). Gündem belirleme yaklaşımı. İstanbul Üniversitesi İletişim Fakültesi dergisi. İstanbul.
- Baran, T. ve Baran, S. (2014). Televizyon programları, sembolik tüketim ve toplumsal yansımaları. KMÜ Sosyal ve Ekonomik Araştırmaları Dergisi. Is.16.
- Büyükbaybal, C. I. (2005). Kitle iletişim araçları ve toplumsal yaşam. İstanbul Üniversitesi İletişim Fakültesi Dergisi. Is.6 vol.4.
- Demirbaş, S. ve Demir, S. B. (2014). Polise yönelik tutum ölçeği geliştirilmesi: geçerlik ve güvenirlik çalışması. International Journal of Social Science. Is.25-I
- ETK. (1937). Emniyet teşkilatı kanunu. Resmi gazete
- Gökçe, O. (2002). İletişim bilimine giriş. Ankara: Turhan
- Gülner, M. (2017). Gündem belirlemede yeni alanlar ve yaklaşımlar. 1. Uluslararası İletişimde Yeni Yönelimler Konferansı. İstanbul.
- Halil, T. (2013). Geçmişten günümüze ülke ve TBMM güvenliğinde polisin rolü.
- Kırtepe, S. (2014). Sosyo-kültürel değişim ve kitle iletişim araçları. Gaziosmanpaşa Üniversitesi yayınları.
- Kırtepe, S. (2014). Televizyon dizileri hakkında izleyici değerlendirmeleri. Gaziosmanpaşa Üniversitesi yayınları.
- Mutlu, E. (2012). Yeni Medya. E. Mutlu içinde, İletişim Sözlüğü. Ankara: Sofos.
- Nayır, F. (2015). Bilimsel araştırma yöntemleri: Gerçek dünya araştırmaları. Ankara: Anı
- PVSK. (1934). Polis vazife ve salahiyet kanunu. Resmi gazete
- Resmi Gazete. (1934) Polis vazife ve salahiyet kanunu. Sayı:2751.
- Soydan, E. ve Alpaslan, N. (2014). Medyanın doğal afetlerdeki işlevleri. İstanbul Sosyal Bilimler Dergisi. Is.7
- TDK. (13.10.2017) www.tdk.gov.tr. adresinden alındı
- Yaylagül, L. (2006). Kitle iletişim kuramları. Ankara: Dipnot

Telling Creative Stories At School: The Complex Knowledge Structure Approach

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Abstract

This paper presents, from both the theoretical and practical points of view, an educational project conducted at the Department of Computer Science, Systems and Communication of the Milano-Bicocca University in collaboration with secondary schools of Milan and its province. The project was devoted involving students to reflect about creativity needed to solve complex problems. Storytelling and case-based reasoning has been adopted, respectively, as the conceptual and computational tools to reach this aim. The CKS-Net framework was used as the didactic platform.

Introduction

Knowledge is an important asset of enterprises and many methodologies have been proposed to acquire and represent experiential knowledge, like CommonKADS (Shreiber, Wielinga, de Hoog, Akkermans, & Van de Velde 1994) and MIKE (Angele & Studer, 1998). Anyway, these methodologies are devoted to manage structured knowledge through the definition of well defined and formalized knowledge models. Unfortunately, there are a lot of fields and problems which cannot be described by standard and general methodologies, since their structures are so complex that it isn't possible to create a model of the involved knowledge.

In this context, a very promising subject of investigation concerns the adoption of Case Based Reasoning (CBR) (Kolodner, 1993) methodology as a very suitable paradigm to deal with complex knowledge structures. It has been applied to many research areas (Muñoz-Avila, Gupta, Aha, & Nau, 2002; Watson, 2002b, 2002a) and it results to be the most natural approach for many research projects characterized by episodic knowledge, since it allows to find a solution to a new problem (i.e. the *case*) by the adaptation of solutions adopted in the past to solve the most similar problems to the current one.

The key aspects of a Case Based application are the *structure of the case* and the *nature of the similarity* among cases. The structure of the case must define what kind of attributes has to be adopted to describe problems, in order to allow the comparison among them. The nature of the similarity must define a criterion, that can be a function (i.e. similarity function) or something more complex like a similarity metric (Finnie & Sun, 2002), to compare cases according to their attributes, in order to determine what are the most similar past problems to the current one.

The definition of case structure and similarity function is rather simple when the examined domains are characterized by well defined knowledge: in such situations, the classical K-Nearest Neighbor based on the Euclidean Distance is sufficient to compare cases having a fixed and unchangeable structure. Unfortunately, there exist a lot of situations in which the structure of the case is not unique, since it depends on the context in which it is analyzed and more sophisticated similarity metrics than the K-Nearest Neighbor algorithm could be necessary to compare them. The aim of the paper is to describe a conceptual and computational framework for the management of collective creativity in decision-making processes, that cannot always be captured exploiting traditional methodologies for the development of knowledge-based systems. Such knowledge typically concerns informal groups of people working and living within organizations, called Communities of Practice (CoPs) (Wenger, 1998) as well as organizations with a low level of technicality, like e.g. Small and Medium enterprises (SME).

Given the importance of SMEs in the global economy, especially in Europe, there has been a great deal of research in the Knowledge Management (KM) context, both from the theoretical and the practical standpoint to support SMEs in their day to day activities and to join SME networks. The main KM issues that have been recognized for SMEs are:

- their significant technological gaps with respect to wider organizations. Several technological solutions have been proposed in KM literature to enhance networking and knowledge sharing within

collaborative communities (see KNOW-CONSTRUCT project (Soares, Simões, Silva, & Madureira, 2006) as an example);

- their vulnerability in terms of loss of key personnel, as a consequence of their small size (Handzic, 2004). The limited dimensions of SMEs, that undoubtedly is a benefit from the agility perspective, may in fact cause the lack of a shared structured framework for company experiential knowledge collection and management.

In this paper we mainly refer to the latter issue and we present *Complex Knowledge Structures (CKS)*, a framework for the representation and management of creativity based on the integration of storytelling (Atkinson, 1998) and Case Based Reasoning methodologies. Storytelling is a short narration through which an individual describes an experience on a specific theme (Bruner, 1991). Storytelling can be considered an effective way to capitalize the knowledge that is produced from the daily working activities within organizations (Kleiner & Roth, 1997). Knowledge Management can profitably exploit storytelling as a way to make explicit the individual experiences, skills and competencies, to promote the negotiation processes through dialogues among people involved, to support the reification of new knowledge in order to make it available for the future and to help newcomers in the learning process about his/her job through the analysis of the problem-solving strategies and social context represented by the stories. In order to improve knowledge formalization and sharing within SMEs, CKS models problem-solving situations, solutions and outcomes into a CKS-Base that can be incrementally enriched with new experiences and managed according to a CBR strategy.

As an example of CKS application, we present here a Work Experience Scheme Project conducted at the Department of Computer Science, Systems and Communication of the University of Milan Bicocca in collaboration with many secondary schools of Milan and its province. The project, called “Let’s cook with the case based reasoning”, aimed at enabling students to involve students in understanding how creativity can be computationally captured (Gervais, 2009) through the storytelling conceptual paradigm. The students were invited to reflect on and solve a concrete problem, quite easily understandable by them given their age and skills: how to organize a dinner tackling in a creative way possible critical situations, like the lack of an fundamental ingredient, the disposition of people around the table, and so on.

Methodology

The Report to UNESCO by International Commission on Education (Delors, 1996) emphasises the role of learning in the new millennium. Learning in this sense means resource, possibility for every human being to realise itself, and not only compulsory education, training, acquisition of competencies, expertise, abilities or skills. Today learning throughout life is a necessity for individuals to participate in the knowledge society and economy, it’s a fundamental strategy. Adult Education asserts as a new man’s right, it finds its fundament and its aim in acknowledging value of every person to whom it must be warranted the opportunity to properly express itself along the life-span development.

This perspective of education as a life long process upsets time and modality of learning: All people can be protagonist of their own life, choices and iter. In this sense the main purpose of educational processes is the promotion of person’s integral health, in all contexts in which he/she lives: In the family, at work, in the local community. A democratic development of every Country would be possible only if education will be a right -not a privilege- during the whole life span development (Alberici, 1998). All people should have opportunity to know their own capabilities and best exploit them. It’s necessary to enable adults to become actors of their own development throughout life (Lengrand, 1970), resources for their own life project and for community.

Contemporary socio-cultural context supports the idea of knowledge acquisition and management, not only as development of Organisation, policy, methods of knowledge diffusion, but also as a community’s benefit. Starting from these considerations, we reflect about the concept of continuous learning within organizations and how to support it. In particular, we focus the attention on learning by doing paradigm.

Learning by Doing is based on well known psycho-pedagogical theories, like cognitivism and behaviourism, which are devoted to point out the role of practice in humans’ intellectual growth and knowledge improvement. In particular, this kind of learning methodology refuses the typical idea that concepts are more fundamental than experience and, consequently, that only a solid set of theoretical notions allows to accomplish a given task in a complete and correct way. Learning by doing methodology states that the learning process is the result of a continuous interaction between theory and practice, between experimental periods and theoretical elaboration moments. Learning by doing can be articulated into four distinct steps (Figure 1), where practical phases (i.e. *Concrete Experience* and *Experimentation*) are alternated with theoretical ones (i.e. *Observation and Reflection* and *Creation of Abstract Concepts*): starting from some kind of experience, this experience originates a mind activity that aims to understand the phenomenon; this step ends when a relation between the experience and its

results (typically a cause-effect relation) is discovered that can be generalized to a category of experiences similar to the observed phenomenon. The result is a learned lesson that is applicable to new situations which will eventually occur in the future.

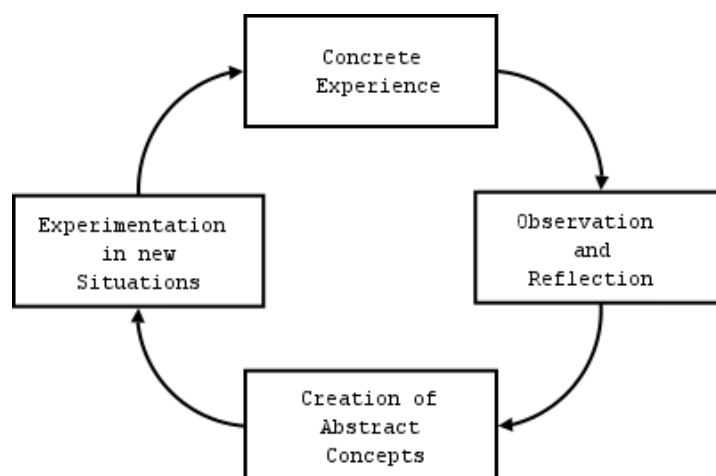


Figure 1: the four steps in learning by doing

In our framework, a *concrete experience* can be represented by a story, which represents a decision making process about a problem to be solved. This story should give to a newcomer an idea of how a critical situation could be tackled, according to the knowledge owned by experts. Moreover, it could give indications about who could help him/her in case of need.

Stories can be archived as cases according to the case-based reasoning (CBR) paradigm. Case Based Reasoning is an Artificial Intelligence method to design knowledge management systems, which is based on the principle that “similar problems have similar solutions”. For this reason, a case based system doesn’t require a complete and consistent knowledge model to work, since its effectiveness in finding a good problem solving strategy depends typically on how a problem is described. Thus, CBR is particularly suitable to adopt when domains to tackle are characterized by episodic knowledge and it has been widely used in the past to build decision support systems in domain like finance (Sartori et al, 2016), weather forecasting (Hansen and Riordan, 2001), traffic control (Gomide and Nakamiti, 1996), and so on.

A case, as shown in Figure 2, is a complete representation of a complex problem and it is generally made of three components: *description*, *solution* and *outcome* (Kolodner, 1993). The main aim of CBR is finding solutions to new problems through the comparison of it with similar problems solved in the past, as shown in Figure 3, which represents the well known 4R’s cycle by Aamodt and Plaza (2004): the comparison is made according to a retrieval algorithm working on problem features specified in the *description* component. When an old problem similar to the current one is *retrieved*, its solution is *reused* as a solving method for the new problem. The solution can be then *revised* in order to fit completely the new problem description and finally *retained* in the case base to become a sort of new lesson learned. In the retained case, the outcome component gives an evaluation about the effectiveness of the proposed solution in solving the problem. In this way, new cases (i.e. stories) can be continuously created and stored to be used in the future, building up a memory of all experiences that can be used as newcomer training tool.

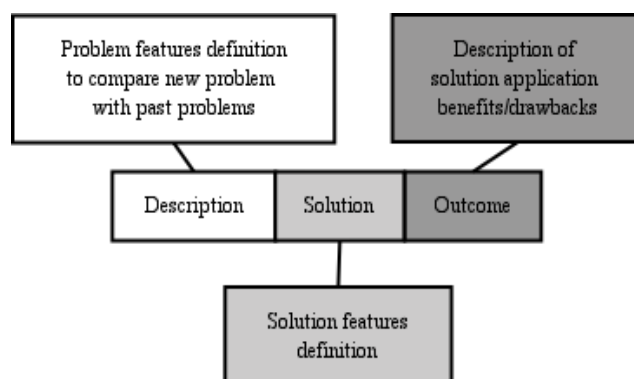


Figure 2: Case structure

Starting from concrete experiences newcomers can learn decision making processes adopted within the organization they are introducing quicker than studying manuals or attending courses. Moreover, the comparison between their own problem solving strategy and the organization one, represented by the collection of stories, stimulates the generalization of problems and consequently the reflection about general problem solving methods, possibly reducing the time period to make the newcomers able to find effective solutions.

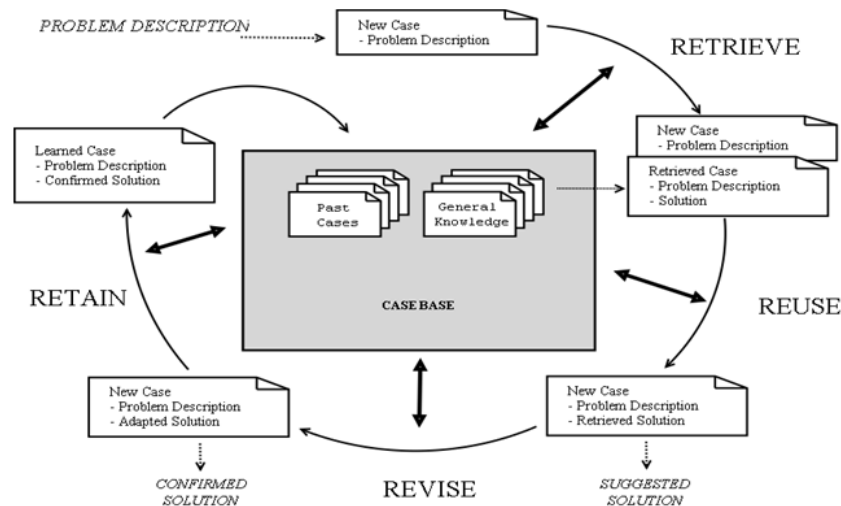


Figure 3: The 4R's cycle for CBR system development

CBR is one of the most suitable Artificial Intelligence methods to deal with learning by doing (Sartori et al, 2010), due to the perfect match between their cycles of life. In particular:

- The *description of a new case* can be a way to represent *experimentation in new situations*, since the aim of CBR is to solve a new problem exploiting old solutions to similar problems. Thus, a new case is the attempt to apply past experiences to a new concrete situation in order to validate a problem solving strategy, as the experimentation in new situations is a way in the learning by doing context to test the generation of abstract concepts starting from already validated concrete experiences;
- A retrieved case in the case base represents a concrete experience in the learning by doing framework;
- Retrieval, reuse and revise are the CBR phases during which a solution to a new problem is found and reused by comparison with similar past problems and then adapted to fit completely the critical situation defined by problem description. Thus, they can be exploited to model the theoretical steps of learning by doing methodology (i.e. Observation/Reflection and Creation of abstract concepts), through which a newcomer finds a general way to tackle a problem starting from a set of existing examples;
- Finally, the retained case in the CBR paradigm is the completion of the initial problem to be solved with the optimal solution obtained at the end of the CBR cycle, thus it represents a new instance of the initial experimentation in new situations.

Moreover, since the concept of story can be used to describe both a case in the CBR paradigm and a concrete experience in the learning by doing methodology, in our opinion, storytelling is the optimal connection between a case-based support to the development of training systems for newcomers and the learning by doing context.

Creative Stories In The Cbr Paradigm: The Cks-Net Framework

Robert E. Franken (2007) defines creativity as “*the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves and others*”. People become creative due to their needs to tackle new, modified or complex situation, to communicate ideas and values or solving problems. Franken argues that creativity arises from the capability to think in a different way with respect to the common sense, being able to generate new possibilities and/or alternatives.

For Robert W. Weisberg (2010), the word *creative* can be referred to both novel products of value and the person(s) working on it, focusing on the fact that the novelty of a product is necessary but not sufficient to state it is creative too, since it must also have value or be appropriate to the cognitive demands of the situation.

A very detailed analysis of creativity and creative people comes from Psychology. For example, Mihaly Csikszentmihalyi (1997) observes that the term creativity is very often associated to people who think unusually, being interesting and stimulating for other groups of persons as well as people who study the world in novel and original ways or individuals capable to produce important changes in our culture. According to the concepts above,

Csikszentmihalyi defines creativity “any act, idea, or product that changes an existing domain, or that transforms an existing domain into a new one [...] What counts is whether the novelty he or she produces is accepted for inclusion in the domain.”

An interesting point of view is offered by Linda Naimann¹, who distinguishes between imagination and creativity: “I define creativity as the act of turning new and imaginative ideas into reality. Creativity involves two processes: thinking, then producing. Innovation is the production or implementation of an idea. If you have ideas, but don’t act on them, you are imaginative but not creative. According to this definition, creativity is strictly related to innovation, defined as² “using new ideas or applying current thinking in fundamentally different ways that result in significant change.”

The last definition is very close to how Knowledge Management has interpreted the term creativity; in a fundamental paper David Gurteen (1998) gives very clear definitions of knowledge, creativity, innovation and the relationship existing among them through the discipline of Knowledge Management: “Creativity and innovation concern the process of creating and applying new knowledge. [...] Knowledge Management, however, is a new discipline and creativity and innovation need to be thought about in this new context.”. As Linda Naimann, Gurteen says that creativity and innovation are complementary: the generation of new ideas (i.e. creativity) needs a way to put them into action (i.e. innovation). On the other hand, no innovation is possible without the existence of an idea. As a consequence, existing knowledge is required to start the process (i.e. how is it possible to put into action an idea?) as well as the generation of new knowledge as the process output (i.e. what is the result of an idea application to a given context?). From the conceptual perspective, *dialogue* is indicated as the most suitable paradigm to take care of creativity in the Knowledge Management area: “In dialogue you prefer a certain position but do not cling to it. You are ready to listen to others. Your mindset is one not of ‘convincing others that your way is right’, but of asking what can I learn from others.” As a consequence, the natural technological support for this kind of creativity management is the adoption of *groupware* approach: “Groupware is coming of age with the advent of INet technologies [...] and its groupware – the bringing of people together across time and space – that combined with new ways of thinking is transforming the way that we work.”

From the conceptual point of view, *storytelling* has been universally recognized as a very good starting point. As reported by S. Denning (2011), storytelling build trust, unlock passion, overcomes hierarchies due to its intrinsically collaborative nature and its capability to flatten the communication among people (or communities). A story is a narrative account of a real or imagined event or events. Within the storytelling community, a story is more generally agreed to be a specific structure of narrative with a specific style and set of characters and which includes a sense of completeness. Through this sharing of experience stories allow to pass on accumulated wisdom, beliefs, and values. Stories explain how things are, why they are, and the different roles and purposes involved. Stories are the building blocks of knowledge, the foundation of memory and learning. In the Knowledge Management literature (Bhardwaj & Monin, 2006), stories are often considered as very profitable tools to make explicit tacit knowledge, with the possibility to exploit them in the process of generating collective creativity from individual creativity.

From the computational point of view *Case Based Reasoning* is one of the most suitable paradigm to deal with creativity (Sartori, 2017). As reported above, the relationship between storytelling and CBR has been already analyzed in the past: in this approach, the story is the conceptual tool through which a tacit knowledge frame, for example a portion of a problem solving strategy, is made explicit.

As pointed out in the previous section, this schema perfectly fits the 4R’s cycle for the development of CBR applications: the case structure can be adopted as an approximation of a story representing the narration of a complete problem solving strategy adopted by an individual during an innovative solution generation; the collection of all the cases produced by an organization, i.e. the *case base*, can be thought as an approximation of all the stories produced by their members in their problem solving activities.

The CKS-Net framework has been designed and implemented according to the following principles:

- creativity is the result of a negotiation process inside a community of people. This community is composed by experts and users interested in their capability to solve a problem. The community lives for a short period of time, starting when a problem arises and finishing when a solution to the problem is found;
- the negotiation process must be represented as story, clearly identifying the problem, the solution adopted and the benefits or drawbacks obtained by the application of the solution;
- the case structure defined to computationally describe the story must be variable according to the different perspectives under which a problem can be considered;
- the similarity measure to compare stories should work on heterogeneous case structures.

¹ Available <https://www.creativityatwork.com/2014/02/17/what-is-creativity/>, last access 2018/08/20

² Definition from the IBM Global Innovation Study, 2006

To take care of the points above in the design of a case-based application is not trivial; one of the principles of the CBR approach is that *similar problems have similar solutions* if the problems are characterized by *homogeneous* descriptions. This principle cannot be completely satisfied in the design of a framework for supporting innovation: an innovative solution to a problem could be derived from different contexts, according to the heterogeneous nature of the fields the community members come from. Tec as structure chosen for representing problems in CKS-Net is the graphical one. As a consequence, the retrieval algorithm must be properly thought, in order to give plausible results in the comparison of problems.

The design phase of the framework for the management of creative stories has started with the analysis of the nature of the knowledge involved: *know-how* knowledge, related to the way a community solves a problem, and *social* knowledge, related to the communications among the members of the community involved in the problem solution. Both of them should be potentially considered in the case structure. Moreover, the problem solving activity should be viewed as a sort of bridge between the description of the problem and the reasons why solving that problem is crucial. The result of the analysis has been the definition of the *Complex Knowledge Structure* (CKS) as a mean to acquire and represent in a uniform fashion both the experiential and social knowledge involved in a problem solving process.

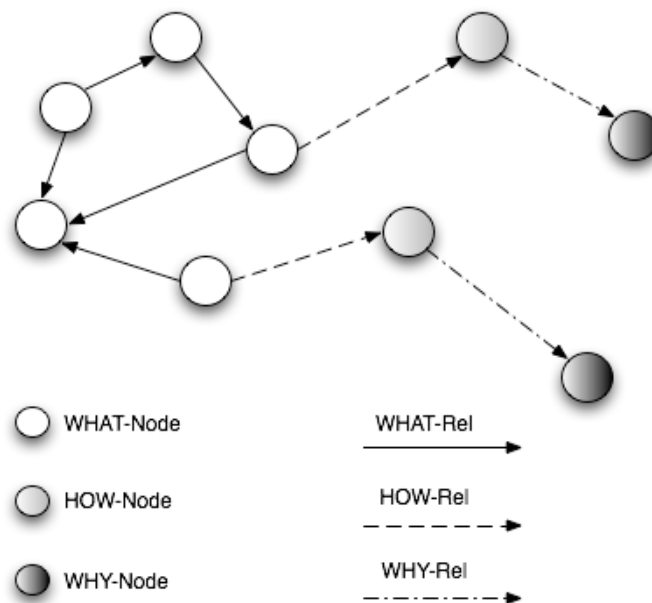


Figure 4: Graphical representation of Complex Knowledge Structures (CKS)

In this sense, a Complex Knowledge Structure can be considered as a mean to describe the narration of a story represented by a problem solving process. CKSs are represented by means of *graphs* (see **Figure 4**), whose *nodes* represent entities involved in problem solving process and are bounded by direct and labelled edges (each edge is an instance of a relationship holding between two entities). Further details about the CKS-Net framework are out of the paper scope: they can be found in (Sartori, 2017).

Case Study

In this paper, we present a Work Experience Scheme Project conducted at the Department of Computer Science, Systems and Communication of the University of Milan Bicocca in collaboration with many secondary schools of Milan and its province. The project, called *Let's cook with the case based reasoning*, aimed at enabling students to reflect about solving complex problems in a creative way. Ten students attending the last two years of the secondary schools were involved in the project, selected on the basis of their motivations. They were invited to discuss about a typical configuration problem in the CBR domain, the definition of lunch or dinner. This problem can be tackled from different points of view, ranging from the meal preparation to the disposition of invited people around the table. In particular, we have focused on the meal preparation: a group of three students worked on appetizers, a group of three students worked on main courses and the last group of four students worked on desserts. First of all, they build up a case base of recipes from opportune knowledge sources, like cooking books and internet blogs: at the end of this step, we obtain a collection of 236 solved cases (105 appetizer, 115 main courses and 116 desserts).

Then, they were answered to think about possible classes of problems that needed a creative solution: to this scope, they tried to retrieve knowledge from the same knowledge sources. They were able to find two main classes of problems:

- the lack of one or more ingredients and their substitution with others to preserve final meal characteristics (e.g. pleasant taste);
- the attempt to modify the recipe to obtain new characteristics of the final meal;

The students formalized such problems as 89 new cases without solution.

Then CKS-Net was asked to find solution to solve the problems, looking for similar problems in the case base and exploiting past solution to derive new ones.

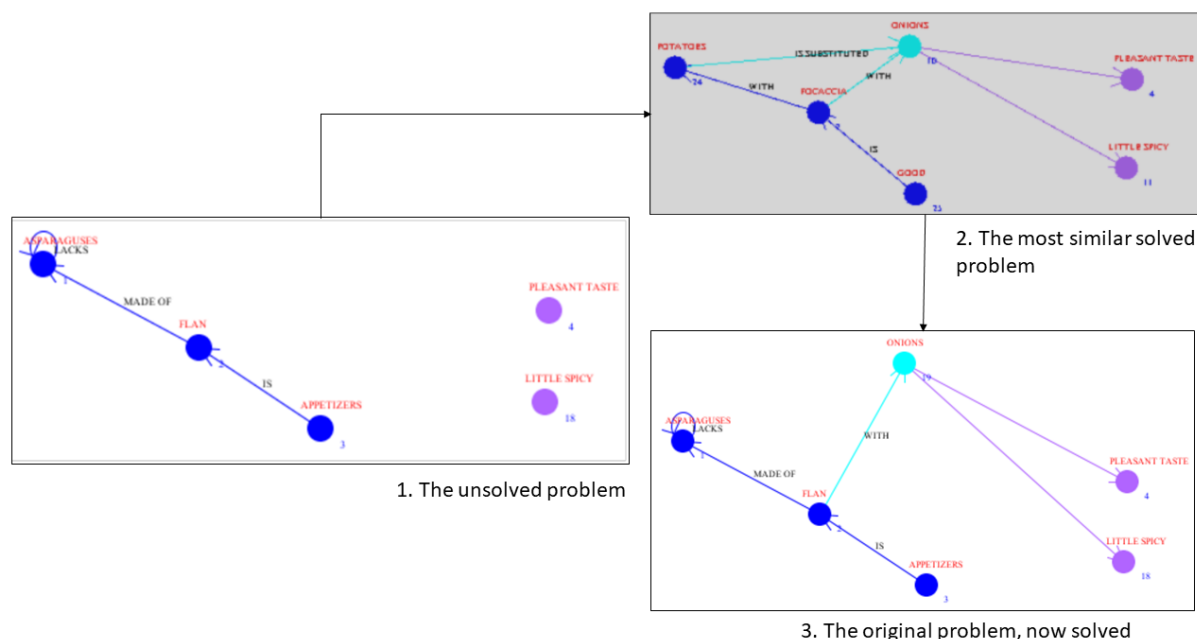


Figure 5: An example of story in CKS-Net

As an example, Figure 5 shows a story about the solution of a missing ingredient in an appetizers, that is and asparagus flan. The problem concerns (step 1. In the figure) the lack of asparagus, and the user must replace them in order to preserve *pleasant taste* and *little spicy* characteristics of the original recipe. The CKS-Net system retrieve the most similar past problem form the case base (step 2. In the figure): the interesting point is that such case represents a *main course*, that is a *potatoes focaccia*. Anyway, the system was able to recognize that the problem represented by it was similar to the current one; in particular, the lack of potatoes with the necessity to substitute them with another ingredient capable to preserve the pleasant taste and little spicy features. Thus, the system reuses the solution adopted in the past to suggest the replacement of asparagus with *onions*. In this sense, and according to the definitions of creativity given above, the story depicted in the figure can be defined a *creative solution to a complex problem*.

At the end of the project, 69 of the initial 89 problem were solved in a good way, for a total 77.5 % percentage of success; the students declared their full interest in the project and they stated their availability for repeating the experience at a deeper level.

Conclusions

This paper has presented a framework to support learning by doing and creativity within different kinds of groups, like communities of practice or more formal knowledge structures acting in SMEs or wider organizations; this framework is based on the integration of storytelling and case based reasoning methodologies.

Storytelling has been chosen due to its capability of taking care of different kinds of knowledge in the description of working experiences and presenting important pieces of expertise to newcomers in wide organizations.

On the other hand, case based reasoning is one of the most suitable Artificial Intelligence paradigms to deal with episodic and heterogeneous knowledge and consequently, in our opinion, it is probably the best approach to manage unstructured narrations about expertise and problem solving strategies. In order to test the effectiveness of our approach, its application in the context of the *Let's cook with case based reasoning* educational project has been briefly introduced: the project has confirmed the capability of our approach to find innovative solutions in

creative contexts and suggested the future works, in particular the integration of CKS-Net in the KAFKA framework (Sartori and Melen, 2017) for the development of a complete environment to support knowledge engineering in complex domains.

References

- Aamodt, A., & Plaza, E. (1994, March). Case-based reasoning: Foundational issues, methodological variations, and system approaches. *AI Communications*, 7(1), 39–59.
- Alberici, A. (1998). Towards the Learning Society: an Italian perspective. In: Holford J., Jarvis P., Colin G., International Perspective On Lifelong Learning. London: Kogan Page Press.
- Atkinson, R., (1998). The Life Story Interview, Sage University Papers Series on Qualitative Research Methods, vol. 44, SAGE Publications, Thousand Oaks, CA.
- Bhardwaj M. Monin J. (2006). Tacit to explicit: an interplay shaping organization knowledge. *Journal of Knowledge Management*, 10(3), 72–85. 10.1108/13673270610670867
- Bruner, J. (1991). The narrative construction of reality. *Critical Inquiry*, 18, 1–21.
- Csikszentmihályi M. (1997). Creativity: flow and the psychology of discovery and invention. New York, NY: Harper Perennial.
- Denning S. (2011). The leader's guide to storytelling: Mastering the art and discipline of business narrative. New York, NY: John Wiley & Sons.
- Delors, J., et al. (1996). *Learning: the Treasure within*, International Commission on Education for the 21st Century report to UNESCO. Paris: UNESCO Press.
- Finnie, G., & Sun, Z. (2002). Similarity and metrics in case-based reasoning. *International Journal on Intelligent Systems*, 17(3), 273–285.
- Franken, R. E. (2007). *Human motivation*. Thomson/Wadsworth.
- Gervás, P. (2009). Computational approaches to storytelling and creativity. *AI Magazine*, 30(3), 49.
- Cazden, C. (1986). Classroom discourse. In M.C. Wittrock (Ed.), *Handbook of research on teaching* (pp.432-463). NY:MacMillan.
- Gomide, F., Nakamiti, G. (1996) *Fuzzy Sets in Distributed Traffic Control*, 5th IEEE International Conference on Fuzzy Systems - FUZZ-IEEE 96, pp 1617-1623, New Orleans - LA - EUA.
- Gurteen D. (1998). Knowledge management and creativity. *Journal of Knowledge Management*, 9(5), 97–107.
- Handzic, M. (2004). Knowledge management in smes-practical guidelines. *CACCI*, 1, 1–11.
- Hansen, B.K., Riordan, D. (2001) *Weather Prediction Using Case-Based Reasoning and Fuzzy Set Theory*, Workshop on Soft Computing in Case-Based Reasoning, 4th International Conference on Case-Based Reasoning (ICCBRO1), Vancouver.
- J. Angele, D. L., D. Fensel, & Studer, R. (1998, October). Developing knowledge-based systems with mike. *Automated Software Engineering*, 5(4), 389–418.
- Kleiner, A., & Roth, G. (1997). How to make experience your company's best teacher. *Harvard Business Review*, 75(5), 172.
- Kolodner, J. (1993). *Case-base reasoning*. 2929 Campus Drive, Suite 260, San Mateo CA 94403: Morgan Kaufmann Publisher, Inc.
- Lengrand, P. (1970). *Introduction à l'éducation permanente*. Paris: UNESCO Press.
- Muñoz-Avila, H., Gupta, K., Aha, D. W., & Nau, D. S. (2002). Knowledge-Based Project Planning. *IJCAI Workshop on Knowledge Management and Organizational Memories*. Kluwer Academic Publishers. Retrieved from <http://www.cs.umd.edu/~nau/papers/IJCAI-KM-2001.pdf>
- Sartori, F., Bandini, S., Petraglia, F., & Svensson, J. (2010). A conceptual and computational approach to support learning and education in wide organisations. *International Journal of Entrepreneurship and Innovation Management*, 11(3), 341-355.
- Sartori, F., Mazzucchelli, A., & Di Gregorio, A. (2016). Bankruptcy forecasting using case-based reasoning: The CRePERIE approach. *Expert Systems with Applications*, 64, 400-411.
- Sartori, F. (2017). What about virtual creative knowledge environments? Definition and modelling through case-based reasoning. *International Journal of Metadata, Semantics and Ontologies*, 12(2-3), 110-123.
- Sartori, F., Melen, R. (2017). Teaching expert systems development with Kafka. *Turkish Online Journal of Educational Technology*, (Special Issue 2017), pp. 20-28.
- Schreiber, G., Wielinga, B. J., de Hoog, R., Akkermans, H., & Van de Velde, W. (1994) CommonKADS: A Comprehensive Methodology for KBS Development. *IEEE Expert* 9(6): 28-37
- Soares, A. L., Simões, D., Silva, M., & Madureira, R. (2006). Developing enterprise sponsored virtual communities: The case of a sme's knowledge community. In R. Meersman, Z. Tari, & P. Herrero (Eds.), *Otm workshops (1)* (Vol. 4277, p. 269-278). Springer.
- Watson, I. (2002a). Applying knowledge management: Techniques for building organizational memories. In *Advances in case based reasoning, Inai 2416*. Berlin: Springer Verlag.
- Watson, I. (2002b). A knowledge management initiative by uk local government. In *Knowledge management and*

- organizational memories*. Kluwer Academic Publisher.
- Weisberg R. W. (2010). The study of creativity: from genius to cognitive science. *International Journal of Cultural Policy*, 6(3), 235–253. 10.1080/10286630903111639
- Wenger, E. (1998). *Community of practice: Learning, meaning and identity*. Cambridge, MA: Cambridge University Press.

Tesi Project: New Horizons For Creating Expression Tools In Social Inclusion

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Abstract

This Poster Presentation deals with and Adaptive Personalized System for Creating Expression Tools in Social Inclusion of Learners with Verbal Communication Disabilities. The European Union project Tools of Expression for Social Inclusion TESI- focuses on social integration of people with verbal communication disorders at risk of social isolation.

It is intended to conceptualize and develop social competences (SC) related to personal, social and professional development of people with verbal communication disorders through the creation of an adaptive, affordable and easy-to-use software solution that will enrich their opportunities for personal expression.

TESI project, now in its initial stage, allows us to reflect on the role of this technology-based solution in supporting disadvantaged learners, examine the TESI conceptual model and software system and the process of validation it through a pilot study.

The Analysis Of Career Anchor In Accordance With Sex, Completion Term, Major Field Centering Around The K College In Gyeongsangnam Province, South Korea

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Abstract

The purpose of this study carried out to analysis of career anchor in accordance with sex, completion term, major field in order to provide a basic date of career anchor applied career development program for college student.

For achieving these study goals, the survey was conducted for a week(2017.12.05.~12.12) by student of K college in South Korea. 950 copies have been distributed, 719 copies have been collected, except for unreliable response, finally 639 copies were used for analysis. Subjects of this study were divided into sex, completion term and major field. Subjects were examined the average score of 8 types of career anchor for whole student, the average score of 8 types of career anchor for each group of sex, completion and major field and were analyzed the significant differences of 8 types of career anchor patterns according to three groups(sex, completion term, major field).

The brief obtained through this study were as follows.

1. There was no significant difference in sex in career anchor.
2. The anchors that showed significant difference among groups by completion were TF, CH.
3. The anchors that showed significant difference among groups by major field were GM, CH.

Based on the results of this study, it is expected that it will be useful to design for career development education program based on career anchor for college student.

The Analysis Of The Target Audience Having A Part In The Success Of An Advertising Campaign In Terms Of Their Demographic Characteristics

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Abstract

As the successful elements of an advertising campaign are taken into account, it is different from similar campaigns and has the purpose of convincing the target audience to buy that product or service. For this reason, the advertiser has to follow a process that involves striking and interesting work on a certain topic at a certain time. In this context, a successful advertising campaign in this process emerges as a result of a realistic evaluation and identification of the demographic characteristics of the target group. This study involves explaining the demographic characteristics (such as age, education, gender, place of residence, occupation, income and marital status) that are vital in defining the overall profile of the target group, which are effective in the emergence of a successful advertising campaign.

Keywords: *Target Audience, Advertising Campaign, Demographic Characteristics*

Introduction

With the emergence of the mass phenomenon of communication, the rapidity of the transmission of the message to as many persons as possible has brought about the time and space that triggered great transformations in cultural structures. The fact that massive communications are open, independent of each other, have begun to affect their level of knowledge, attitudes and attitudes (Aziz, 1982: 48). The concept of mass communication, which is the "mass communication" in English, emerges as a process in which, in the first place, antisocial social groups or individuals try to convey or convey symbolic contents to other people. Among the most important factors of this process are the fact that other people who constitute the mass have different characteristics from the ones that constitute the symbolic contents and the other is the use of technical tools in reaching the contents (Gökçe, 1993:81). The transformation that mass media has experienced in today's world, also called Network Society or Post-Industrial Society; have created significant differences in the mechanism of operation of these vehicles from the past. As a result of developments in Internet technologies and leaps in mobile technology, people are now able to communicate with each other on social networks online 24 hours a day and exist in new public spaces where they can interact and interact. As a result of the changes and transformations that technological developments cause in daily life practices, the main difference between the new mass communication channels that are developing alternatively or in parallel; all users can produce content independent of content providers and have reached the capacity to publish this content. The conceptual framework drawn by Laswell (Mutlu, 2008:178), which introduced the concept in the 1940s, is that the prominent discussion areas of mass communication in academic meetings held in the 1970s (Alemdar and Kaya, 1983:15) seen. After the periods when the owners of media tools have discussed the dimension of the capacity to establish cultural hegemony or the existence of large institutions that are necessary for content production, social networking is now the most penetrated penetration of society as a whole; the right to create content derives from the monopoly of media ownership and democratization as all the individuals have reached this capacity.

Advertising derived from the word "clamare" meaning "to call" in Latin; is generally defined as the act of promoting and adopting the people, institutions, products and services to the target group. (Karpas, 1999: 35). Advertising is the most controversial item on marketing communication. With the development of marketing, products, services, individuals and ideas are also considered within the scope of marketing, and the focus areas of advertisements are enlarged in this way. (Odabaşı and Oyman, 2002: 95) In the marketing process, advertising is accepted as part of mass communication in terms of communication. When considered by communication as an instrument of information and persuasion, It is also used to advertise a product or service in large quantities. (Gürüz, 1999: 20). Thus, it is ensured that the product or service is announced to the target masses determined by the mass media, and attitudes and behaviors are made in the desired direction.

Social responsibility campaigns can be defined as a strategic positioning and marketing tool in which various agencies use an agency or individual to connect to a related social purpose or problem within a certain period, period and movement plan to provide mutual benefits (Elden, 2009:302). Institutions contribute to a specific problem with social responsibility campaigns; At the same time, consumers have the opportunity to find an emotional connection with the media and find a place in the media. Long-term and successful campaigns; the institution is able to be news in the media and increases the likelihood of institutions in the consumer's eyes. Being news in the media about a social

campaign will attract even those who are opposed to the ad; they can create positive judgments in the minds of the institution indirectly. (Karahana, 2006: 62).

The person intended to reach the message in the communication process is one of the basic components of the target communication process, defined as a cluster or a mass. Through the mass communication, the target can be expanded from person to mass; (Mutlu, 2008: 126), which defines specific audience segments and has the definition of reaching them with the most effective channel available.

The success of an advertising campaign is assessed based on whether it can convince the target mass to meet its campaign objectives. If the advertising campaign can create a positive attitude towards the product or service on the target audience, it means fulfilling the advertising campaign objectives if it can increase the awareness or recall of that product or service. In order to achieve this, the demographic factors including age, gender, place of residence, occupation, income and marital status, which help to segment the target population according to certain numerical and livelihood characteristics, need to be recognized in the context of the basic characteristics of the target population.

Demographic Characteristics And Samples Of Target Audience

Age is creating differences in Consumer's age group consumption behavior. For example, young age group clothes, cassette, cd products, middle age group, household goods, etc. products (Gürüz, 1999: 87). In this context, advertisers should set up advertising strategies by taking into account the age range of the target masses they are aiming to call, and identify the advertising content accordingly. The perspective of the target group that sees associations of its own age group in an advertisement for a product or service will therefore also differ in its perspective and hence in its buying behavior (Elden et al., 2008:105). A consumer in the 15-20 age group tries to follow the fashion while choosing products such as clothing, plaque, and magazines. In this way age groups are important in determining consumer characteristics due to the needs and desires of different products at different ages (Yaylacı, 1999:133). In this context, advertisers should set up advertising strategies by taking into account the age range of the objects they are aiming to call, and determine the advertising content accordingly.

In an ad for a product that one child will use, attention will be drawn to the target item, and cartoon characters, animations, or the use of real animated children as protagonists will draw attention to the child's product (Elden, 2009: 369). For example; In the Pınar Kido Fruity Milk advertisement, an advertisement consisting entirely of cartoon characters was prepared and the advertisement was animated with a clown to attract children easily.

Likewise, advertisements in which the character of Lion King Max, identified with the product by Max freezes and helping children in difficult situations, play a role in real life children in the foreground can be given as examples of advertisements prepared for children. As can be seen from the examples above, these images used in advertising campaigns show that the success of the campaign for the age factor is significant at the point of describing and attracting interest.

Like age, it plays a very important role both in the purchase decision and in **gender** differences in the choice of product or service and brand. Some products or services are directed towards women by some products or services to men. Again, while men are more decisive in the purchase of certain products or services, women have a say in the purchase decision of some products or services. For this reason, it must be determined which product or service the product or service is intended for and what the gender of the person making the decision to purchase the product or service is (Kocabaş and Elden, 2006: 60).

For example; Orkid Alldays is directly proportional to the gender factor due to the fact that the target audience for the product of the use of a woman figurine (mother, business woman, friend, etc.) who wear different collective roles in social life.

It is also possible to find advertisements in which some women's products are included as final decision makers. For example; Gillette's shaver is shown as a woman who tests and certifies the utility of the product. As can be seen from the above examples, the gender roles used in advertising campaigns indicate that the success of the advertising campaign is important in terms of defining the target audience.

Another factor that has a significant effect on the buying behavior of the target group is the **marital status** of the group in which the advertisement is voiced. The marital status also increases the needs for certain products or services, and

can be influenced by specific brands or services, such as how, gender, and age group they are involved with, which brand they are heading to, which needs and desires will emerge, and which products or services it leads to more orientation.

In terms of marital status, it is possible to categorize as the target groups, young single, young married children without children, young married children with a child under the age of six, young married children with a child older than six, elderly married children with children, elderly married children without children and single widows. Especially at this distinction, the target is decisive on the life span of the kittens, the need for children to be newly married, the need for children to be newly married, and the tendency towards certain products decreases while increasing the orientation towards certain products. This creates a point for marketers to form a basis for market segmentation and sets the path for advertisers to improve the effectiveness of advertising by preparing appropriate messages for the marital status of the target audience. For example; children's toys that are not needed during the young single age are at the forefront in the young married stage of children (Odabaşı, Barış, 2002: 254).

For example; baby grooming and baby food advertising, couples waiting for babies, and young married children under six years of age, there will be no sense for young married children aged six or over. However, Akbank's Baby Fund advertisement, where a newly married and expecting baby can be found, can be seen as an advertisement for married couples who are both waiting for a new baby and younger than six.

For older married or married children, my children will be able to focus their time on travel, entertainment, and product needs so that this kind of product or service advertising will be more targeted to this audience. For example, a pair of couple and families are shown in the advertisements of Kilim Mobilya firm and the bride who answered "enough of rug" in order to ask the mother-in-law "what you want" is displayed while shopping at Rug Store. The second ad of rug focuses on the need to renew the sofa sets in the husband's house in preparation for marrying his sons. These rug ads, new married young couples, or young singles preparing for marriage take their children as the target audience for elderly married couples in preparation for marriage. As can be seen from the above examples, the marital status of the target group and the stage of marital status have an important influence on the advertising content in terms of advertisers.

It is important to note that the target groups have different cultural backgrounds, diverse elements of subcultures, lifestyles, habits, and differences in tradition-customs, where the masses in which they advertise different **geographical locations** or advertisements in different countries offer significant clues and are not eligible for creative work in creative work (Elden et al., 2008: 111).

In international or global advertisements, preparation of contents that will not be contrary to the social values and cultural structure of the addressed country, and where necessary, advertising of the local content specific to the addressed geographical area is effective on the success of the advertisement, as well as the effect of subcultures - rural, east-west etc.) should not be ignored. The place where sustains his life can differentiate his viewpoints on visual and auditory codes in the context of the advertisements, as well as his consumption and buying habits, lifestyle, increased need for certain products, and cultural influences. For this reason, advertisers should pay close attention to the perceptions of the cultural aspects that arise as well as the needs and requirements that the geographical location is active when creating the advertising content (Elden, 2009: 374-375).

For example; In addition to global advertisements being launched worldwide by companies operating in world markets such as Coca-Cola and Nike, advertisements that include Coca-Cola's unique symbols, such as the month of Ramadan, in particular the Turkish society and their values are geographically influenced by local advertisements to advertisements that are used.

However, one of the examples of advertisements in which elements such as life styles and traditions of subcultures are emphasized in the same country is Doğuş Çay commercial, in which Sinan Çetin also plays a role. In this advertisement, a peasant girl who lives in Karadeniz, a region where tea is grown in our country, says "The most beautiful tea is Doğuş Çay" with her regional Black Sheik Shivi in her local clothes.

Educational status provides useful information for determining the level of education of consumers, preparing advertising plans and strategies and implementing them effectively. Buying behaviors also vary, as a consumer with a high level of education and a consumer with a low level of education may differ in the demand for a particular product

or service. In this way, the selection of the media in which the advertising messages and messages will take place is determined, taking into account the educational situation of the consumer (Yaylıcı, 1999: 134).

A target group with a high educational level is more oriented towards technical products, complicated features and esthetically different products. In this context, it is much easier to perceive the content of a rational message that conveys these characteristics of a product with complex technical features in an ad that appeals to a target audience with a higher level of education. If an educational message is prepared for a target audience with a high level of education, the expected behavior of the target audience or the resultant emphasis on them can create a disturbing effect on the target audience at this level. They want to make their own decisions about what to do, or to arrive at themselves in the end. For this reason, the messages emphasized directly as the result should not be preferred while calling this mass (Elden, 2009: 371-372).

For example; In the Turkuaz Water advertisement, indirect benefits are used instead of direct benefits of water benefits, benefits of the consumption of the body and turquoise water properties. The advertisement, which starts with a mother who drinks a baby in a park and a turquoise water girl starts to take flowers from a child, helps the flower girl to download a little girl's kitten from the tree, this girl crosses an old uncle and her two uncles fight the two lovers, he continues to take the falling wallet of a certain person, who is a business man with a dress, and give it to him. At the end of the ad, the male character comes to the house and his wife, who sees the turquoise water at the beginning of the commercial, welcomes him. The advertisement, which ends with the slogan "Goodness is in its essence," is told that doing good will return to the person as finding goodness, and the goodness chain starts with the mother character who drinks Turkuaz Water. In this ad, there is no emphatic message about what to do directly to the target group, and the goodness, purity, health and benefit in the essence of the water are emphasized with an indirect expression.

Advertising messages to be prepared for low-level educational targets need to be prepared with clearer content that is simpler, easier to understand, leaner, and will not challenge the target audience, in contrast to the higher-level educational level. From this point of view, it will be a suitable strategy to prepare one-way message contents with direct narration instead of indirect narratives, instead of rational stimuli, where emotional stimuli and humor items are foregrounded at the end of the advertisement message (Elden, 2009: 371-372).

For example; the Ali Desidero Derby Shave Banner commercial, which struck a turning mark, has a direct expression of appeal to a lower level of education. Ali Desidero is presented as an opinion leader, approval authority, and goes to the factory where the razor blades are produced. "I see it all as educated children" seems to offer direct messages directing consumers as a person who decides on behalf of the advertisers.

The income situation, the economic situation in which the country is located, is one of the economic factors affecting the agency operations as well as all the production enterprises (Yaylıcı, 1999: 135). The state of the national economy is a loyal feature of consumer behavior. In the economy, the situation of the Gross National Rate, which is the monetary expression of goods and services created in a year, is considered as the most important data in determining per capita income. In countries where income per capita is high by increasing Gross National Rate, it is easier for people to turn to consumption. In such countries, where resources can be allocated for eliminating other necessities after eliminating their compulsory needs, management managers perform activities such as product diversification and product differentiation in a more intensive manner, and accordingly marketing and advertising activities develop and become active (Gürüz, 1999:87).

For example; Peti Danone, a food item for the child to use, is advertised in advertisements containing a vitamin that contributes to the child's healthy development of the product as well as the child being affected by the user in order for the child to be bought by his parents, rather than by his / her own paternity, and if you want your children to develop healthy as a conscious mother, you should buy Peti Danone "and parents and daughters are affected as purchasers and money is separated from family income.

Although the woman who will use the washing machine as an individual in the white goods advertisement will also need to separate a share from the family income, besides facilitating the housework of the woman, the issues such as the stability in general, economic washing programs and long- income is being tried to be shared with a common decision.

For example, Istikbal Regina Ready Kitchen is trying to make it easier to get a common share of family income through the presentation of "this is your living space" by presenting the kitchen as a living room where only the woman does not eat and eat food, where the whole family can spend time, even as a baby room .

Result

The ability of brands to sustain their lives depends on their preference by a specific target audience and the existence of loyal target kits. Advertising campaigns fulfill key objectives such as bringing brands together with target groups, informing target groups about the brand, and enabling the target group to choose brands. In fulfillment of these objectives, it is necessary to consider the demographic factors that are effective in shaping the buying behaviors of the consumers who constitute the target group to be effective in order to create ads that attract attention to the advertisement targeted by the advertisements and to ensure that the advertising content can create the desired effect.

Kaynakça

- Alemdar, A. & Kaya, R. (1983). Kitle iletişiminde temel yaklaşımlar. Ankara: Savaş Yayınevi.
- Aziz, A. (1982). Toplumsallaşma ve kitlesel iletişim. Ankara: Ankara Üniversitesi.
- Elden, M. (2009). *Reklam ve Reklamcılık*. İstanbul: Say Yayınları.
- Elden, M., Ulukök, Ö., Yeygel, S. (2008). *Şimdi Reklamlar...* (Üçüncü Baskı) İstanbul: İletişim Yayınları
- Gökçe, O. (1993). *İletişim Bilimine Giriş*. Ankara: Turhan Kitapevi.
- Gürüz, D. (1999). *Reklam yönetimi*, İzmir: Punto Yayınları.
- Karahan Ş. (2006). Sosyal Sorumluluk Kampanyalarının Tüketicilerin Satın Alma Tercihlerine Etkisi.Yüksek Lisans Tezi. Ege Üniversitesi, Sosyal Bilimler Enstitüsü, İzmir.
- Karpat, I. (1999). Bankacılık sektöründen örneklerle kurumsal reklam, İstanbul: Sahaf Yayınevi.
- Kocabaş, F., Elden, M. (2006). *Reklamcılık: Kavramlar, Kararlar, Kurumlar*. İstanbul: İletişim Yayınları.
- Mutlu, E. (2008). *İletişim sözlüğü*, Ankara: Ayraç Yayınevi.
- Odabaşı Y., Barış G. (2002). *Tüketici Davranışı*. İstanbul: Mediacat Yayınları.
- Odabaşı, Y. & Oyman, M. (2002). *Pazarlama iletişimi yönetimi*. İstanbul: MediaCat.
- Yaylacı, G. (1999). *Reklamda Stratejilerle Yönetim*. İstanbul: Alfa Yayınları.

The Applicability Of Taylor's Six-Segment Message Strategy Wheel To Brand Posts On Social Media

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Abstract

It is important for brands to be where their target audiences are. In today's media environment, the attention of the consumer is shifting to the Internet and several social media sites are enjoying a growing interest by Internet users. The rapidly evolving platform of Instagram is one of the most popular social media sites and brands are using it to reach their target audience. Brands are not only using Instagram for sponsored posts and paid partnerships, but they are also using their Instagram profiles to communicate with consumers via posting images related to the brand. This study aims to analyze brand posts on Instagram using Taylor's (1999) six-segment message strategy wheel and to explore the models applicability to the context of social media. Based on the literature on communication strategies, six-segment message strategy wheel suggests a dichotomy of transmission and ritual views, each consisting of three segments

The Balance Lifestyle Of Malay Muslim Students In Private Higher Learning Institute: A Study In Sunway University

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Abstract

The purpose of this research is to identify the profiles and balance in lifestyle of the Malay Muslim students who are the minority group in Sunway University. The research respondents consist of 70 students who are pursuing a professional accounting course in which the average academic achievement of all the subjects taken is at least 60 percentage. The collection of data is done by giving out questionnaires that were answered by the respondents. The descriptive analysis method used to identify the frequency and percentage of the balance level of the students' lifestyle consist of the relationship with Allah, relationship with other people, academic development, health management, financial and excellent time management. The research finding had determined that the Muslim students in private institute have mediocre lifestyle balance except for their relationship with Allah which is noticeably high.

1. Introduction

Private higher learning institutes have become more important to the education field in Malaysia in the recent years. The inability of public institutes to accommodate new enrolment of students has led to the establishment of private colleges and universities, in order to provide the opportunity to students who are unable to secure their places in public institutes in order to continue their studies.

However, in the effort to pursue their studies in private institutes, students especially the Muslim students will be facing various challenges and predicaments in their studies and daily lives. Some examples of the problems encountered by students in private institutes are the relationship with their friends, skipping classes, financial problems, language barriers, cultural shock and getting negatively influenced by their peers (Ng Wei Leng 1999:64). In addition to that, students in private institutes especially those in Sunway University consist of multiple races including Chinese, Indians, internationals students and the minority groups of Malay Muslim students. Thus, it is very likely for this minority group of students to be exposed with a totally different lifestyle, as compared to their school days which focused more on the all-around excellence, academically, spiritually and personality-wise. The goal of achieving the overall balance in all these aspects can be more easily executed in school because most of the students were Muslim Malays as compared to their university lives where they are given more freedom to decide on their own. Furthermore, students in private institutes come from various backgrounds, different religions, races and even countries, which force the Malay Muslim students to accept and adapt to a very different environment from their school days.

The question is, can the Malay Muslim students adapt to the university life in private institutes? Will they be able to maintain the same lifestyles from their school days? Hence, the purpose of this research is to identify the level of balance in the Malay Muslim students' lifestyles in private institutes, which consist of relationship with Allah (spiritual), relationship with other people (social), academic development, health management excellent financial and time management.

2. The Balance of Muslim Students' Lifestyle

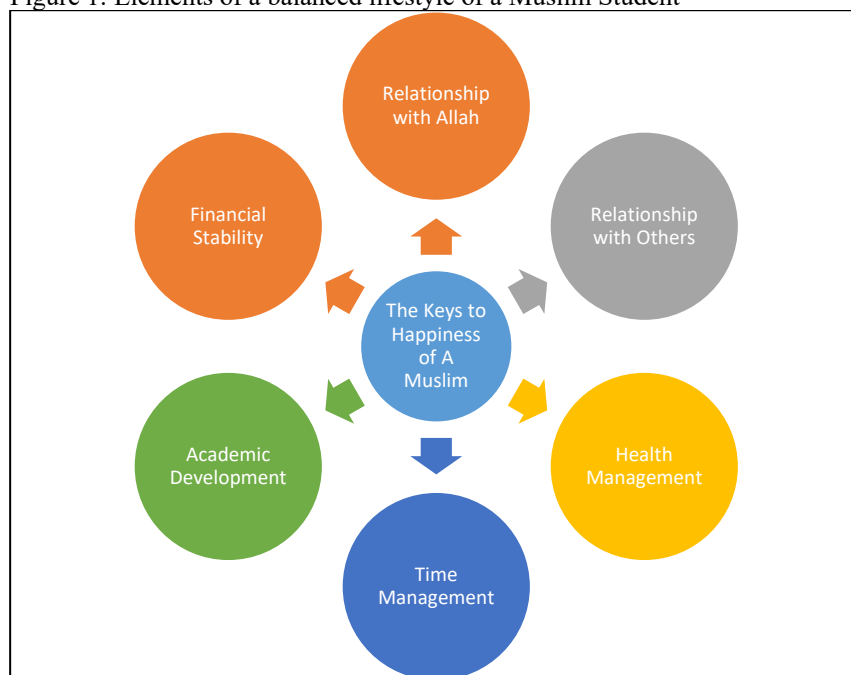
According to the dictionary (2001), balance is defined as equally distributed and unbiased. Meanwhile, lifestyle is defined by the dictionary (2001) as the way of life of a certain individual. According to Plummer (1983), lifestyle is how an individual spends his day, what he presumes as important in his life and what he thinks of his surroundings.

In the *International Encyclopaedia of the Social Sciences & Behavioural Sciences* (2001), lifestyle is defined as life patterns practiced by people who are classified into different classes within a society. The classes are measured from multiple aspects such as participation in social activities, housing areas, housing appliances, vehicles, clothes,

education, social status and behaviours. Thus, lifestyle is a life pattern of a certain individual who is identified by his activities, interests and views on something.

On the other hand, the balance of a Muslim student's lifestyle is to integrate spiritual, physical and emotional elements in his lifestyle, whether it is from the daily activities, interests or views on certain things. In discussing the balance of Muslim students' lifestyle, a few elements have to be managed in order to achieve balance between spiritual, emotional and physical aspects. The elements that drive the balance of a Muslim student's lifestyle is shown in figure 1:

Figure 1: Elements of a balanced lifestyle of a Muslim Student



The general dimension of a Muslim student's lifestyle balance is as shown in Table 1 below:

Table 1: Summary of the dimension of a Muslim student's lifestyle balance

Relationship with Allah	Performing daily prayers, reciting the Quran, fasting, believing in fate, believing in effort and reward, praying to Allah, believing in failures and never gives up (Al-Qadir:2015).
Relationship with Others	Keeping in touch with the parents, frequent meeting with the lecturers, keeping in touch with the friends, studying in groups, sharing knowledge, participating actively in clubs and society, sharing and listening to other people's problems. (Baharin Mesir, 2003)
Academic Development	Striving towards excellence, jotting down notes in lectures, managing study time properly, asking questions to the lecturers, able to understand the lesson easily, preparing before the lectures, looking for references in the library, doing daily revisions. (Norhani Bakri, 2005)
Health Management	Rarely fallen sick, maintaining dietary diet, exercise frequently, good stress management, ensure enough rest. (Yusoff al-Qaradhwai, 1998)
Financial Management	Good financial management, thrifty, do not spend money excessively (Yusoff Al-Qaradhwai, 1998), do not burden the family with financial problems. (Ng wei Ling, 1999)
Time Management	Self-study for more than 4 hours daily, sleep at least 6 hours daily, go to bed before midnight, wake up before 6 am, be in class 5 minutes early, do not waste time (Rafiq bin Abdullah 2004)

3. Research Methodology

This is a quantitative research using questionnaire as the instrument of study. Sample size consists of 70 Malay Muslim students in Sunway University who enrolled in Professional Account course which consist of CAT and ACCA programs. The data analysis is conduct using the descriptive analysis and the results of study is shown by

using table which indicates the frequency and level of percentage of Muslim students' lifestyle which contain five Likert scales. The obtained data is analyzed using the Statistical Package for Social Students (SPSS). The ranking of the Muslim students' lifestyle is categorized into high level, intermediate level and low level as shown in table 2 below:

Table 2: Level of Muslim students' lifestyle

Level of Muslim students' lifestyle	Score
Low	0-1.6
Intermediate	1.7-3.4
High	3.5-5.00

4. Results and discussions

Based on the analysis that has been done, 70 questionnaires were obtained. The discussions of result are divided into several aspects:

4.1 Students' background

From the analysis, the percentages of male students are 38.6% while the female students are 61.4%. All of them enrolled in Professional Account course. Majority of the respondents are students funded by Yayasan Peneraju scholarship. While the examination grade for the respondents are from average grade (60%-79%) which is 58.6% up to excellent grade (80%-100%) which is 41.4%.

From the respondents' school background, research analysis found that majority are from boarding school which is 72.9%, as shown in table 3:

Table 3: Respondents' previous high school

Previous School	Frequency	Percentage
Fully Boarding School	26	37.1
MRSM	25	35.7
Public high school	13	12.6
Private school	4	5.7
Public high school	2	2.9
Total	40	100

4.2 The Balance of Malay Muslim Students' Lifestyle in Sunway University

The balance of Malay Muslim students' lifestyle in Sunway University consists of relationship with Allah, relationship with others, academic development, health management, financial and time management.

4.2.1 Relationship with Allah SWT

Relationship with the Creator is one of the main characteristics that picture the lifestyle of a Muslim student. In this aspect, research has emphasized on the five daily prayers, tahajud or dhuha prayers, reciting al-Quran, fasting, to believe in fate, to believe in effort and rewards, to pray and to trust in Allah and to believe that failure is a part and parcel of life. From the analysis done, it is found out that the relationship between respondents with Allah is high that is 72.9% as shown in table 4 below. This proved that Malay Muslim students in Sunway University still emphasis on spiritual elements within themselves. This research supports the research done by Suzyliana Mamat (2016), have discovered that having close relationship with the Creator will shape spiritual intelligence and emotion of a student. As quoted by her, high emotional intelligence will develop good behaviour of the student.

Table 4: Level of respondents' relationship with Allah

Relationship with Allah	Frequency	Percentage
High	51	72.9
Moderate	19	27.1

4.2.2 Relationship with Others

Students cannot exclude themselves from human to human relationship. The relationship between human that should be done by students include maintaining the relationship with their parents, lecturers and housemates or even their classmates. Analysis done have discovered the level of relationship between respondents and other human the majority is moderate which is 58.6% compared to high level which is 41.4% as shown in table 5 shown below. This proved Muslim students in private higher education Institutions still prioritize and maintain good relationship between human. This research supports the research done by Baharin Mesir (2003) that assumes each student should have good relationship with their parents, lecturers and friends. Good relationship with other people will surely help to ease all their effort to achieve success in their studies.

Table 5: Level of respondents' relationship with others

Relationship with human	Frequency	Percentage
High	29	41.4
Moderate	41	58.6

4.2.3 Academic Development

In the aspect of academic development, this research aimed to observe on how students managed to achieve success in their studies. This includes taking lecture notes, good time management, consulted to their lecturers, making preparation before lectures, finding revision materials at the library and doing revisions every day. The result of the analysis discovered that the level of academic development mostly is moderate which is 58.6% compared to high level which is 41.4% as shown in table 6. This proved that respondents are serious when comes to their academic development. These researches supported the research done by Baharin Mesir (2003), which is a student that excelled in his studies and a student that responsible and work hard to achieve success.

Table 6: Level of academic development

Academic Development	Frequency	Percentage
High	29	41.4
Moderate	41	58.6

4.2.4 Health Management

In the aspect of health management, this study is carried out to observe how students conduct self-health management such as monitoring food and diet, exercising, being wise upon managing stress and having enough rest. Based on the performed analysis, it is found that the majority of people with medium-level of health management is 68.6% rather than the higher level which is 31.4% as shown in Table 7 below. This proves that the respondents are monitoring their health wisely. This study supports the study outcome carried out by Baharin Mesir (2003) which states that an excellent student is a student who is an expert in monitoring his/her health. This is because a fit body will definitely result in having an excellent and balanced spiritual, physical and emotion.

Table 7: Level of Health monitoring

Health Monitoring	Frequency	Percentage
High	22	31.4
Medium	48	68.6

4.2.5 Financial Management

As for the aspect of financial management, this study is carried out to observe how students manage their finance; saving, prioritizing needs rather than wants, managing finance wisely, does not bother family members with financial issues and does not bother to follow the latest trend. Based from the analysis done, it states that the level of financial management is medium, 52.9% rather than the higher level which is 47.1% as shown in Table 8 below. This also proves that the respondents are able to manage their finance wisely. This study supports the one carried out by Ooi Yoon Phaik (2002) and Misra & Mc Kean (2000) who found out that a less effective financial management is one of the causes which leads students to be stressed. However, if the student is able to manage his/her finance wisely, this condition will lessen the stress upon the students.

Table 8: Level of Financial Management

Financial management	Frequency	Percentage
High	33	47.1
Medium	37	52.9

4.2.6 Time management

From the aspect of time management, this study is carried out to observe how students manage their time wisely such as time for studying, sleeping, class attendance, revision session, updating general knowledge and carrying out the things we love or hobbies. The outcome of the study tells us that the majority level of medium time

management is 72.9% compared to the higher level which is 27.1% as shown in Table 9 below. This proves that respondents are capable of managing their time intelligently. The study supports the one carried out by Baharin Mesir (2003) which assumes that an excellent student will always be ready and is capable of managing his/her time wisely.

Table 9: Level of Time Management

Time management	Frequency	Percentage
High	19	27.1
Low	51	72.9

Conclusion

Based on the analysis conducted on the lifestyle of Muslim students in private higher learning institute found that the lifestyle of Muslim student in Sunway University is at a moderate level, in the exception of their relationship with Allah, which is at a high level. This research proves that the respondents have a balanced lifestyle. The research also found that most of the Muslim students in Sunway University were excellent students back in their high schools because majority of them came from boarding schools. In addition to that, the research also found that the students managed to achieve excellent marks in their examination in which most of them scored at least 60 percent.

Furthermore, the finding of this research also proves that the Malay Muslim students in Sunway University do not only have strength in spiritual aspects but also emphasize on their academic achievements, possess strong personalities and spiritual aspects. The all-around strengths make the students not only emotionally, mentally and physically strong, but also make them not easily influenced by surrounding external factors. This research also supports Mohd Anuar (2011), who claims students who are able to balance the spiritual, intellectual, social and physical aspects of their life will achieve excellence in higher learning institute, both public and private. In conclusion, this research has answered the question in which Muslim students in Sunway University have balanced lifestyle and are able to adapt to the private higher learning institute.

References

- Baharin Mesir, Jamaludin Mohd Yatim, Azmahani Abd Aziz, Mohd Hidayat Jamal and Muzaffar Zainal Abideen (2003). *Excellent students lifestyle in campus environment, proposal paper of the committee of Excellence students Program*. University of Technology Malaysia: Faculty of Civil Engineering.
- Beil. J Smelser and Paul B Batlers (2001). *International Encyclopaedia of the Social Sciences & Behavioural Sciences*. UK: Elsevier Science Ltd.
- Julie Pallant (2013). *SPSS survival manual: A Step by step guide to data analysis using IBM SPSS*. 5th Edition. England: Mc Graw Hill.
- Kamus Dewan (2001) Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Misra, R. and Mc Kean M. (2000). College Students Academic Stress and Its Relationship to Their Anxiety, Time Management and Leisure Satisfaction. *American Journal of Health Studies*. 16: 41-52
- Mohd Anuar Abdul Rahman and Nursharil Abdul Hamid (2011). Environmental Impact on Student Emotional Development at Faculty of Education, University of Technology Malaysia. *Journal of Education Psychology and Counselling*. Volume 1, March, pages 141-161
- Ng Wei Ling (1999). *The Lifestyle of Private College Students: A Case Study at Sunway College, Selangor*. University of Malaya: Department of Anthropology and Sociology, Academic Exercise.
- Norhani Bakri, Noor Zainab Abd Razak, Hamidah Ab. Rahman dan Aminah Hj Ahmad (2005). Cause of Poor Learning Performance Among Students from Management and Human Resource Development Faculty, University of Technology Malaysia, Johor. *Journal of Technology* 43 (E) Dis. Pp 29-44
- Ooi Yoon Phaik (2002). *Stress and Anxiety among Engineering Students and Non Engineering Students at UTM*. University of Technology Malaysia: Academic Exercise.
- Plummer, K (1983). *Documents of Life: An Introduction to the Problems and Literature of Humanistic Methods*. London, Unwin Hyman.
- Rafiqah bin Abdullah Husin (2004). *Time Management among Students: A study on undergraduate students of sciences and education (Islamic Studies) in University of Technology Malaysia*, University of Technology Malaysia: Academic Exercise.
- Suzylana Mamat (2016), Emotional Quotient among Teenagers in Islamic College and University Melaka. *Journal of Social Science*, Volume 1 2016: 115-136
- Syeikh Abdul Qadir bin Abdul Muthalib al-Mandili (2014), *The cure for heart*, Verification: Dr Abdul Basit bin Hj Abdul Rahman. Selangor: PTS Publishing House.
- Yusoff al-Qaradhawi (1998). *The Role of Values and Morals in the Islamic Economy*. Translate by Mufti Labib & Arsil Ibrahim. Kuala Lumpur: Blue T. Sdn Bhd.

The Challenges Of Faith Education Of Islam In The Formation Of Malaysian Muslim Behaviour

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Abstract

Taking a look at the data of moral collapse among Malaysian youth, the Malay Muslim youth serve as the major contributor compared to other races. According to racial division, 204 recorded cases involving the Malays, while 54 were Chinese and 47 were Indian. This has raised questions among the Malaysian scholars, especially the Muslim scholars, because the figure doesn't add up with what Islam teaches; to practice noble values and to uphold the faith. What is happening to the Muslim community in Malaysia nowadays is contrary to what a Muslim is supposed to be. Hence, this research is aim to study the status of Islamic faith education and its significance in facing the challenges of Muslim behaviour. Qualitative study is applied in this research by collecting primary and secondary data from printed materials in order to build a basic theoretical framework of the study. Obtained data from books, journals, magazines, proposals, newspapers, dissertations, theses, brochures, websites and any form of information are being referred to assist researcher to achieve the objective of the study. These forms of resources are categorized as secondary data. To analyze the data, this study is referring to the basic theory of Islamic faith in order to gain more understanding of the forms of behaviour of Muslim society in Malaysia. From the finding, the data are analyzed and evaluated whether the forms of behaviour of Muslim society in Malaysia are derived from Islamic education or otherwise. In Malaysia, the current development of Islamic education has developed its own niche in the Muslim community, as Islamic education has been taught starting from the school level until the tertiary level with the implementation of the Islamic and Asian Civilization Curriculum (TITAS). Based on the findings, researcher has found that Muslim Malaysians at least committed three forms of behavioural deviation from Islamic faith, namely the deviation of the faith through speeches, the deviation of the faith through acts and deviation of the faith through writing. This somehow has given impression that the Islamic education is incapable of being translated into life and one's behaviour. The concept of Tauhid can not be understood comprehensively so as not able to give a positive impact on life and also depicted that the Islamic faith is being separated from life. Although the Islamic education system has been implemented at every level of education, it indicates that Islamic

education seems to be needing more improvements on the quality of its learning outcomes. This is because some form of allegations of faith among Muslims in Malaysia through behaviour still exist in the society.

Introduction

Teenagers in Malaysia are the main community groups estimated to have about 60% to 70% of the population of nearly 30 million. Being an important asset for the society and nation, teenagers play a significant role to contribute to the development and progress of a nation in the future. With the growth of political, economic and social taking place rapidly, it is undeniable the teenagers in Malaysia today are struggling to get through the social dilemma and confusion of life. To name a few, the common social problems caused by today's adolescents are the free sex that starts from promiscuity, runaway teens, drug abuse, alcoholism, illegal racing and teenage involvement in crimes such as stealing, robbing, raping and murder cases. And day by day, these social problems are worsening at an alarming level.

In 1998, Malay Muslim youth served as a major contributor to moral collapse data compared to teens from other races. According to racial division, 204 recorded cases involving the Malays, while 54 were Chinese and 47 were Indian. This often become question mark amongst the Malaysian scholars, due to high percentage of moral collapse by the Malay Muslims, while Islam itself educates its people to practice righteousness and good values. Within 10 years between 1989 and 1998, the crime rates involving male teenagers increased by 35 percent, while female teenagers by 25 percent, and in 1998 itself, 6338 new cases involving adolescents were reported. To no surprise, the Malay Muslim contributed the biggest figure. Even in 2016, the Ministry of Health Malaysia revealed a total of 3,980 cases of 28.8% of 13,831 teenagers who were born out of wedlock in the age of 10 to 19 years, while the Royal Malaysia Police confirmed that 432 cases of baby dumping were reported from 2011 to June 2015. (Nurul Husna Rosidi, 2017). These data and reports depicted that the supposed identity of teenagers of Malay Muslim are slowly degrading. Thus, researcher will study the status of aqidah education and its importance in battling the challenges of Muslim behaviour.

The Study

A qualitative approach has been applied throughout the process of completing the study. During the data collection process, all the printed materials are regarded as primary and secondary data for the purpose of building a basic theoretical framework of the study. Therefore, the basic primary data that touch on the topic of Muslim's faith and background of Islam in Malaysia will be used further in the analysis so that the theoretical foundation on the basis of Islamic religious education is based. Hence the printed materials produced by experts in the field of Islamic faith are used in constructing the theoretical basis of this study. Apart from that, secondary data are obtained from books, journals, magazines, academic papers, scientific studies, dissertations, theses, pamphlets, websites and any form of information which found to be helpful are being referred to assist researcher to achieve the objectives of the study. These secondary data act as a helping hand because it allows the researcher to gain different perspectives of the study by comparing the concepts and debates among authors and authoritative researchers in the field of Islamic faith, in particular, relating to Muslims in Malaysia. In this case, the method of document analysis is being used.

To analyze the data, this study emphasizes on the basic theory of Islamic faith; the Quran and the Sunnah of the Prophet. The basic theories will be constructed based on description and details by the leading Islamic scholars. From this theory, obtained data regarding the faith and behaviour of the Malaysian Muslim community will be evaluated and analyzed.

The study applies the aqidah theoretical framework which means the belief, confidence and firm imaan cannot easily be shaken and unravelled by any influence capable of damaging either from internal (spiritual) or external aspects (physical) a person's self. Tauhid means knowing, believing, acknowledging and pledging that the God is true and right to be worshiped. Apart from Him, it is untrue and not worthy to be worshiped. Appreciation of the tauhid includes pledging with the heart, expressing it by tongue and proving by deeds. Therefore, a person who is a believer in tauhid must know, understand and live by the faith. The faith then is translated into absolute obedience through behaviour towards the teaching of Islam. In fact, the faith is a driving force for those who earnestly believe in God and keep them away from all the prohibitions of Allah ('Al-Jazairi, Abu Bakar Jabir, 1985). Thus, during the analysis process, researchers are trying to analyze the forms of behaviour of Muslim society in Malaysia. From the findings, this study will analyze and evaluate whether the forms of behaviour of Muslim society in Malaysia are derived from Islamic religious education or otherwise.

Finding

Today, it is undeniable that the development of Islamic education has gained its place in the heart of the Muslim society, as compared to the 1980s where the society overlooked the importance of Islamic education. The tahfiz

institution back then did not receive encouraging response from parents to send their children there. But as time passed, the tahfiz education system has been upgraded and equipped with better facilities and able to be at par with the academic education system. The discipline of the tahfiz education system in Malaysia has also been reviewed to meet the established standards, be it in the aqidah or co-curriculum implementation as stipulated by the religious affairs of the Selangor Islamic Religious Department (JAIS), the Department of Islamic Development Malaysia (JAKIM) and the Ministry of Education. In fact, there are also Tahfiz Institutions that integrate the discipline of memorization of al-Qur'an with the common academic system taught in regular schools in order to produce the professional huffaz who can fully remember the whole Qur'an. This progress has led Muslims to be more confident to send their children to the Tahfiz institutions to strengthen the understanding of the aqidah in the face of a challenging era. The changes made by the founders of these tahfiz institutions has contributed to curbing and reviving the Western's influences that could spoil the faith of Muslim community in Malaysia (Nor Kamariah Abdul Manaf, 2013).

Even at the tertiary education level in Malaysia, the implementation of the Islamic and Asian Civilization Curriculum (TITAS) has an important role in strengthening the aqidah of the Muslim youth comprising the students of both public and private universities. The execution of the TITAS curriculum is not only aimed at enhancing the understanding of Islamic teachings, but also a way to study the glorious history of Islamic civilization in Malaysia and Asia, thereby strengthening the aqidah of students so as not to be affected by the growing threat of liberal thinking in today's society. (Nor Hayati Fatmi Talib, 2014).

However, the practice of Islamic education and teaching systems in Malaysia are still accustomed to traditional teaching and learning methods whereby the input and explanations are solely given by teachers. This one-way teaching method is not helping the students to develop a sharp-minded thinking and curbing the freedom to ponder about religion, because the pattern of thinking, be it about ibadah, hadith, aqidah, sirah and akhlaq are centralized on teachers instead of students. The problem of teacher-centred teaching and learning need to be changed in order to be in line with the current will to attract students to learn about Islam and thus enhance the belief towards Allah S.W.T. (Zakaria Bin Abdullah, 2012; Alias Azhar, 2013, p.59-72). This has led to the emergence of some forms of religious deviation in Muslim society in Malaysia which can be categorized as follows:

1. Deviation of faith in word.

This kind of deviation takes place when a Muslim deliberately renounce matters that can invalidate the faith as per the fundamentals of ahlu Sunnah Wal Jamaah, that is to say something with a view to deny the proven nass. For example, according to Abur Hamdi Usman et. al (2016), the anti-Hadith group disregarded the Prophet Muhammad's Hadith as the second source of Islamic law that they solely depended the legal resources to be taken from the Quran. The arguments adopted by the anti-Hadith group are as follows;

- a) They claimed that the hadith as a deviation from the teachings of the Prophet Muhammad s.a.w and can not be accepted as a source of Islamic law as they were not recorded during the Prophet's lifetime
- b) Qur'an is a revelation sent down to Prophet Muhammad s.a.w through Angel Gabriel and is considered complete, perfect and detailed. Therefore, the Qur'an does not require any form of interpretation nor translation.
- c) The true teaching of God is during the lifetime of the Prophet Muhammad s.a.w as the last Prophet and brought by him is only the Qur'an and nothing else.
- d) Regarded the hadith as a historical record that may and should be examined by researchers to understand and assess the times.
- e) The expression of syahadah by the Muslims nowadays is prohibited by the Qur'an because the compulsory syahadah is only La Ila Haillallah.
- f) Refused to believe in Qada' and Qadar which is one of the most important aspects of the Pillars of Faith because it was revealed through the hadith and considered contrary to what is found in the Qur'an.
- g) The interpretation of the word al-hikmah in surah al-Baqarah verse 2 which was interpreted by al-Imam al-Syafie as Sunnah or hadith is unreasonable. They referred to the interpretation by Maulana Muhammad Ali which stated that the word al-hikmah is one of the names of the Quran. (Abur Hamdi Usman, et. al, 2017).

2. Deviation of faith through deeds.

The deviation occurs when a Muslim intentionally acts without compromising matters that is against the fundamentals of ahlu Sunnah Wal Jamaah. Among the corrupted acts according to Izhar Ariff Mohd Kashim (2016) are as follows;

- a) Performing shirk practices that can debauch the aqidah, for example the worship of ancestral spirits, feeding the occult matter during certain times, worshipping shirk things which are believed to increase the wealth, to get offsprings and to guard the property and residence.
- b) Participating in the practice of the non-Muslims through the act or speech that associates worshipping and praising other than Allah SWT. It is permissible for Muslims to engage in non-Muslim ceremonies, as long as it

is not related to religious rites such as celebratory ceremonies, provided that the ceremonies are not incorporating the illegal things in Islam, such as drinking alcohol, promiscuity, consumption of non-halal food and the likes of it.

c) Wearing garments that resembles other religions or insulting Islam, for example wearing garments that have the symbol of the cross, praising Jesus or any images and wordings that might be offensive for Islam (Wardati Mohd Saini, et. al, 2015).

3. Deviation of faith through writing.

To write something that contradicts the aqidah in conscious abandonment is assumed as deviation of faith. The dissemination of the writings are as follows:

a) Shame Writing Against Islam.

The writing can be in the form of stating Shari'a law is not in accordance with the country law to be applied to the basis of the nation's advancement. For example, the practice of sharia law can stave off the progress of a country or declaring that Islam is no longer relevant to the era of globalization of the world whereby situation of a country will not be safe if the people still practice the Shari'a law (Muhammad Qutaibah Suliman, et. al, 2105).

b) Liberalism Writing.

Liberalism is an ideology, a western philosophy and a political perspective, based on the understanding that freedom from religious guidance in the development of a country is the main foundation. Liberalism has the goal of building a liberated society with equal freedom of speech and freedom of thought for every individual. Liberalism repudiates the boundaries of ideas controlled by government and religion. The liberalism writing emphasize that the exchange of ideas must be free, individuals must not be economically exploited and reject the restrictions on individual ownership. The objective of liberal writing is to create a secular state that separates the religion interests of the individual with the interests of the state, but in a condition where the state still protects the interests of the individual and makes the principle of religion only as an individual's interest. Liberal writers aim to liberate the nation from the influence and upperhand of religion where the state has no rules and does not intervene in religious matters. The policies laid down have the meaning that the country does not prohibit or encourage a person to follow the rules of religion, any guidance made for the development of the country is based on the results of national leaders' decisions and it must be final and enshrined in the country's legislation which is believed to be a positive basis for national progress. Meanwhile, religious issues are individual problems that have been separated from the state (Haslinda Binti Hassan, 1999).

Conclusion

All forms of behaviour that have been marked as the abolition of the aqidah (deviation of faith in the form of words, deeds and writing) is a manifestation of the method of Islamic education which is in the form of text teaching without a thorough understanding and far from the appreciation of the aqidah is capable of being a driving force for every Muslim's behaviour. As a result, the Islamic knowledge is not being fully understood and failed to be translated into life and one's behaviour. To add up, with the challenges of today's technological achievement influenced by the lifestyle of materialism and secularism, the old approach of the Islamic education has made it difficult and weaken the appreciation of the Islamic faith. The concept of Tauhid cannot be grasped comprehensively so as not able to give a positive impact on life. The understanding of God or the aqidah is only understood by the Muslim community just to comply with specific deeds such as fasting, zakat and hajj only. Although the Islamic education system has been implemented at the school and tertiary level, it indicates that Islamic education is in dire need of improvements and enhancements of the quality of its learning outcomes. This is because these forms of faith deviation still exist among Muslims in Malaysia.

Acknowledgement

The authors would like to express gratitude and thanks to Universiti Kebangsaan Malaysia for the fund allocated for the research project entitled: The Development of the Current Profile of Malaysian Muslim Youth: Research on the Solution for the Fragility of Faith Problem, research code (GUP-2016-026), which resulted in the presentation and publication of this article.

References

- Abur Hamdi Usman, Rosni Wazir, Mohd Norzi Nasir, Suriani Sudi, Zanariah Ismail, Sakinah Salleh & Azman Abdul Rahman. (2016). Golongan Anti Hadis: Isu Dan Cabaran. In *Kertas Kerja Muzakarah dan Mu'tamar Hadis kali ke-1 2016*. Bangi: Institut Kajian Hadis (INHAD).
- Abur Hamdi Usman, Rosni Wazir, Zanariah Ismail. (2017). The Notion of Liberalisation On the Anti-Hadith Movement and Its Impact On Society. *Al-Irsyad: Journal of Islamic and Contemporary Issues: Desember Vol. 2(2)*, 81-94.
- 'Al-Jazairi, Abu Bakar Jabir. (1985). *Aqidah Mu'min*. Kaherah, Mesir: Darul Kitab al-Salafiyyah.

- Alias Azhar. (2013). Pendemokrasian Sistem Pendidikan Islam di Malaysia: Satu Tinjauan. *Jurnal Kajian Pendidikan: Jun 3(1)*, 59-72.
- Haslinda Binti Hassan. (1999). *Sekularisma: Sejarah kelahiran dan kesannya terhadap serangan pemikiran*. Master of Arts Thesis. Kuala Lumpur: Fakulti Sastera dan Sains Sosial, Universiti Malaya.
- Mohd Izhar Ariff Mohd Kashim. (2016, August 11). Waspada punca yang menyebabkan akidah terbatal. *Berita Harian*.
- Muhammad Qutaibah Suliman, Muhammad Inamul Hassan Muhammad Shah & Sulaiman Shakib Mohd Nor. (2105). Gugatan Akidah: Reda dengan Kekafiran. In *Prosiding Seminar Pemantapan Akidah 2015*. Fakulti Tamadun Islam, Universiti Teknologi Malaysia.
- Nor Hayati Fatmi Talib. (2014). *Penilaian Pelaksanaan Kurikulum Tamadun Islam dan Tamadun Asia (TITAS)*. Master Degree Thesis. Bangi: Universiti Kebangsaan Malaysia.
- Nor Kamariah Abdul Manaf. (2013). *Integrasi Pengajian Tahfiz Al-Quran dan Akademik di Maahad Hafiz Klang*. Master Degree Thesis. Bangi: Universiti Kebangsaan Malaysia.
- Nurul Husna Rosidi. (2017, Mei 8). Akhlak remaja Melayu semakin meruncing. *Utusan Malaysia*. Retrieved from <http://www.utusan.com.my/rencana/forum/akhlak-remaja-melayu-semakin-meruncing-1.478633>.
- Wardati Mohd Saini, Noramizah Mohd Yatim Nurin Safia Mohd Puaad, & Jimain @ Ajmain Safar. (2015). Gugatan Akidah: Hak Selain Allah swt dalam Hukum Syarak. In *Prosiding Seminar Pemantapan Akidah 2015*. Fakulti Tamadun Islam, Universiti Teknologi Malaysia.
- Zakaria Bin Abdullah. (2012). *Pengajaran dan Pembelajaran Berasaskan Pendekatan Berpusatkan Pelajar Dalam Pendidikan Islam di Sekolah Menengah Kebangsaan*. Phd Thesis. Bangi: Universiti Kebangsaan Malaysia.

The Consequences Arising from the use of Social Innovation in Small Schools of Thailand

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Abstract

Social innovation is the concept, processes, methods, or result from the creative in small school to make the change in the direction of improved effectiveness. The development model for learning and development needs of society by supporting the involvement of the society is divided into four components including 1) changes in society, 2) productivity, 3) creativity in methods, and 4) supporting the participation of society. This research aims to study the consequences arising from the use of social innovation of small schools. The methodology of the research is grounded theory research by understanding the phenomenon of social innovation for small schools from the perspective of the phenomenon and who is involved by means of a study into the field with in-depth interview, focus group discussion, documents analysis, observation, and field-note to get insight in all-round and through triangulation.

The results showed that : the consequences resulting from the use of social innovation, there are two levels: 1) The sequel to the external network, including civil society and the state to a stable, prosperous, sustainable, balanced social dimension, and equality and social justice, and 2) a sequel that takes place within the school, including cultural and creative performance, a community of creative, innovative and rich social intelligence, and quality of life and social values as well.

Keywords: *Consequences, Social Innovation, Small School, Thailand*

Introduction

Nowadays, among many technological advances and developments, we are encountering the time of rapid disruptive innovation changes that have never occurred before. Thus, small organizations with insufficient resources or limitations are able to take the challenge and make an impact in society, which corresponds to chaos theory (Boeing, 2016). This causes a change insubsystems of small organizations to affect bigger systems as in butterfly effect phenomenon (Guastello, 2013), which could stimulate sustainable growth of organizations using innovation and difference-making by participants struggling for new ways. On the other hand, we are also dealing with problems that are increasing, such as economic and social inequality, political and cultural controversy, or serious environmental problems. These problems are complicated and linked together; hence, efficient solutions require the key factor in order to creatively come up with a solution to social problems or to improve people's quality of life – that is, to develop “Social Innovation”, especially in educational system that determines to solve many problems in human society caused by cultural changes. Moreover, Thai society is likely to be an individual society (DawruwanThawinkarn, 2015). Therefore, social innovation is essential for school development to reach a goal of various, efficient, and inclusive educational reforms, which is coherent to community's potential development and school reform's goal (Gold&Brown, 2003). Additionally, the principle of the success of small schools should urge the creation of new projects that make them proud of their schools and believe that they can do different things (Ewington et al., 2008). Even though small schools have limitations, deficiencies, and many problems, some of them are trying to invent and develop innovations and administration models and manage education that is new, different, and suitable for needs. Conditions of the community's context bring cooperation from all social sectors together in order to build standard quality and unique differences to succeed in efficient and effective educational management and administration of small schools so that they can be accepted and be a good model of a good school, community, and society. This is considered challenging to the trend of changing in many dimensions, yet these schools still have courage because the heart of education is students. They are also determined to overcome their limitations, which is corresponding to McGregor (2007) that thinks many successful organizations around the world focus on the use of creativity of their staff to create an innovation in the organization and that creativity is related to every activity at work. This creativity and innovation are used widely and interchangeably. However, a concept of creativity is unique and clear, which is different from that of innovation (Howkins, 2009). That is, creativity is either an individual or a team process, whereas innovation is a process on the organization level. It is a successful use of creativity (Amabile et al., 2002) as well as a creative social innovation for small schools. In other words, concepts, process, methods, or inventions from society's creativity in small schools can improve the society effectively by enhancing thoughts, mind, and realisation, which can be developed into a learning and development model responding to the needs of the society supporting the social involvement. It can be divided into 4 compositions: 1) a change by society, 2) concrete product, 3) creative methods, and 4) support for society's participation.

Therefore, it is an issue to study the consequences caused by the use of creative social innovation for small schools from people involved. It is the research area using qualitative research, which is to seek knowledge from consideration of social phenomenon in real life in every dimension (Supang Chantavanich, 2014). It is Grounded Theory Research – a form of systematical grounded theory research by Strauss and Corbin (2015) to gain new knowledge to develop successful learning management. Furthermore, a finding found that small schools under the office of basic education have applied innovations to their learning, and some compositions and applications correspond with creative social innovation and are able to be applied in different contexts properly to develop a complete human resource – good, talented, happy, useful, generous, and smart, to be able to creatively bring happiness to mankind in the future.

Research Objectives

To study the consequences arising from the use of social innovation of small schools.

Literature Review

Consequences From The Use Of Creative Social Innovation

PrawaseWasi (2013) states that to develop a strong society using creative social innovation involves an educational system development for it is a big organization and its effects can cause changes. Creative social innovation is a concept and a process for presenting the important changes according to the needs of the community. Moreover, the usefulness of the creative social innovation is not only to increase the efficiency of the organization but also to develop the country for long high-quality life. Roger (2003) explains the consequences or impacts of creative social innovation that can change the society as follows:

- 1) to encourage value in the society
- 2) to solve problems or develop the society
- 3) to help improve people's daily routine in the community or society
- 4) to be able to give value and use effectively after comparing

Moulaert, Martinelli, Swyngedouw & Gonzalez (2005) mentioned the consequences or impacts in the social dimension of creative social innovation as follows:

- 1) respond to needs and necessities of human society
- 2) improve the society
- 3) increase social and political capacity and access to resources

Martinelli (2012) mentioned three impacts of the use of creative social innovation on the national level:

- 1) respond to the needs that human ignores from what they deserve
- 2) energize an individual or a group
- 3) improve social relationships

Kanjana Saenglimsuwan (2012) has summarized three consequences of creative social innovation as follows:

- 1) The effect of the creative social innovation to life quality is the increased capacity of the government and life quality of people from World Development Indicator database. The innovation helps reduce the mortality rate of newborn babies, increase people's longevity and potential, and improvement of state structure that is represented by Government Effectiveness and Control Corruption index.
- 2) The social innovation helps solve educational problems and start a production and development of new media as well as the development of the curriculum to increase entrance rate.
- 3) There is a study of dust in the air which affects people's health; it is concluded that the social innovation helps reduce the amount of air pollution by collecting data from World Development Indicator to compare the relationship between how much dust in the air and entrance rate. The social innovation decreases air pollution and increases entrance rate.

Additionally, Saimon (2014) talks about the consequences of the use of the social innovation which are:

- 1) Integration of cross-sectoral
- 2) New relationships
- 3) Great pro-consumption and co-production
- 4) Development from a grassroots level
- 5) Mutualism
- 6) Development of capacities and assets
- 7) Better use of assets and resources

In summary, the consequences of the social innovation are the increase of the capacities to access resources, human needs, moral, economic growth, healthier relationship, to solve corruption problem, to be a strong society, to have a better environment, to develop from grassroots level, to use resources effectively, and to produce a great product.

Research Method

This qualitative research (Chai Potisita, 2016) had three phases of data collection, as follows.

- 1) The researcher reviewed 150 documents relating to social innovation to obtain data on components of social innovation. The simple random sampling method was used to select the papers reviewed for this research.
 - 2) The researcher conducted in-depth interviews with 10 social innovation experts, including school directors, academics, and researchers involved in social innovation development.
 - 3) Data were collected from 5 small schools that had been awarded national prizes and that had been named master schools with impressive social innovations. The schools were selected using purposive sampling in order to ensure they represented the values of good social innovation within schools and to confirm that they had been able to introduce positive changes within their communities.
- The data collection process involved field data collection, decoding of the school's successful practices, interviewing school stakeholders, and summarizing the data, with the purpose of offering recommendations for the consequences arising from the use of social innovation of small schools.

Results And Discussion

Findings on the consequences arising from the use of social innovation of small schools.

1. consequences in external network

1.1 public network for society and stability

The high-quality community is enthusiastic to continuously improve itself, follow the changes, and preserve its identity. Services from the government have high-quality and good governance on all levels; people also have an opportunity to participate, which make them feel a sense of belonging and cherish it. This then builds bonds, responsibilities, and the need to work to develop the society and schools from the belief and acceptance of the organization's goals and values. They would feel that they are a part of this organization or society, and they would be willing to work to maintain their organization and reach its goals.

From such situation, it shows determination and desire to improve the society and gain people's acceptance of the organization through teamwork and everyone's involvement in order to step into the new generation of the strong, wealthy, and sustainable society.

1.2 Social balance

When using strategies to drive social innovation until it becomes successful in small schools, they can maintain as well as the community or society will balance – there are a giver, a receiver, and discipline; there are fewer problems in the society and more of creativity. Normally, a good balance of the society should bring civilization and justice to all area. Socially, there should be a balance between groups and classes – the balance that focuses on equality and prestige of human. Effective administration is a result of learning and emphasis of balance in the workplace especially the ability to manage limited resources such as budget, material, staff etc., to reach the goals through a neat process and effective use of resources.

1.3 equality and social justice

To establish equality, people with the least number opportunities should receive support the most; the ones with advantages do not have to receive as much support, but should give more to those who do not have as much as them. In today's society, equality in a political implication tells that everybody in the society is equal in every way so people can live together peacefully. Inequality is the cause of many conflicts in the society, and it is a matter that we are aware of as well as understand that inequality is natural in the society because of unequal treatment. This has to be perceived seriously as people are basically different especially their bodies, minds, emotions, statuses, and roles in the society. These differences are natural problems that prevent equality although we are naturally different. However, we, as human beings, have rights as many as others, which is an important factor when living together in the society. Furthermore, as we are in the society with the democratic government, human equality is undeniably important. Equality means equal rights to receive services from the government; thus, a state with the democratic government has a responsibility to provide equal opportunities so that the people have access to its services. However, people's basic differences are a problem to the government services access. Without a good management, the gap of the inequality will occur and it will be difficult to understand.

2. Consequences within schools

2.1 creative culture and high potential organizations

To build a social innovation, it is to put a value on organization level reflecting from behavior and attitude of the staff in the organization that encourages a development of new work. Creativity in a team is for objectives achievement of the organization, which has to be from a cultivation of creative concept and a creation of an atmosphere in a workplace that stimulates creativity. The director must encourage and support teachers and staff to willingly bring their creativities into practical use to develop an ability to become the organization of innovations – to work efficiently without too strict control.

2.2 Community of innovations and the creation of a knowledge-based society

The 21st century is an age that information travels quickly resulting in new knowledge and technology all the time. It can be called the age of a knowledge-based society. Moreover, it is also the age of the economic competition, wisdom investment, and innovation creation that do not happen only in the country but on regional and international level as well. From these changes, educational organizations and teachers are expected to play an important role in solving social problems and develop the youth to become an efficient human resource with satisfactory qualifications so that they can compete on international level. This is corresponding with National Education Act B.E. 2542, which intends to produce good, talented, and happy students. Hence, it is a challenge to improve paradigm in educational administration by managing a more efficient school administration especially in human resource development, which is considered a valuable resource. The focus is also on to raise the value of staff in the organization to become a human resource, which is the heart of the development and building a happy organization or school. This then can become a tradition of an educational organization's happiness along with a tradition of efficient work, which advantages both to an individual in a better quality of life and to the organization itself in effectiveness and productiveness of the work. It is the consequence of the cooperation of the staff within the organization – to work together with enthusiasm, love, and bond toward the organization, resulting in good work evaluation and fame. The students will also learn and benefit from the teachers who are dedicated to their work because of the happiness built in their organizations.

2.3 Quality of life and good social value

An improvement of life quality is everyone's desire as well as the society in order to live happily and peacefully together. Therefore, the improvement of life quality is a basic improvement starting from ourselves – improve the lifestyles following the changes in the future, improve mental health, control emotions to be happy and optimistic, not stressed or anxious about schools or work, gain acceptance and admiration from society, respect the sense of belonging and the need to be a part of the society, learn new skills to know and understand more, and be creative in problem solving. Thus, the improvement of life quality involves every individual, community, and society; it is necessary to build a balanced system and maintain it under social changes because a good life depends on a happy society. At the same time, an efficient society depends on quality people as well.

Conclusion

When a school uses a strategy to drive social innovation successfully, its consequences affect both the organization itself and the staff or related matter as well as the influences of the contextual and intervening conditions, which are the consequences of the use of social innovation in small schools. It is composed of the consequences toward external network which are: (1) the network of civil state for society, stability and sustainability, (2) social dimensional balance, and (3) social equality and justice. In addition, there are consequences occurring within schools themselves: (1) creative tradition and high potential organization, (2) the creation of the society and to be the community of innovation, and (3) better life quality and social value.

The consequences of the social innovation use for small schools can be applied to strengthen their strong points, improve their weak points, and for more completion of the innovation in order to be a model of an effective and efficient small school administration. This happened after the cooperation of the government and private organizations, society and individuals who have the same belief that everyone is responsible for a good educational system resulting in a network that works together to also change the social concepts and make the public realise the power and ability to help change the education from where they are. Finally, this power is believed to put pressure until a change happens in Thai educational system to truly serve the demands of Thai people.

REFERENCES

- Amabile, T. M., Mueller, J. S., Simpson, W. B., Hadley, C. N., Kramer, S. J., & Fleming, L. (2002). **Time pressure and creativity in organizations: A longitudinal field study.** Working Paper, Harvard Business School, Boston, MA.
- Boeing, G. (2016). "Visual Analysis of Nonlinear Dynamical Systems: Chaos, Fractals, Self-Similarity and the Limits of Prediction." *Systems*, 4 (4), 37.
- Chai Potisita. (2016). *Science and Arts of Qualitative Research*. 7th ed. Bangkok, Amarin Printing.
- Dawruwan Thawinkarn. (2015). *Teaching Materials : National Economic Development Plan*. Course on Policy Analysis and Educational Management, Educational administration, Faculty of Education, Khon Kaen University.
- Ewington, J., Mulford, B., Kendal, D., Edmunds, B., & Silins, H. (2008). Successful School Principalship in Small Schools. *Journal of Educational Administration*. 46(5) : 545-561.
- Gold, E., Simon, & Brown, C. (2003). Reframing Accountability for Urban Public Schools.

- The Evaluation Exchange*. 9(2):10-12.
- Guastello, S.J. (2013). *Chaos, Catastrophe, and Human Affairs: Applications of Nonlinear Dynamics to Work, Organizations, and Social Evolution*. Psychology Press: New York, USA.
- Howkins, J. (2009). *Creative Ecologies: Where Thinking Is A Proper Job*. University of Queensland Press, Australia.
- Kanjana Saenglimsuwan. (2012). Social Innovation : More value than you can imagine. *Executive Journal*. 32(3), 12-15.
- Martinelli F. (2012). *Social innovation or social exclusion ? Innovating social service in the context of a retrenching welfare state*. In Franz, H-W., Hochgerner, J. & Howaldt, J. (eds.). *Challenge Social Innovation : Potentials for Business, Social Entrepreneurship Welfare and Civil and Society*. Berlin and Heidelberg : Springer Berlin Heidelberg.
- McGregor, D. (2007). *Developing Thinking; Developing Learning*. Open University Press, England.
- Moulaert, F., Martinelli, F., Swyngedouw, E., & Gonzalez, S. (2005). Towards Alternative Model (S) of Local Innovation. *Urban Studies*. 42 (11), 1969 – 1990.
- Prawase Wasi. (2013). *Social innovation with national development*. Bangkok, Office of the Fund Health promotion.
- Rogers. Everett, M. (2003). *Diffusion of innovations*. 5th ed. New York. Free Press.
- Simon T. (2014). *Social Innovation for Public Service Excellence*. UNDP Global Center for public Service United Nation.
- Strauss, A. & Corbin, J. (2015). *Basics of qualitative research: techniques and procedures for developing grounded theory*. 4th ed. Los Angeles, CA: Sage.
- Supang Chantavanich. (2014). *Qualitative Research Methodology*. 22nd ed. Bangkok, Chulalongkorn University Press.

The Development Of Students' Desirable Characteristic For Private Elementary School

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Abstract

The desirable characteristic of students is essential as well as the knowledge that they learned from the school because the society does need not only the genius but also the good person. The study aimed to study the realistic basis and desirable characteristic of students in the perspective of teachers in private elementary school, and develop the desirable characteristic of students through action research methodology at the sample school to suit the context. The procedure was divided into two phases; phase I: studied the problems and the developmental needs of the desirable characteristic by using questionnaires; phase II: designed and developed the desirable characteristic of students based on the results from studied, conducted with focus group discussion methodology and experimentation with students. The result of this research founded that the desirable characteristic of students was increased after finished the process.

Keywords: *Desirable Characteristic, Elementary Students, Private Elementary School*

Introduction

Nowadays, the private schools have the critical role in Thai education, to manage the education level from the early childhood level to the higher education level (Office of the Private Education Commission, 2015). Thereby, the quality of education was crucial for them. The indicators that can be told about the quality were students. All academics must develop educational quality. Schools should also develop their operation and reveal their operational results to the community or stakeholders, to reassure parents and communities that they will get the best quality from the school.

Youth is the critical resource, as hope and future of the nation. The prosperity and development of the nation will be increased or not were depended on the quality of people. The present social conditions were changed regarding economic, political, social and technological, and they were affected to the youth's development (Chareonwongsak, K., 2014) because they will learn everything from their surroundings and absorbed them unconsciously. Then they were developed into the characteristic of themselves. Each people have the personal characteristic that can remember and identify by the others (Meador, D., 2018), if they have the desirable characteristic, they will gain the self-confident and can be a person who was accepted by the society and also can succeed their life in the future.

The enhancing of the desirable characteristic should cultivate with the all ages students, (Peeters, J., 2016), especially in the elementary school. Because they are the beginner to learn anything, if they were learned the good things from the beginning, they were affected to be the good students (Chaisongkam, S., 2013). Therefore, the elementary schools are the essential organizations to cultivate desirable characteristics for the students. It was imperative to have the corporate sponsorship from the related organizations, include communities, temples, and parents to be the vital role in cooperating to successful them.

In fact, it was founded that some students have the impolitic characteristic and demeanor. Especially, speech and responsibility. The researcher realized the importance of the issues mentioned above. Therefore, the researcher has begun this research to develop the desirable characteristic of students, to guide the development of the quality of students by using action research methodology. (Kemmis and McTaggart, 1988) The experimentation process that worked for this research took place at Phatharadon School, in Roi Et province, Thailand.

Objectives

This research aimed to;

1. Study the realistic basis and desirable characteristic of students in the perspective of teachers in private elementary school.
2. Develop the desirable characteristic of students through action research methodology at the sample school to suit the context.

Limitations

The sample of this research in the first phase were 293 teachers of the private elementary school in Roi Et province, and they were randomly selected from the formulated by Yamane's technique from the 1095 population size. The second phase, the participants were 22 teachers and 392 students from Phatharadon School in Roi Et province.

The instruments of this research were 1) the questionnaire of students' desirable characteristics and 2) the activities that were set together by the teachers under the action research methodology.

Variables Under The Study

The 6 Aspects of students' desirable characteristics obtained through the synthesizing process from the study of 6 resources about the desirable characteristics of students. The researcher compared each resource if they were the same three items or more, it was chosen to be the variables of this research. Finally, the variables consisted of Diligence, Frugality, Discipline, Patriotism, Honesty, and Service Mind, the following table shows how the students' desirable characteristics were synthesized.

The Aspect of Students' Desirable characteristics	Desirable characteristics of students' resource						Frequency
	5 Basis Values of the Office of the National Culture Commission	Desirable characteristics under the core curriculum	12 Values Announced by the Head of the National Council for Peace and Order (NCPO)	9 Basic Virtues by the Ministry of Education	10 Characteristics of Great Students	10 Characteristics of a Successful Student	
1) Diligence	✓	✓	✓	✓	✓	✓	6
2) Frugality	✓	✓	✓	✓		✓	5
3) Discipline	✓	✓	✓	✓			4
4) Religious	✓		✓				2
5) Patriotism	✓	✓	✓				3
6) Honesty		✓	✓	✓			3
7) Service Mind		✓	✓	✓	✓	✓	5
8) Grateful			✓	✓			2
9) Preserve culture		✓	✓				2
10) Democracy behavior			✓			✓	2
11) Conscious			✓				1
12) Good mental and healthy			✓				1
13) Polite and respect others.				✓		✓	2
14) Cleanness				✓			1
15) Unity				✓			1
16) Like to ask questions					✓		1
17) Leadership					✓		1
18) Problem solved					✓		1
19) Supported					✓		1
20) Credible					✓		1
21) Responsibility						✓	1

Methodology

This research process was divided into 2 phases;

Phase I: Studied the problems and the developmental needs of desirable characteristic.

The researcher began by surveying the needs and problems of students' desirable characteristic by using questionnaires. In the next step, the researcher participated in focus group discussion with the four private schools that belong to Roi Et province.

Phase II: Designed and developed the desirable characteristic of students.

The researcher chose a private school to develop and experiment with the students, the criterion of selection included 3 conditions; 1) the school was assessed by the Office for National Education Standards and Quality Assessment (ONESQA) in the third round and passed this assessment, 2) the school administrator had graduated in master degree or above in the major of educational administration, and 3) the school had allowed the researcher to experiment the process of research with their students.

After the considered of criterion above, Phatharadon school had allowed the researcher to experiment the research process in their school. Then, the researcher began to summarize the information from questionnaires and a focus group discussion in the first phase. When finished, the researcher participated in a focus group discussion, again with nine teachers in the school where was chosen, during the focus group, the teachers set the indicators and prepared projects together to support the indicators that were chosen based on the results from the study in the first phase. They also can develop the desirable characteristic of students under the indicators chosen by teachers through action research methodology, including plan, act, observe and reflect. (Kemmis and McTaggart, 1988)

Results

The results of the questionnaires on problems and needs for development showed that the overall of the desirable characteristic of students' problems was in a medium level when considering individual aspect in ascending order, there were service mind aspect, discipline aspect, and honesty aspect respectively. Moreover, the needs of development were in a high level, when considering individual aspect in ascending order, there were service mind aspect, discipline aspect, and honesty aspect also.

The Aspect of Students' Desirable characteristics	Problems			Need to Develop		
	\bar{x}	S.D.	Meaning	\bar{x}	S.D.	Meaning
1) Diligence	3.10	.34	Medium	4.12	.31	High
2) Frugality	3.13	.41	Medium	4.11	.33	High
3) Discipline	3.35	.36	Medium	4.35	.28	High
4) Patriotism	3.16	.39	Medium	4.27	.34	High
5) Honesty	3.17	.38	Medium	4.28	.33	High
6) Service Mind	3.38	.41	Medium	4.43	.25	High
Total	3.21	.16	Medium	4.26	.12	High

Furthermore, the results from the focus group discussion of the teachers in private school where was chosen showed that the desirable characteristic should be developed to focus on the discipline aspect and service mind aspect to solve the problems, especially on the issues of punctual, endurance, environmental protection, sacrifice and working with other. Finally, all of the teachers agreed with the overview of the process.

The teachers together set 4 indicators from 2 Aspects to development process:

- 1) The number of discipline promoted activities organized.
- 2) The percentage of students who were disciplined.
- 3) The number of activities that were organized to encourage students to learn and work together and
- 4) The percentage of students who had a service mind.

The Aspect of Students' Desirable characteristics	Project Name	Number of Indicators	The indicators that were set by the teachers
1) Discipline	1) Students' discipline enhancement.	2	1) The number of discipline promoted activities organized. 2) The percentage of students who were disciplined.
2) Service Mind	2) Students' service mind enhancement.	2	3) The number of activities that were organized to encourage students to learn and work together. 4) The percentage of students who had a service mind.

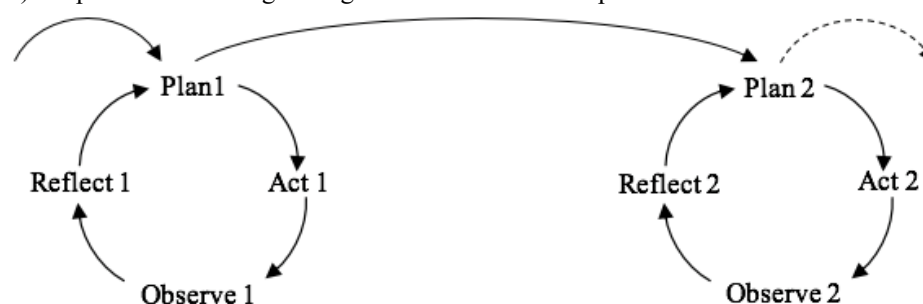
Then the researcher and all the teachers developed all indicators under action research methodology. This is an example of an indicator development;

Indicator 2: The percentage of students who were disciplined.

Project name: Students' discipline enhancement project.

Activities: 1) The training of students by the military program.

- 2) Responsible areas' organizing for the environmental protection.



Development Operation: Loop 1	Development Operation: Loop 2
Plan: Prepare the project; set the project organizers; set project period; communicate to the military organization to invite their staff. Plan and set the training programs together with the military staff and the teachers.	Revise Plan: The teachers set the activity together. (They organized the responsible areas for each group of students for the environmental protection); set the period for the participation of students; prepare the materials and set the project organizers.
Act & Observe: The operation followed the training program that was chosen; interviewed the military staff and the teachers who participated in this project about the cooperation and behavior of students.	Act & Observe 2: The operation followed the activity programs that were set together; observe the behavior of the students; interview the teachers again and use the questionnaire on students' discipline satisfaction.
Reflect: Teachers were satisfied with their students who participated in the activity, some teachers need to set other activity that controls by themselves only. In the first period of the project, they could participate in only one activity. Recommend: Should let all teachers together set the activity by themselves without staff from outside.	Reflect 2: All teachers were satisfied with their students' behavior of discipline and needed these activities every year; focus on the participation of teachers and staff from outside, both activities suit all students. Recommend: Should set more types of activity; the school director should support the activity that set from the teachers focus on the students' behavior enhancement.

The result of other indicators showed that: Indicator 1 and 2: students were more disciplined than before and the school area was cleaner, the atmosphere was better. Indicator 3: students learned more and worked together better, and the relationship among the students was better, and some students showed leadership qualities, and indicator 4: the students were more service mind, the relationship among the students was better. The following table summarizes the success of all indicators.

Indicators	Targets	Results	Conclusion
1) The number of discipline promoted activities organized.	2 activities	2 activities	Successful
2) The percentage of students who were disciplined.	90%	95%	Successful
3) The number of activities that were organized to encourage students to learn and work together.	2 activities	2 activities	Successful
4) The percentage of students who had a service mind.	90%	80%	Unsuccessful

This concluding table showed that three indicators were successful and one indicator was unsuccessful. Although some indicators were unsuccessful, all indicators were developed under the action research methodology and showed increased quality.

Conclusion And Discussion

The needs of development showed that the service mind aspect and discipline aspect was in a high level, because of some students still focus on their benefit as the primary objective, if they satisfy they will do. On the other hand, if they cannot gain some benefits from them, sometimes they will refuse to do. That is the reason why the teachers should enhance them about the service mind. The process begun from the researcher and teachers participatory about the expected activities and targets, the designing of this process was based on the problems according to Weir (1974), and the development operations were driven under action research methodology of Kemmis and McTaggart (1988); finally, the almost activities were accomplished.

From the four indicators that were identified by the teachers founded that three indicators were successful. However, all indicators were developed and showed the desirable characteristic of students were increased. This was because the teachers design the activities suited with the contexts of school (Feeney, Christensen and Moravick, 1987), and allowed the students developed themselves from the real practice was consistent to the principle of learning by doing of Dewey (1972).

The results were also according to Ramitanont (2018), who identified that the characteristic was not something that accidentally or naturally occurred, but that the students' culture formed them under the process over time, and that the culture was a society of students construct and together developed themselves. It eventually became a circuit of culture how the students treated each other. In addition, there are some of the educators who see that culture directly related to the characteristics. They supported the view that cultural patterns in each school result from teaching and training at an early age (Benedict, 1970), that was the reason why their characteristics were developed.

Recommendations

From the variables, only two aspects of 6 were developed. In the future as many aspects as possible should be developed. Furthermore, this research was only conducted over one semester. In the future, research should be conducted at least more than one academic year.

Acknowledgements

The researcher expresses his appreciation to all teachers of private elementary school who were the samplers and all experts in educational and research methodology for their expertise and cooperation in checking research instruments, Phatharadon School, a coordinator, and everyone who participated in this research.

References

- [1] Benedict, R. (1970). **Thai Culture and Behavior**. Southeast Asia Program, Department of Far Eastern Studies. Cornell University Press: Ithaca NY.
- [2] Chaisongkam, S. (2013). **Management Strategies for Developing Desirable Characteristics of Elementary School Students in Schools under the Office of Basic Education Commission**. Bangkok: Faculty of Education Journal. Phranakhon Rajabhat University. 41(4): 162-179.
- [3] Chareonwongsak, K. (2014). **The Desirable Characteristics and Future of People in Thailand**. Bangkok: Office of the Education Council, Ministry of Education.
- [4] Dewey, J. 1972). **Experience and Education**. New York: Collier Books.
- [5] Feeney, S., Christensen, D. and Moravick, F. (1987). **Who Am I in the Lives of Children**. 3rd ed. Ohio: Merrill Publishing Company.
- [6] Kemmis, S., & McTaggart, R. (1988). **The Action Research Planner** (3rd ed.). Geelong: Deakin University Press.
- [7] Meador, D. (2017). **Characteristics of Great Students**. Top Pupils are Motivated and Hard-working. (online). Retrieved September 8, 2017, from <https://www.thoughtco.com/perfect-student-characteristics-41886.html>
- [8] Office of the Private Education Commission, Thailand. (2015). **The Report of Action Research to Development of Internal and External Quality Assurance System in Private Schools**. Bangkok.
- [9] Peeters, J. (2016). **Teacher Differences in Promoting Students' Self-Regulated Learning: Exploring the Role of Student Characteristics**. Learning and Individual Differences Volume 52: 88-96.
- [10] Ramitanont, C. (2018). **Identity, Culture, and Changing**. (online). Retrieved February 12, 2018, from <http://www.soc.cmu.ac.th/wso/data/identity>.
- [11] Weir, J. J. (1974). **Problem Solving is Everybody's Problem**. Science Teacher. 4: 16-18.

The Effect Of Blended Learning With Think-Pair-Share Technique To Enhance The Information Literacy Skills Of Rajabhat University Students

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Abstract

The variety of the information is important for 21st century students who were growing up together with technology, and they should know how to apply it to their learning. This study aimed to the comparison of students' information literacy skill using the blended learning with the Think-Pair-Share technique before and after learning of Rajabhat University students, and study of students' information literacy skill through the using of the blended learning with the Think-Pair-Share technique of Rajabhat University students. The procedures of the blended learning with Think-Pair-Share technique were as follows; phase I: define the challenging problem from the classroom and the online resources; phase II: Brainstorming and discussion in the topic of the issues that they found; and phase III: sharing and publicizing the knowledge from the media that they created. The result of this research found that the information literacy skills of students after used the blended learning and Think-Pair-Share technique higher than before began the process.

Keywords: *Blended Learning, Think-Pair-Share Technique, Information Literacy Skills*

Introduction

The variety of the information is important for 21st century students who were growing up together with technology, for example, computer, network, and technology literacies and they should know how to apply it for their learning and to gain the information in the format of image, sound, and text as the new media or new technology under the era of rapid change (Kathleen Tyner, 2014).

National Science and Technology Development of Thailand need to enhance the Thai student's skill of information communication technology (ICT) and internet using, screening the information under the reason, communicated skill and presentation skill. In addition, The Thailand Qualification Framework for Higher Education (TQF) focus to enhance the student skill of interpersonal skill and communication and information technology skills to support the working market in the future (Sinlarat, P., 2010).

Consistent of the faculty of education in Thepsatri Rajabhat University (TRU) that created the teacher who can use and select the information under the reason, self-expression, accept the opinions from the other, and be in the community happily. The instructional management in the university that brings the concept of learning both Face-to-Face in the classroom and teach them through the internet as known as the blended learning (Curtis J. Bonk, Charles R. Graham, 2013). This concept can help the students learn through the technology, practice to the selection of the various types of information and bring the data that were learned to have the discussion both inside and outside the classroom. Moreover, the teaching technique of Think-Pair-Share can give them the opportunity to practice and receive the information back from their friends in the classroom (Frank Lyman, 1987), the knowledge sharing of classmate increase the courage of counseling and presentation their work.

For that reason, the method that encourages students to access resources, identify and refer the sources, evaluate the information and apply it efficiently by using the blended learning and the Think-Pair-Share technique to enhance the literacy skills of students in Rajabhat University.

Objective

This study was aimed to;

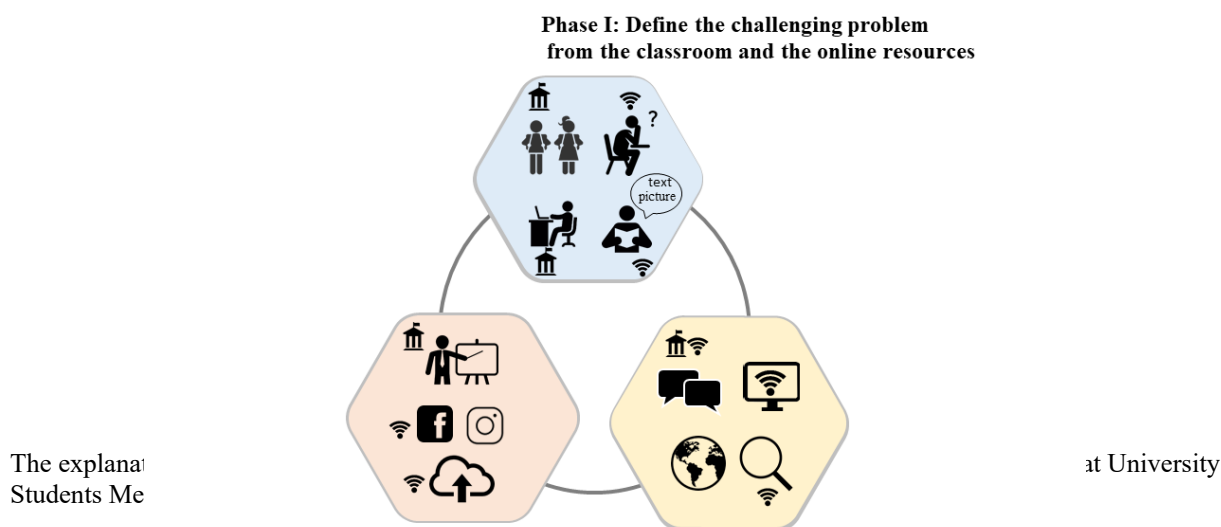
1. Comparison of students' information literacy skill using the blended learning with the Think-Pair-Share technique before and after learning of Rajabhat University students.
2. Study of students' information literacy skill through the using of the blended learning with the Think-Pair-Share technique of Rajabhat University students.

Limitations

The sampling group of this research was 52 students who were programming in English education, who were studying “innovation and information technology in education” course in the second semester of 2017 academic year at Thepsatri Rajabhat University. The sample of this research was from a purposive technique. The samplings were paired to twenty-six, for each is two students and take part in any activities provided in the study and create the media about the own infographic. The instruments of this research were; 1) Information literacy website, and 2) information literacy skills test form.

Methodology

The research process of the blended learning with the Think-Pair-Share technique was divided into 3 phases as follows; Phase I: Define the challenging problem from the classroom and the online resources; phase II: Brainstorming and discussion in the topic of the issues that they found; and phase III: Sharing and publicizing the knowledge from the media that they created.



Phase I: Define the challenging problem from the classroom and the online resources
This is the first phase of the research process. The students began with the teacher explained the role of student, then the students chose the buddy voluntarily to be the helper, discussed and shared ideas about the topic that was assigned. Next step, they designed and created the infographics for each of them from the challenging topic, to the planning step for identified the scope of contents, knowledge pursuit, data format, information sources consideration, and the instrument that use to find, including the assessment of their necessary skills to create the infographics. After that, the students explained their plan in the report and uploaded it to the teacher's website for the data discussion, and assessed their skills in the scope of working with their buddy in the classroom.

Phase II: Brainstorming and discussion on the topic of the issues that they found

In this step, the students practiced the activity on the internet and studied the contents of how to search for information effectively and the principles of infographic media design. Then, the students search the information through the method that they found by identify their source, identify the methods used to search information, identify the website, data found types such as message, image, video, and sound, the technique of data searching and how to select the credible information and useful. Next step, shared the method how to search and select the information for used it in their infographic with the buddy. All of the methods in this phase, there was the communication among teacher students and their buddy both within the classroom, on the internet and social network. When all the students came into the class, they were brainstorming and discussion on the topic of the issues that they found

Phase III: Sharing and publicizing the knowledge from the media that they created.

The last step of this research, after the students finish their infographic in the second phase, they presented their work and explained it in the classroom about the concept of design and the information selection for created their work. Then, they discussed the presentation of the classmate and recorded the video clip for upload to the network. In the part of each work of infographic, the students had published their work on the social media, such as Facebook, this is an opportunity for people to gain the knowledge from their work through pictures. After two weeks, the students uploaded their work and the results of publishing in the social media, and then they analyzed how the others feedback about their work from the social media.

The role of teacher and students in the blended learning process

The role of teacher	The role of students
Face-to-Face	Face-to-Face
1. Clarified the rules and procedures, such as single activity, buddy activity, activity in the classroom, and activity on the network. 2. Designed of activity in the classroom, each couple of students shared ideas and exchanged the information from the source of documents and on the internet. 3. Gave the instructions, reflective of ideas by face to face with the activity in the classroom	1. Random selection of the topic that students had been assigned to find out the relevant information about the innovations, to challenge the ability of the students. 2. Pair with the other students as the buddy to work together and assigned the role of themselves. 3. Shared the ideas of the information that each student received from their study between the buddies. 4. Presented each students' work and discussed together, then record the video clip for upload to the network.
Online	Online
1. Determined the sequence of online activities. 2. Designed the activity and assigned the task for students 3. Evaluated the results of activity and the students' work.	1. Communicated with their teachers as the consultant and receive the instruction through the network. 2. Study the contents, participated in the activity, completed the exercise within the lesson on the network.

Findings

The effect of blended learning with Think-Pair-Share technique to enhance the information literacy skills of Rajabhat University students, after using the Think-Pair-Share technique had the Information literacy skills increased, the details of it as shown in the table below.

Range	Number of Students		Percentage		Meaning
	Before	After	Before	After	
28 – 36 points	0	13	0	25	Highest
19 – 27 points	0	37	0	71.15	High
10 – 18 points	21	2	40.38	3.85	Medium
0 – 9 points	31	0	59.62	0	Low

The above table result showed that before used the Think-Pair-Share technique found that, 31 students (59.62%) had the low level of Information literacy skills, and 21 students (40.48%) had the medium level of Information literacy skills. However, after used the Think-Pair-Share technique had the Information literacy skills increased, there were 37 students (71.15%) had the high level of Information literacy skills, and 13 students (25%) had the highest level of Information literacy skills.

The Information literacy skills of students had overall in the high level, as shown above, this skill was assessed including 12 sub-skills that synthesized from Sconul (2011), NSTDA (2015), Michael and Robert (1987), and the association of college and research libraries (2000). There were 12 sub-skills consisted of 1) ability to determined scope of topic for information searching, 2) ability to determine the sources of information searching, 3) ability to topic identifying for searching and wording selection that clearly and easily to understand, 4) responsibility for information searching under the time limit, 5) ability to identify what they need to find more, 6) ability of using tools for information searching, 7) ability to identify and searching the variety of information format to utilize, 8) ability to consider, select, and evaluate the credibility of information, 9) ability to identify the sources of information for correct reference, 10) ability to design for information presentation appropriately, 11) ability to select the tools for publish the information appropriately, and 12) ability to solve the problems and obstacles encountered during the operation.

Conclusions

1. The comparison of information literacy skills by the blended learning and Think-Pair-Share technique, found that the information literacy skills of students after used the blended learning and Think-Pair-Share technique higher than before used it, this might be the cause of the information literacy skills can practice to increase it by applied the process and merge to the learning curriculum, contents selection, and the activities that allow students to practically, according to Scott and Sullivan (2005), Daniel, Dominique and Kraemer (2014), said that information literacy skills are the things that the teacher can integrate into the curriculum because the credible of data searching, to enhance them to learn and apply it to work in the future.

Corresponded with the research of Michael (2008), stated that the information literacy skills is essential in the present, it can help us to search, evaluate, and use the information we need, and filter unwanted data in the

overwhelming information world, to select it to use as much benefit as possible. However, the information literacy skills can be learned through the learning process and affected to the success of the activity is the task identified clearly, defining of objectives searching, using of tools and resources appropriated, and the decision of data selection. The skills that were mentioned above are necessary for the students in the university to learn before they will work in real life. It can be seen that if the teachers designed the appropriate instructional activities, they would be able to improve the student's information literacy skills more than before.

2. The information literacy skills of students overall were in the high level, this might be the cause of the step design of blended learning and Think-Pair-Share technique that focus on the benefits of learning by using technology and the tools for access to the information, the contents of lesson, communication channel, interaction between teachers and students, or among students quickly. According to the research of Habidge, Sanderson, and Tin (2015) that studied about the using mobile technology to enhance undergraduate student digital information literacy skills with group Canadian case study founded that students feel challenge when collaborative or exchange the opinions according to think-pair-share technique that can enhance the discussion of the students until the presentation step, including the face-to-face learning, that increase the opportunity for students to had the reflection together, share ideas with classmate, knowledge sharing, learn from the other perspective to develop the skills of student.

According to Bill Johnston & Sheila Webber (2003), studied about the information literacy in higher education founded that, the success of students in information literacy skills development was from the operation both in the classroom and outside, and allowed the students had the participation in the classroom, decision making, and evaluated their work and classmate, these can motivate the students to operated and develop themselves. In addition, the Think-Pair-Share technique that the students shared ideas and consulted with their buddy, can encourage the learning under the target of each student, and controlled themselves to operate in the activity.

It's also in conformity with the research of Houtman (2015) that studied the motivation of students learning by using the Self-Regulated Learning for the information retrieval, found that the using of Think-Pair-Share technique in the activity can open-minded of students and express their opinion among the classmate more than communicated directly with the teacher, and efforted to operate the activity for information searching, listening and learn from other work to improve their work better. From this process that was mentioned above, affected to increase the student's skill of information literacy.

Acknowledgements

The author wishes to gratefully acknowledge the financial support by the Faculty of Education, Thepsatri Rajabhat University, Thailand, all student teachers who were the samplers and everyone who participated in this research.

References

- [1] Bill Johnston & Sheila Webber. (2003). **Information Literacy in Higher Education: A review and case study**, Studies in Higher Education, 28:3, 335-352
- [2] Curtis J. Bonk, Charles R. Graham. (2013). **The Handbook of Blended Learning: Global Perspectives, Local Designs**.
- [3] Daniel, Dominique and Kraemer, Elizabeth W. (2014). "Integrating the Credit-Bearing Information Literacy Course into the Curriculum: Goals, Benefits, and Challenges." **LOEX Conference Proceedings 2012**. 6. Retrieved June 1, 2018, from <http://commons.emich.edu/loexconf2012/6>.
- [4] Hanbidge, Alice Schmidt; Sanderson, Nicole; Tin, Tony. (2015). **Using Mobile Technology to Enhance Undergraduate Student Digital Information Literacy Skills: A Canadian Case Study**. IAFOR Journal of Education, spec. ed. p108-121 Sum 2015
- [5] Houtman, Eveline. (2015). "Mind-Blowing": Fostering Self-Regulated Learning in Information. **PDXScholar: Communications in Information Literacy** 9(1), Iss. 1 pp.6-18
- [6] Kathleen Tyner. (2014). **Literacy in a Digital World Teaching and Learning in the Age of Information**. 1st Edition: New York. Routledge.
- [7] Lyman, F. (1987). **Think-Pair-Share: An Expanding Teaching Technique**: MAA-CIE Cooperative News.

- [8] Michael B. Eisenberg. (2008). **Information Literacy: Essential Skills for the Information Age**. DESIDOC Journal of Library & Information Technology, Vol. 28, No. 2, March 2008, pp. 39-47
- [9] National Science and Technology Development of Thailand. (2018). **Four aspects of information literacy**. Retrieved April 16, 2018, from <https://www.nstda.or.th/th/>.
- [10] Sinlarat, P. (2010). **Thailand's Qualifications Framework for Bachelor's Degree (TQF)**. Retrieved April 16, 2018, from www.onesqa.or.th/onesqa/th/file/.../3-1600-Pitoon.pdf.
- [11] Scott, Thomas J, O'Sullivan, Michael K. (2005). **Analyzing student search strategies: making a case for integrating information literacy skills into the curriculum**. Teacher Librarian; Bowie Vol. 33, Iss. 1, (Oct 2005): 21-25.

The Effect Of Essential School Leadership On Innovative Organization Of Thai Secondary Schools

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Abstract

This research aimed to examine linear structural relationship model of essential leadership styles of school administrators in promoting organizational innovation of basic secondary schools in Thailand. This is followed up with development of an approach for innovating school organizations. Researchers employed a mixed mode design using a combination of quantitative and qualitative methods to collect data. Researchers used the quantitative findings from Structural Equation Model (SEM) to explain and interpret the qualitative findings. The effect of leadership styles namely learning leadership, creative transformational leadership, and learning-centered leadership on innovation of school organization were examined using a quantitative survey questionnaire. A total of 760 school administrators and teachers were involved in the first phase. This is followed by in-depth interviews at the second phase to five experts in order to develop leadership style factors that have high factor loading based on the findings from first phase. The final phase was carried out with five academic experts and five practitioners to develop an approach and provide solutions for innovative issues. Quantitative data was analyzed using SEM while qualitative data was analyzed using content analysis and MACR (Multi Attribute Consensus Reaching) method. The quantitative findings show that all the three leadership styles were affecting the innovation of school organization. Learning leadership was found to have the highest effect ($\beta = 0.877$) and contributed 87.7 percent to the structural relationship model. This is followed by the creative transformational leadership ($\beta = 0.381$). The least capacity leadership style was learning centered leadership ($\beta = 0.264$). Moreover, it was found that the measurement model of leadership style factors has goodness fit with evident data, with $\chi^2 = 162.269$, $df = 136$, $p = .067$, $\chi^2/df = 1.193$, CFI = .997, TLI = .995, RMSEA = .028, and SRMR = 0.013. Finally, qualitative findings of this research have successfully proposed an approach for school administrators to develop organizational innovation.

Keywords: *Creative transformational leadership; innovative organization; learning centered leadership; learning leadership*

Introduction

Educational leadership is an essential factor to ensure the development of the country so that it can keep it up with the changing world. Current education situation has to transform rapidly from time to time due to the impact from academic and technological progress to Thailand's education and educational leadership (Aritatana, Sirisooksilp, & Tang, 2016). Howell and Costley (2001) stated that a leadership style not only covers leadership behavior directly but also concerning about leader's trait as leader is the one who produce successful work for the group outcomes and work performance. On the other hand, school organizations need to be more creative and innovative in order to compete, grow, and lead. Therefore, ChanLin, Hong, Horng, Chang, and Chu (2006) emphasized that school organizations have to help students to perform in the realm of innovative behavior which requires changes in both educational policy and teaching practices that are controlled by school administrators.

Leadership is considered as a key factor to promote innovative and positive change to the school organization. A school organization will be lost of direction to change and could experience negative change instead without an essential leadership (Moo & Yazdanifard, 2015). According to Ganta and Manukonda (2014), leadership is a kind of power possessed by leader who has the ability to influence or change the values, beliefs, behavior, and attitudes of other individuals. Moo and Yazdanifard emphasized that school administrator who has his full power to control the direction of the school, as well as through the influence they exert on their teachers that will motivate them to bring the school to greater success.

Somprach, Tang, and Popoonsak (2017) highlighted that school administrators have to adopt different leadership styles in order to match the astonishing diversity of school organizations, ranging from small, rural primary schools to extra-large secondary schools, across different contexts in Thailand. Current school administrators should utilize the application of information and communication technologies to provide innovative teaching and learning process in the rapid changes of school organization (Somprach, Prasertcharoensuk, & Tang, 2016). Somprach et al. (2016) found that school administrators should apply the standards of the Malcolm Baldrige National Award or the Thailand Quality Award as a framework to promote effective leadership.

In addition, Thai Ministry of Education (2011) summarized the three key features of education reform with regards to the second decade of this century (2009 to 2028), namely improvement in quality and standard of education and learning of Thai people, increment of life-long educational opportunities thoroughly and effectively, and encouragement sector participation and systematic reformation and learning in Thailand. This is further supported by Thai Ministry of Education (2015) by fostering the transformation of the education system with a tactic used based upon enriching moral and ethical values, in conjunction with a central program for cultivating excellence in education. Both government calls seemed to be in line with Somprach et al.'s findings (2017). They found that school administrators should obtain knowledge, competency, ethics, morality, creativity, systematic thinking, and good professional code of ethics so that they can exhibit effective leadership styles to achieve goals, improve quality standards, and use techniques that can lead to problem solving and accomplishment.

Literature Reviews

Somprach et al. (2017) explored the role of essential leadership styles of school principals in encouraging teachers' participation in professional learning communities in basic education schools in northeastern of Thailand. They found that learning, transformational, collaborative, and invitational leadership styles of the school principals contributed 55.6 percent of the variance in teachers' participation in professional learning communities based on 731 respondents' perceptions. Specifically, the impacts of learning leadership was 46.6 percent, that of transformational leadership was 6.7 percent, that of collaborative leadership was 1.6 percent, while that of invitational leadership was just 0.7 percent. In conclusion, the two essential leadership styles were learning leadership and transformational leadership in terms of promoting teachers' participation in their professional learning communities.

The National College for School Leadership (NCSL) (2004) defined learning-centered leadership as a set of strategies which influence the quality of teaching and learning in the classroom. School administrators should play their essential roles to lead learning, raise standards, and focus on students' achievement (NCSL, 2004). Leithwood and Riehl (2003: 2-7) stated that learning centered leadership has significant effects on student learning, the quality of curriculum, and teachers' instruction. Therefore, successful school administrators not only need to respond productively to challenges and opportunities that created by the accountability-oriented policy context but also respond productively to the opportunities and challenges of educating diverse groups of students.

Prasertcharoensuk and Tang (2016) investigated the effect of creative transformational leadership and teachers' teaching behavior in teaching efficiency of schools under the Office of Khon Kaen Educational Service Area 5, Thailand. Their findings showed that the relationship between creative transformational leadership as well as teachers' teaching behavior and teaching efficiency were positive and significant level at 0.01. In addition, their findings also indicated that there were two dimensions of creative transformational leadership, namely intellectual and contingency reward could be used to explain 81.76 percent of teaching efficiency at the macro level according to 150 school administrators. Finally, the multilevel analysis findings of Null Model, Simple Model, and Hypothetical Model revealed that the average value of teaching efficiency of 4.388, 4.394, 4.402 and the variance of parameter as 0.01656, 0.01420, 0.00302 respectively.

Hsiao and Chang (2011) investigated the effect of creative transformational leadership on organizational innovation thus examined whether organizational learning would be the mediator or not using SEM to test the relationship model. Hsiao and Chang have successfully provided the evidence that creative transformational leadership and organizational learning had significant and positive effects on organizational innovation from 330 teachers who are in charge of administration in postsecondary schools in Taiwan. Their findings also demonstrated that there was significant effect on the role of organizational learning as mediator on the relationship between transformational leadership and organizational innovation. Hsiao and Chang suggested that school administrators in Taiwan should use the strategies of creative transformational leadership and organizational learning simultaneously because organizational learning was found to be highly effective in term of achieving organizational innovation in the post-secondary schools in Taiwan.

RESEARCH OBJECTIVES

Based on the previous literatures above, researchers would like to study linear structural relationship model of the three essential leadership styles consisted of learning leadership, learning centered leadership, and creative transformational leadership toward innovation of school organization at the secondary basic education in Thailand. The following are the specific objectives of this study:

- i. To examine the relationships between the key factors of school leadership styles and innovation of school organization in a structural relationship model.
- ii. To examine the congruence of the structural model with empirical data.

- iii. To investigate the strategies for developing an innovative school organization.

Conceptual Framework

The independent variables are identified as learning leadership, learning-centered leadership, and creative transformational leadership and the dependent variable is innovative organization as elucidated in Figure 1. The learning leadership factors consist of creativity and courage, powerful environment, self-directed learning, team learning, transformation process and tailor making, technology, and integration according to Somprach and Tang's (2016) findings. The learning-centered leadership has been determined by Somprach (2016) as an essential leadership. The learning-centered leadership is comprised of vision for learning, high standard of achievement, rigorous curriculum, quality instruction, a connected community, and accountability. The final independent variable is creative transformational leadership identified from Brewer and Tierney's (2010) findings. This creative transformational leadership variable consists of four factors, namely systematic thinking, technological competency, innovative culture, and change management. All the three leadership styles are hypothesized to be essential leadership styles to shape the organizational culture and innovative environment.

School administrators are accountable to assemble and lead their teachers to optimal performance outcomes. An effective school administrator recognizes the importance of embracing differences among the teachers and knows how to connect the differences amongst them to get the best outcomes from the teachers. This is so called as in cultivating a school environment of continuous improvements, innovation, and initiative. Subsequently, school administrators must foster a commitment from the team to embrace an innovation mindset where each teacher learns to apply the differences that exist in one another for their own success and that of the school organization (Llopis, 2014). The dependent variable of this study is innovative organization that including knowledge management, atmosphere and information communication technology management, value and innovative culture, and personal strategic management. The relationships between the three essential leadership and innovative organization are justified as how school administrators create new school environments that are suitable for learning and innovation, are flexible and responsive to change, and apply information technology to their work.

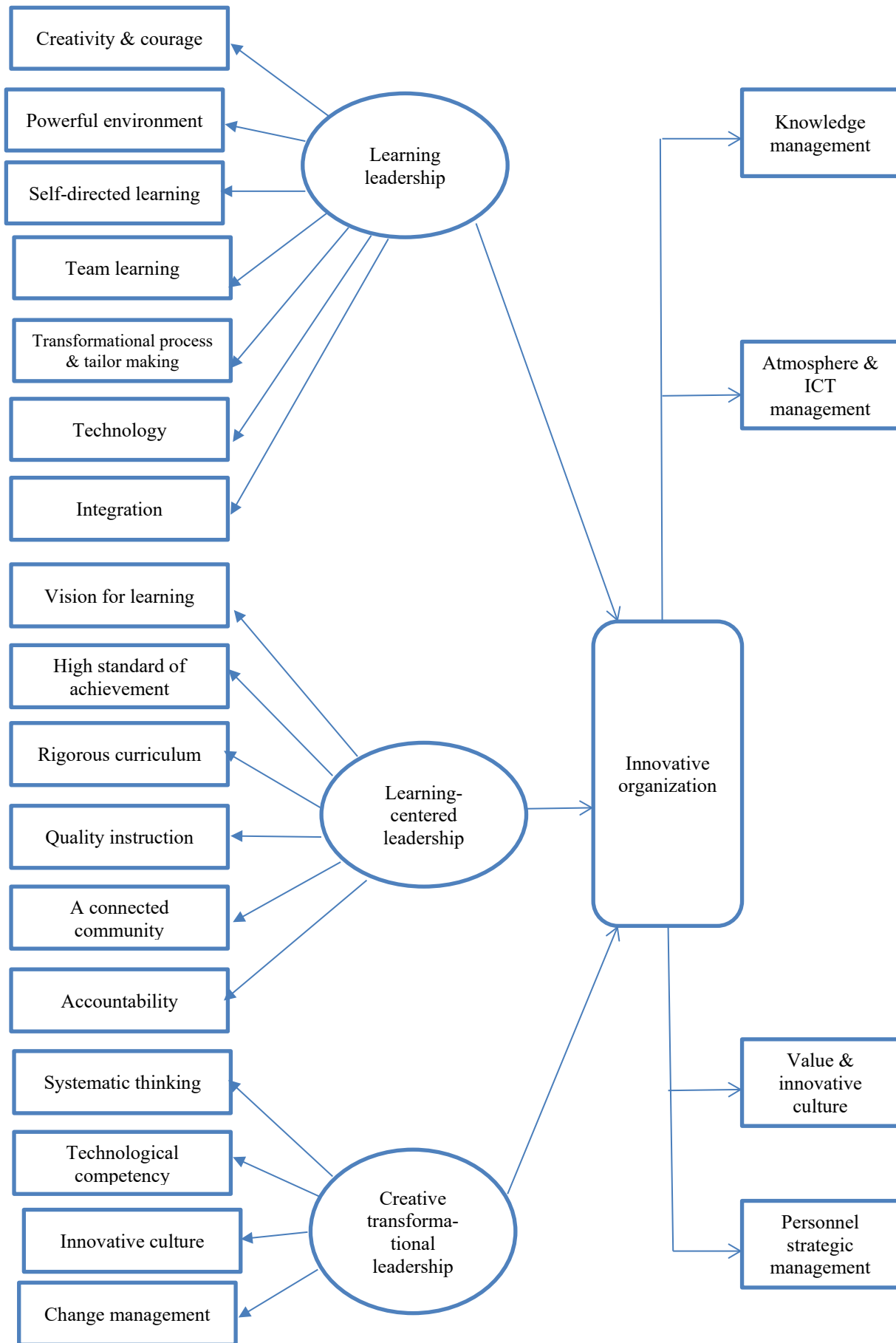


Figure 1. Conceptual Framework

Methodology

Researchers employed a mixed mode design to collect the quantitative and qualitative data using multiple ways to explore the research problem. It is referred as a combination of different modes of collecting data for a single research. Researchers begin to collect quantitative data followed by a collection of qualitative data to achieve the sequential explanatory of the collected data. Researchers intend to use the quantitative data analysis from Structural Equation Modeling (SEM) to assist in explaining and interpreting the findings of a qualitative study (Creswell, 2014).

At the first phase, a survey quantitative method was employed to 760 school administrators and teachers from 360 secondary schools utilizing a multi-stage random sampling technique. Sample size was determined based on Meyers, Gamst, and Guarino's (2006) rules of thumb because Meyers et al. proposed that suitable sample sizes depend upon the numbers of items available for factor analysis. The unit of analysis of this study was school using questionnaire as an instrument.

Quantitative data was analyzed using SEM in order to fit the model with empirical data. SEM is suitable to use because the theoretical constructs of this study are represented by the latent factor. The relationships between the theoretical constructs are represented by regression or path coefficients between the factors. The SEM implies a structure for the covariance between the observed variables. Confirmatory Factor Analysis (CFA) is used to validate the measurement model. Secondly, SEM directs around fitting the structural model by measuring the significance of the relationship between latent variables, which is accomplished through path analysis (Kaplan, 2000). CFA was used as a desirable validation stage preliminary to the main use of SEM to identify the causal relations among latent variables (Schumacker & Lomax, 2004)

At the second phase and final phase, researchers investigated to determine a suitable approach and guidelines for developing innovation of school organization. In-depth interviews with the five academic experts who were selected using purposive sampling were the method of qualitative data collection regarding development of leadership style factors based on findings from the first phase. The qualitative interview data was analyzed using content analysis. At the final phase, researcher employed MACR (Multi Attribute Consensus Reaching) method in order to find consensus concerning the approach with five academic and five practitioners. This MACR method required the five experts and five practitioners to give opinions, debate and find the solution for the attributes or issues in the meeting. The factor loading data gathered from the first phase adding with the information provided by the 10 informants from the final phase were used to outline an approach for innovation development which was coupled with the existing principles and concepts as well.

Findings

The findings of this study are presented in accordance with the research objectives stated above.

Quantitative findings of key factors of school leadership styles and innovation of school organization in a structural relationship model

According to the linear structural relationship of innovative organization model, there were seven key factors from learning leadership namely creativity and courage, powerful environment, self-directed learning, team learning, transformation process and tailor making, technology, and integration. On the other hand, there were six key factors from learning-centered leadership including vision for learning, high standard of achievement, rigorous curriculum, quality instruction, a connected community, and accountability. Finally, finding of the key factors from creative transformational leadership were systematic thinking, technological competency, innovative culture, and change management. CFA was used to validate at the preliminary stage to identify the causal relationships among the latent variables.

Findings related to factor loading values of all the key factors for innovation of school organization ranged from 0.679 to 0.816 are statistically significant at 0.05. Factor loading is the importance of standard factors of each observable variable in the relationship model of essential leadership factors and innovative organization that had been taken into account. The co-variance with innovative organization was from 67.90 to 86.00 percent.

An overview of learning leadership as indicated in Table 1 below shows that each factor had its loading value ranging from 0.683 to 0.774. The factor with the highest factor loading was technology ($\beta = 0.774$, $R^2 = 0.802$). This second highest factor was integration ($\beta = 0.768$, $R^2 = 0.781$). This is followed by transformational process and tailor making, self-directed learning, powerful environment, and team learning respectively. The factor that had the lowest factor loading was creativity and courage. As a result all the key factors of learning leadership are found to be important construct for innovation of school organization.

Table 1. Factor loading and validity of learning leadership in the measurement model

Factors	Matrix of Factor loading			
	β	SE	t	R ²
Creativity & courage	0.683	0.038	17.95	0.794
Powerful environment	0.705	0.041	17.098	0.747
Self-directed learning	0.706	0.040	17.565	0.773
Team learning	0.694	0.039	17.617	0.775
Transformational process & tailor making	0.759	0.040	18.804	0.837
Technology	0.774	0.043	18.135	0.802
Integration	0.768	0.043	17.728	0.781

Table 2 shows the overview of learning-centered leadership and its factor loading value ranging from 0.757 to 0.816. The key factor with the highest factor loading value was accountability ($\beta = 0.816$, $R^2 = 0.836$). The second highest factor loading value was quality instruction ($\beta = 0.766$, $R^2 = 0.831$). This is followed by high standard of achievement, vision for learning, and rigorous curriculum respectively. The factor that had the lowest factor loading was a connected community. As a result all the key factors of learning centered leadership are found to be important construct for innovation of school organization.

Table 2. Factor loading and validity of learning centered leadership in the measurement model

Factors	Matrix of Factor loading			
	β	SE	t	R ²
Vision for learning	0.762	0.044	17.517	0.770
High standard of achievement	0.764	0.041	18.743	0.835
Rigorous curriculum	0.759	0.041	18.679	0.831
Quality instruction	0.766	0.041	18.670	0.831
A connected community	0.757	0.044	17.180	0.752
Accountability	0.816	0.043	18.756	0.836

An overview of creative transformational leadership shows that each factor had value ranging from 0.568 to 0.698 (refer to Table 3). The key factor with the highest factor loading value was innovative culture ($\beta = 0.698$, $R^2 = 0.860$). The second highest factor loading value was change management ($\beta = 0.685$, $R^2 = 0.766$). The lowest factor loading value was systematic thinking ($\beta = 0.568$, $R^2 = 0.679$).

Table 3. Factor loading and validity of creative transformational leadership in the measurement model

Factors	Matrix of Factor loading			
	β	SE	t	R ²
Systematic thinking	0.568	0.036	15.742	0.679
Technology competency	0.679	0.039	17.283	0.763
Innovative culture	0.698	0.038	18.172	0.860
Change management	0.685	0.040	17.333	0.766

Table 4 shows the factor loading values of dependent variable that is innovation of school organization. The factor loading values were ranged from 0.731 to 0.766. The key factor with the highest factor loading value was knowledge management ($\beta = 0.766$, $R^2 = 0.891$). The second highest was atmosphere and ICT management ($\beta = 0.753$, $R^2 = 0.917$). The third highest was value and innovative culture ($\beta = 0.749$, $R^2 = 0.874$). Finally, the lowest factor loading value was personal strategic management ($\beta = 0.731$, $R^2 = 0.838$).

Table 4. Factor loading and validity of school organizational innovation in the measurement model

Factors	Matrix of Factor loading			
	β	SE	t	R ²
Knowledge management	0.766	0.039	19.876	0.891
Atmosphere & ICT management	0.753	0.037	20.370	0.917
Value & innovative culture	0.749	0.038	19.482	0.874
Personnel strategic management	0.731	0.039	18.773	0.838

Findings of CFA showed that all the three leadership styles were confirmed factors that affecting the innovation of school organization. Learning leadership had the highest factor loading value ($\beta = 0.877$). This is followed by

creative transformational leadership ($\beta = 0.381$). The least capacity of the effect on innovation of school organization was learning-centered leadership ($\beta = 0.264$). It can be concluded that all the three leadership styles were affecting the innovations of secondary basic school organizations in Thailand with 87.7 percent, 38.1 percent, and 26.4 percent in respect to learning, creative transformational, and learning centered leadership styles as shown in Table 5.

Table 5. Results of CFA of school leadership styles on innovations of school organization in the measurement model

Leadership factors	β	S.E.	t
Learning leadership	0.877	0.336	2.608
Learning centered leadership	0.264	0.104	2.532
Creative transformational leadership	0.381	0.143	2.651

Quantitative findings of congruence of the structural model with empirical data

Findings from the correlations between the factors of leadership styles could be assessed in the standard component score (β) which indicated significantly high and positive correlations at 0.05. Besides, it was found that the measurement model has a goodness fit with evident data, with $\chi^2 = 162.269$, $df = 136$, $p = .067$, $\chi^2/df = 1.193$, CFI = .997, TLI = .995, RMSEA = .028, and SRMR = 0.013. Finding shows that the structural relationship model of innovation of school organization were consistent with empirical data.

Qualitative findings of an approach for developing an innovative school organization

Qualitative findings are derived from the 10 experts' responses. The 10 experts shared with researchers regarding the challenges that the school administrators faced in terms of innovations. This is followed by debating the unique ways to respond to these innovative challenges in order to successfully overcome them. Once, they found the solutions for the innovative issues and proved that school administrators in basic secondary schools can create some types of creative approach to be innovative, researchers could accumulate them and consider as an approach. The followings are the qualitative findings:

- i. School administrators should focus on the three key factors of learning leadership, namely technology, integration, and transformational process and tailor making. Learning leadership has been justified from quantitative findings that it is the most powerful force for developing an innovative school organization. In addition, these initial quantitative findings were further having goodness of fit with empirical data in the structural relationship model. As a result, school administrators need to be competent, knowledgeable, creative to develop innovation and extending innovative potential of teachers.
- ii. School administrators should create a self- and team-learning culture in their school organization. In order to create this kind of culture, school administrators should open and be trusted. An environment of trust reduces defensiveness when innovative issues are raised. Teachers react honestly, ask questions more frequently, and are more spontaneous with their innovative ideas. School organization derives greater value from school administrators' talent, and teachers get to develop their competence and contribute to innovative success.
- iii. Conflicts and unfulfilled commitments are expected to occur whenever there are innovative issues. School administrators have to manage the differences among the teachers by looking into the alternatives and options without a predetermined outcome. Teachers are encouraged to express real opinions and resolve the innovative issues more effectively.
- iv. School administrators should know very well about their teachers' strengths. Hence, school administrators are able to match their talent and task effectively because they understand teachers' strengths and how best to elicit them. They and their teachers focus less on closing gaps and more on learning and building on strengths.
- v. School administrators should focus on development of communication and technology with the aim of making it accessible anywhere and anytime, as required by students and teachers. School administrators should know how to make the innovative implementation with clarity, precision defining what needs to be accomplished and how as a razor-sharp focus and simplicity. The commitment should come from all levels of the organization to remove the complexity from the way of implementing innovative issues.

Discussion

The main objective of this study was to examine the effect of school leadership styles, namely learning leadership, creative transformational leadership, and learning centered leadership toward basic secondary school organizational innovation. The findings reveal that when secondary school administrators used strategies such as learning leadership had a highest effect for the achievement of school organizational innovation. This is followed

by creative transformational leadership and learning centered leadership. This implies that school administrators play the major role in organizational innovation. School administrators have important responsibilities and should lead their teachers in making innovative changes at schools.

Qualitative findings reveal that school administrators should work together with their teachers and discuss the importance of innovative in the school system with their teachers. This finding is in accordance with Prasertcharoensuk and Tang (2016) as well as Somprach et al. (2017). Previously, Hsiao and Chang (2011) proposed a causal model of creative transformational leadership as an important effect on organizational innovation. According to Kursunoglu and Tanriogen (2009), school organizations need to transform in order to survive and be effective in current increasingly rapid innovation environment. For example, previous researchers such as Hsiao and Chang (2011), Somech (2010), and Zhang (2009) highlighted the importance of organizational innovation-specific meaning in schools and its relationship with actual innovational behavior. The findings of this study are in full support of the findings of these previous studies.

Researchers would like to suggest to Thailand Ministry of Education to conduct training which incorporating the three leadership styles, namely learning leadership, creative transformational leadership, and learning centered leadership to encourage organizational innovation. Our findings suggest that human resource department at the Ministry of Education needs to recruit school administrators who have potential for constructive learning, creative transformational, and learning-centered leadership as a means to facilitate innovative issues of school organization. Other practical consideration may involve the facilitation of an increasing understanding and appreciation of research evidence to help basic secondary school administrators specifically and teachers generally on how to incorporate organizational innovation, signal the importance of this type of behavior, and promote maximum innovative performance (Sanchez & Levine, 2009).

References

- Airratana, W., Sirisooksilp, S., & Tang, K. N. (2016). The effect of leadership styles on professional learning community. *New Trends and Issues Proceedings on Humanities and Social Sciences*, 8, 60-69.
- Brewer, D. & Tierney, D. J. (2010). Barriers to innovation in U.S. higher education. *Reinventing the American University: The promise of innovation in higher education*. Washington, DC: American Enterprise Institute Conference, pp 1-35.
- ChanLin, L., Hong, J., Horng, J., Chang, S., & Chu, H. (2006). Factors influencing technology integration in teaching- a Taiwanese perspective. *Innovations in Education and Teaching International*, 43(1), 57–68.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Ganta, V. C. & Manukonda, J. K. (2014). Leadership during change and uncertainty in organizations. *International Journal of Organizational Behavior & Management Perspectives*, 3(3), 1183.
- Howell, J. P. & Costley, D. L. (2001). *Understanding behavior for effective leadership*. New Jersey, NJ: Prentice-Hall.
- Hsiao, H. C. & Chang, J. C. (2011). The role of organizational learning in transformational leadership and organizational innovation. *Asia Pacific Education Review*, 12, 621-631. doi: 10.1007/s12564-011-9165-x
- Kaplan, D. (2000). *Structural equation modeling: Foundations and extensions*. Thousand Oaks, CA: Sage Publications.
- Kursunoglu, A., & Tanriogen, A. (2009). The relationship between teachers' perceptions towards instructional leadership behaviors of their principals and teachers' attitudes towards change. *Procedia Social and Behavioral Sciences*, 1(1), 252–258.
- Leithwood, K. & Riehl, C. (2003). *What we know about successful school leadership: A report by Division A of AERA*. Nottingham, UK: NCSL.
- Llopis, G. (2014). 5 ways leaders enable innovation in their teams. Retrieved from <https://www.forbes.com/sites/glennllopis/#227f2b9050d0>
- Ministry of Education. (2011). *Educational reform in second decade* (5th ed.). Bangkok, Thailand: Pigwarn Graphic.
- Ministry of Education. (2015). *Educational standard for quality assurance*. Bangkok, Thailand: Kuruspa Landpao.
- Moo, J. H. & Yazdanifard, R. (2015). How effective leadership can facilitate change in organization through improvement and innovation. *Global Journal of Management and Business Research: Administration and Management*, 15(9), Version 1, 1-5.
- National College for School Leadership NCSL (2004). *Learning centered leadership (Pack 1)*. Nottingham, UK: NCSL.
- Prasertcharoensuk, T. & Tang, K. N. (2016). The effect of transformational leadership and teachers; teaching behavior on teaching efficiency. *The Turkish Online Journal of Educational Technology – December*

2016. *Special Issue for INTE 2016*, 826-833.
- Sanchez, J. I., & Levine, E. D. (2009). What is (or should be) the difference between competency modeling and traditional job analysis? *Human Resource Management Review*, 19, 53–63
- Schumacker, R. Lomax, R. (2004). *A Beginner's Guide to Structural Equation Modeling*, (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Somech, A. (2010). Participative decision making in schools: A mediating-moderating analytical framework for understanding school and teacher outcomes. *Educational Administration Quarterly*, 46(2), 174–209.
- Somprach, K. (2016). *Leadership and learning leadership for school principals*. Khon Kaen, Thailand: Klang Nanavitaya.
- Somprach, K. & Tang, K. N. (2016). Learning leadership of Thai school principals: A grounded theory study. *The Turkish Online Journal of Educational Technology – December 2016. Special Issue for INTE 2016*, 15-22.
- Somprach, K., Tang, K. N., & Popoonsak, P. (2017). The relationship between school leadership and professional learning communities in Thai basic education schools. *Educational Research Policy and Practice*, 16, 157-175. doi: 10.1007/s10671-016-9206-7.
- Somprach, K., Prasertcharoensuk, T., & Tang, K. N. (2016). Factors affecting the effectiveness of Thau secondary world class standard school. *International Journal of Learning and Teaching*, 08(1), 20-29.
- Zhang, J.-W. (2009). Technology-supported learning innovation in cultural contexts. *Education Technology Research & Development*, 58, 229–243.

Acknowledgements

The researchers would like to thank Faculty of Education, Khon Kaen University for providing the supports to conduct this research. Special thanks to Khon Kaen University for its financial support to make the research a success.

The Effect of Flipped Vocabulary Learning on Achievement and Attitudes of EFL Ninth-Graders in Oman

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Abstract

The study aimed to investigate the effects of flipped vocabulary learning (FVL) on vocabulary students' achievement and explore the students' attitudes towards flipped learning after experimenting such approach. Total of fifty students participated in the study; twenty-five students involved in the flipped learning approach (FLA) as the experimental group and twenty-five students were taught in the non-flipped learning environment as a control group. During the intervention, students in the experimental group were exposed to practice materials such as video clips (fill in vocabulary logs), PDF file and chatting via Whatsapp Application before face-to-face activities in the classroom; while during the classroom, the students did exercises on the practice materials in pairs/groups. To measure students' performance, a vocabulary pre-test and post-test were administrated, and an independent t-test for post-test were used to compare the control group and the experimental group's performance. Moreover, to assess the experimental group's attitude toward their learning experience through FLA, an attitude survey questionnaire was distributed. The findings indicated that the experimental group outperformed the control group in vocabulary learning and they had a positive attitude toward the FLA.

Keywords: *Flipped learning, Vocabulary Achievement, Students' Attitudes.*

Introduction

Vocabulary knowledge is one of the most crucial components of any language proficiency (Harley, Cummins, Swain, & Allen, 1990). Without a wide range of meaningful vocabulary, it is a challenging task to communicate with people and initiate conversations with them (Gardner, 2013; Thornbury, 2006). Gardner (2013) and Thornbury (2006) stated that developing a wide range of vocabulary can assist learners in mastering foreign or second language. Additionally, most foreign language learners have a common understanding about the importance of learning English vocabulary. In their studies conducted in Korea, Fujiwara (2011) and Horwitz (1999) concluded that learning vocabulary appeared to be the most significant part of learning a foreign language in the learning process category. In Oman, students' lack of vocabulary is one of the main reasons for not being able to communicate well using the English language (Al-Maawaliya, 2008; Al-Siyabi, 2016; Al Hosni, 2014). Moreover, Omani students find difficulties in answering higher level questions in the extensive reading programs because of lack of basic vocabulary (Al-Maawaliya, 2008).

In response to the importance of mastering vocabulary, researchers have suggested different strategies and techniques to promote foreign language vocabulary learning such as repetition, mnemonics and using paper-dictionary (Nation, 1982; Rossiter, Abbott, & Kushnir, 2016). These researchers have claimed that these strategies are effective in learning foreign vocabulary but they have somehow considered them old-fashioned, however. Most Recently, with the emergence of technology, researchers in language teaching field have experimented different types of technological tools to promote vocabulary achievement such as augmented reality (Santos et al., 2016; Solak & Cakir, 2015), mobile applications (Ghazali & Ali, 2017; Lu, 2008; Zhang, Song, & Burston, 2011) and computer-based space (Chukharev-Hudilainen & Klepikova, 2016). These tools have been maintained to be effective in learning foreign language vocabulary (Chukharev-Hudilainen & Klepikova, 2016; Mahdi, 2018; Santos et al., 2016).

One of the evolving approaches that has emerged in the educational field with technology use and it has been widely used in the last decade is the flipped learning approach (FLA). The FLA was first initiated in 2007 by science teachers, Sam and Bergmann, who requested their students to watch video clips at home and then to discuss the content of the lesson in the class where the focus was on high-level skills in Blooms' taxonomy. Thus, The FLA can be defined as "a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter" (Flipped Learning Network, 2014). Further, FLN specifies four essential pillars which constitute the four letters of the word "FLIP". These pillars are "flexible environment", "learning culture", "intentional content" and "professional educators" which stand for the four letters of the word "FLIP" respectively.

Statement Of The Problem

Flipped learning approach (FLA) is widespread and is used in different kinds of disciplines whether in higher education level or K-12 education (Lo & Hew, 2017; O'Flaherty & Phillips, 2015). Many researchers have maintained that FLA can be utilized in teaching a foreign language and it can promote learning achievement in different skills of the foreign language (Hung, 2014; Lee & Wallace, 2018; Lyddon, 2015). In addition, some studies revealed that FLA had changed the attitudes of learners towards learning English as a foreign language positively (El-Esery & Radwan, 2017; Lee & Wallace, 2018). However, some researchers have called for further studies to investigate the effect of flipped learning approach in different skills and sub-skills of the language (Kim, Park, Jang, & Nam, 2017; Moranski & Kim, 2016) and some researchers have called for further research in K-12 Education globally (Huang & Hong, 2016; Lo & Hew, 2017) and in Oman specifically (Lane-Kelso, 2015). More recently, Wang, An, and Wright (2018) recommended that vocabulary knowledge should be measured in details when investigating the effect of FLA on the foreign language skills.

Although an extensive research has been carried out on FLA, there seems to be few studies that have examined the effect of flipped vocabulary learning on learning achievement and the attitudes towards it in the Omani context. For example, this approach had been investigated in the science discipline in one of the Omani Government Schools (Al-Hosni, 2015), but not in teaching English..

Further, by providing evidence/s on the effect of flipped vocabulary learning on the achievement and attitudes, teachers can be aware of the benefits of flipped learning and they might consider applying this approach with their students while teaching vocabulary. Therefore, this study comes to explore more about the FLA in the context of teaching new vocabulary in Oman Basic Education schools and to explore students' attitudes towards the approach.

Research Proposes

The purposes of the study are:

1. To investigate the effect of flipped vocabulary learning approach on the vocabulary achievement in the Omani schools.
2. To explore the students' attitude towards flipped vocabulary learning after the implementation of the approach.

Research Questions And Hypotheses

- What are the effects of flipped vocabulary learning on vocabulary achievement?
- What is the attitude of grade nine students towards learning vocabulary using FLA?
- There is a significant difference between the flipped vocabulary learning group and non-flipped vocabulary learning group in the post-test vocabulary achievement test in favor of the flipped learning group at $p \leq .05$.

Research Design

The study employed quasi-experimental design in which the researcher developed a pre-test and a post-test to assess the vocabulary knowledge for the control group and experimental group. The control group was taught vocabulary explicitly at the beginning of each class and they practised some exercises pertinent to the explained vocabulary. Whereas, the experimental group learned the same words through flipped vocabulary learning approach. A questionnaire was administered to the flipped group to investigate the students' attitudes towards learning vocabulary through FLA. At the same time, students were asked about their preferences for and the benefits of flipped vocabulary learning as open-ended questions. The steps of the procedures are summarized in the following points:

- * Before the experiment, the researcher did a training presentation for the experimental group to show the proper way of watching video clips outside the classroom and before they come to the classroom as suggested by Sam and Berg and other researchers (Bergmann & Sams, 2012).
- * Then, each student in the flipped learning group was given a student vocabulary log where they can write some notes while they are watching the video clips. This vocabulary log was adopted from (Hadley & Charles, 2017) and adapted in Kang's (2015) study which is about flipped classroom.
- * Before each lesson, a video clip was sent to the students through Whatsapp application containing vocabulary items that they would study in the lesson the coming day. The new words range from seven to twelve words per video and the video clip lasted from four to seven minutes.
- * The students were asked to fill in the student vocabulary log and to answer questions related to the words embedded in the video while the students were watching the video clips.
- * In the classroom, the students did some activities pertinent to the words that they had watched outside the classroom. The activities focused on higher-order thinking skills in Bloom's Taxonomy and students answered open-ended questions and quizzes in pairs or in groups.
- * The students involved in Pair-and -Share activities through which students discussed the words in pairs and then they shared their ideas with the whole class (DeLozier & Rhodes, 2016).

* The teacher also organized students presentations at the beginning of the lesson as a lead-in activity so that five students presented what they had watched in the videos clips outside the classroom (DeLozier & Rhodes, 2016).

* For the control group, the teacher explained the same vocabulary items to the students in the classroom at the beginning of each lesson.

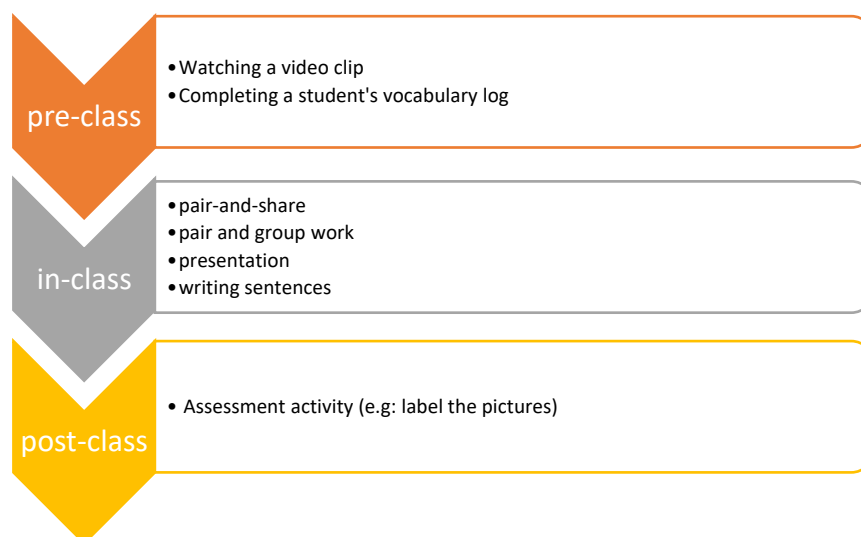


Figure 1. Illustration of stages of flipped vocabulary learning approach

Population And Sample

The population of the study was all grade nine students in Al Batina North Governorate in 2017/2018. The sample size was two male groups from different schools in Saham studying in two classrooms. The experimental group was from Alarqam Bin Alarqam School consisting of 25 students and they studied the vocabulary items using FLA. The experimental group was selected at the convenience of the researcher, and it was taught by him as FLA is new to English teachers in the Governorate. Prior to commencing the intervention, the students' parents signed in a consent form for approval as the students are under 18 years old (A sample of the consent form in Appendix B). The control group, randomly selected, comprised 25 learners studying in a nearby school. This group received explicit vocabulary instruction at the beginning of each lesson. A pre-test was administered to both groups to specify the homogeneity of these two groups.

Research Instrumnets

Vocabulary Achievement Pre-Test

The vocabulary pre-test was administered for the experimental group and the control group three days prior to teaching unit three. The researcher performed an independent t-test to ascertain that both groups are homogeneous and have the same breadth of vocabulary knowledge regarding the words they would study. Table 2 displays the results of the independent t-test.

Table 2 *Vocabulary Pre-test Independent T-test for Groups Equivalence*

Group	N	Mean	SD	t-value	p-value
Experimental	25	3.76	1.45	-.094	.926*
Control	25	3.72	1.57		

Total score is 10. *p < .05.

The results in table 2 indicates that there is no significant difference between the experimental group and the control group in the mean scores regarding the vocabulary knowledge.

Vocabulary Achievement Post-Test

The vocabulary post-test contained four different types of questions and each question measures specific vocabulary skill. For example, question one is multiple-choice and it measures guessing from context knowledge (Sasao & Webb, 2018). The second question was designed using defining context format and it measures the student's form recall ability (Kremmel & Schmitt, 2016). Laufer and Nation (1999) stated that this type of questions can assess the active vocabulary knowledge for the students. The third question is also a multiple-choice questions where the word definition is provided and the students have to choose the correct answer. Kremmel and Schmitt (2016) classified this kind of question as a form recognition test where the students can link the meaning with its suitable form. The fourth and last question is also guessing from context test (Sasao & Webb, 2018) in which students read a dialogue and they have to fill in the gaps according to the context provided. Both groups learned the vocabulary items through the intervention process while they are learning vocabulary using flipped learning for the experimental group or the traditional way for the control group.

Students' Attitudes Post-Questionnaire

To determine the reliability of the questionnaire, it was piloted by 10 students in grade ten (not the experimental group) studying in the same school. These students experienced learning English via video clips last year but they watched the videos in the classroom. The analysis of the piloted questionnaire revealed that the Cronbach's alpha is .918, showing a high level of reliability as presented in Table 3.

Table 3 Cronbach's Alpha for Studnets' Attitudes Post-Questionnaire

Cronbach's Alpha	N of Items
.918	15

Results And Discussion

First Research Question: Vocabulary Achievement

What is the effect of flipped vocabulary learning on vocabulary achievement?

Table 4 Descriptive Statistics of the Vocabulary Post-test for the Experimental and Control Group

Group	N	Mean	SD	Std. Error Mean
Experimental	25	9.0	4.4	.88
Control	25	6.56	3.9	.78

Table 4 illustrates that the experimental group (M = 9.0, SD = 4.4) obtained higher marks in the vocabulary post-test than the control group (M = 6.65, SD = 3.9).

In order to respond to the first question, an independent-sample *t*-test was calculated to find any significant difference between the experimental group and the control group. The results are illustrated in Table 6.

Table 5 Results of Independent-Sample T-test for the Vocabulary Achievement Post-test

Group	N	Df	Mean	t-value	p-value
Experimental	25	48	9.0	2.057	.045*
Control	25		6.56		

Total score is 20. *p < .05.

Table 5 shows that the statistical difference between the two groups is significant at p-value= .05 in the mean scores of the vocabulary achievement post-test; the experimental group (M= 9.0) outperformed the control group (M= 6.56) in the vocabulary achievements, suggesting that the FLA had a positive effect on students' performance in the vocabulary knowledge. Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted. There is a significant difference between the two means in favour of the experimental group.

These findings of the study are in line with previous findings in Alnuhayt, (2018), Kang, (2015), Mori's et al. (2016) and Zhang et al., (2016) who reported higher achievements in the vocabulary achievement due to implementing flipped

vocabulary leaning, but contradict with Oh's (2017) study which showed insignificant statistical difference in the scores between the control group and the experimental group.

Second Research Question: Students' Attitudes

What is the attitude of grade nine students toward learning vocabulary using flipped learning approach?

Table 6 below shows the results of the questionnaire's responses.

Table 6 Means and Standard Deviations of the Experimental Group's Attitudes toward FLA

Statements	Mean	SD
10- I see that watching the video clips before the lesson is a useful way to learn new words.	4.36	.95
1- I enjoyed learning English vocabulary using the video clips at home before the lesson.	4.32	1.03
8- I enjoyed watching video clips via Whatsapp application.	4.28	.89
2- I felt comfortable when I learned vocabulary through the video clips that I watched outside the classroom and before the lesson.	4.24	.83
9- I felt more prepared to participate in in-class activities after I watched the video clips outside the classroom and before the lesson.	4.24	.92
5- I enjoyed the activities that I did in the classroom with my group.	4.2	1.2
14- I learned the meanings of some English vocabulary items during the discussion with my classmates in my group.	4.12	1.01
15- I felt bored while I was doing in-class activities that were related to English vocabulary items.*	4.12	1.23
7- I did not like learning new vocabulary items through watching video clips.*	4.08	1.18
6- Watching video clips at home helped me learn new vocabulary more promptly and efficiently.	4.04	1.06
4- Watching the video clips helped me learn vocabulary items through repeating them several times.	4.0	1.15
13- Watching video clips as homework increased my study load.*	3.72	1.24
12- Watching English vocabulary items in the video clips made them easy to remember.	3.68	1.25
11- Learning new vocabulary items is difficult via video clips.*	3.08	1.35
3- I learned new words more from face-to-face instruction than from the video clips at home.*	2.4	1.41
Overall total	3.93	1.11

*Negative statements that are reverse-coded

The table reveals important facts about students' attitudes toward FLA. First, the overall score displays that students have positive attitudes toward FLA in general ($M = 3.93$, $SD = 1.11$). Item#10 "I see that watching the video clips before the lesson is a useful way to learn new words" obtained the highest scores ($M = 4.36$, $SD = .95$). The second highest item in the scale is item#1 "I enjoyed learning English vocabulary using the video clips at home before the lesson" which has a mean of 4.32 and SD of 1.03. On the other side of the scale, item#3 "I learned new words more from face-to-face instruction than from the video clips at home" has the lowest mean ($M = 2.4$, $SD = 1.14$) and students were confused which technique is better whether to learn words with their teacher's instruction or learning words using the video clips. This claim can be supported by some of the students' answers to the first open-ended question as one of the students reported that "*I enjoyed watching video clips at home, but I understand more when the teacher explains the words in the classroom*". Item#3 is followed by item#11 "Learning new vocabulary items is difficult via video clips" which is the second lowest item in the scale ($M = 3.08$, $SD = 1.35$). Although item#11 has the second lowest

item, it is still in the range of positive attitude toward learning vocabulary through video clips and the SD of this item indicates the responses' dispersion is widespread as it is the highest score among the items.

It is safe to say that overall the students' attitudes toward learning vocabulary is positive, and it is in line with the results from (Adnan, 2017; Ahmed, 2016; Al-Harbi & Alshumaimeri, 2016; Kang, 2015; Lee & Wallace, 2018; Wang et al., 2018; Wanner & Palmer, 2015; Wong & Chu, 2014). However, it contrasts with DeSantis, Van Curen, Putsch, and Metzger (2015) findings.

Conclusion

This quasi-experimental study set out to examine the effect of flipped vocabulary learning approach on vocabulary achievement and attitudes of Omani grade nine students. This chapter shows a summary of the main findings regarding the two research questions, implications for using flipped vocabulary learning generally and specifically in Oman and recommendations for further research.

Based on the results obtained from the statistical analysis of the vocabulary achievement post-test, there was statistical difference between the experimental group and the control group in favor of the experimental group. A possible explanation for this result is that flipped learning is suitable for elementary level (Mori et al., 2016) and millennial students enjoy employing this approach while learning vocabulary (Roehl, Reddy, & Shannon, 2013).

This study has found that generally students in the experimental group have positive attitude toward FLA. Students enjoyed the new approach more than anything else in the process of learning vocabulary.

References

- Adnan, M. (2017). Perceptions of senior-year ELT students for flipped classroom: a materials development course. *Computer Assisted Language Learning*, 30(3-4), 204-222.
- Ahmed, M. (2016). The effect of a flipping classroom on writing skill in English as a foreign language and students' attitude towards flipping. *US-China Foreign Language*, 14(2), 98-114.
- Al-Harbi, S. S., & Alshumaimeri, Y. A. (2016). The Flipped Classroom Impact in Grammar Class on EFL Saudi Secondary School Students' Performances and Attitudes. *English Language Teaching*, 9(10), 60-80.
- Al-Hosni, H. A. S. (2015). The Effect of Using Flipped Classroom Approach in Acquiring General Self-Efficacy and Academic Achievement of Ninth-Grade Female Students. (Unpublished Master's Thesis), Sultan Qaboos University, Muscat, Oman.
- Al-Maawaliya, F. M. (2008). The Effectiveness of Web-based Extensive Reading in Developing Vocabulary and Reading Skills. (Unpublished Master's Thesis), Sultan Qaboos University, Muscat, Oman.
- Al-Siyabi, S. S. H. (2016). The Effect of WebQuest on Vocabulary Achievement and Attitudes of Omani EFL Students (Unpublished Master's Thesis), Sultan Qaboos University, Muscat, Oman.
- Al Hosni, S. (2014). Speaking difficulties encountered by young EFL learners. *International Journal on Studies in English Language and Literature (IJSELL)*, 2(6), 22-30.
- Bergmann, J., & Sams, A. (2012). *Flip Your Classroom: Reach Every Student in Every Class Every Day*: International Society for Technology in Education.
- Chukharev-Hudilainen, E., & Klepikova, T. A. (2016). The Effectiveness of Computer-Based Spaced Repetition in Foreign Language Vocabulary Instruction: A Double-Blind Study. *CALICO Journal*, 33(3), 334-354.
- DeLozier, S. J., & Rhodes, M. G. (2016). Flipped Classrooms: a Review of Key Ideas and Recommendations for Practice. *Educational Psychology Review*, 29(1), 141-151. doi:10.1007/s10648-015-9356-9
- DeSantis, J., Van Curen, R., Putsch, J., & Metzger, J. (2015). Do students learn more from a flip? An exploration of the efficacy of flipped and traditional lessons. *Journal of Interactive Learning Research*, 26(1), 39-63.
- El-Esery, D. A. M., & Radwan, D. N. A. (2017). Modeling CALL programs in EFL Flipped Classrooms to Enhance Achievement and Language Learning Attitude. *JRCIET*, 3(2), 115-125.
- Flipped Learning Network. (2014). Definition of Flipped Learning. Retrieved from <https://flippedlearning.org/definition-of-flipped-learning/>
- Fujiwara, T. (2011). Language Learning Beliefs of Thai EFL University Students: Dimensional Structure and Cultural Variations. *Electronic Journal of Foreign Language Teaching*, 8(1), 87-107.
- Gardner, D. (2013). *Exploring Vocabulary: Language in Action*: Routledge.
- Ghazali, M. A. I. M., & Ali, Z. (2017). The Impact of Using VocBlast to Learn Technical Vocabulary at Tertiary Level. *International Journal of Novel Research in Education and Learning*, 4(3), 22-25.
- Hadley, G., & Charles, M. (2017). Enhancing Extensive Reading with Data-Driven Learning. *Language Learning & Technology*, 21(3), 131-152.
- Harley, B., Cummins, J., Swain, M., & Allen, P. (1990). The nature of language proficiency. In B. Harley, J. Cummins, M. Swain, & P. Allen (Eds.), *The Development of Second Language Proficiency* (pp. 7-25). Cambridge: Cambridge University Press.

- Horwitz, E. K. (1999). Cultural and situational influences on foreign language learners' beliefs about language learning: A review of BALLI studies. *System*, 27(4), 557-576.
- Huang, Y.-N., & Hong, Z.-R. (2016). The effects of a flipped English classroom intervention on students' information and communication technology and English reading comprehension. *Educational Technology Research and Development*, 64(2), 175-193.
- Hung, H.-T. (2014). Flipping the classroom for English language learners to foster active learning. *Computer Assisted Language Learning*, 28(1), 81-96. doi:10.1080/09588221.2014.967701
- Kang, N. (2015). The Comparison between Regular and Flipped Classrooms for EFL Korean Adult Learners. *Multimedia-Assisted Language Learning*, 18(3), 41-72.
- Kim, J. E., Park, H., Jang, M., & Nam, H. (2017). Exploring Flipped Classroom Effects on Second Language Learners' Cognitive Processing. *Foreign Language Annals*, 50(2), 260-284.
- Kremmel, B., & Schmitt, N. (2016). Interpreting Vocabulary Test Scores: What Do Various Item Formats Tell Us About Learners' Ability to Employ Words? *Language Assessment Quarterly*, 13(4), 377-392.
- Lane-Kelso, M. (2015). The Pedagogy of Flipped Instruction in Oman. *Turkish Online Journal of Educational Technology-TOJET*, 14(1), 143-150.
- Laufer, B., & Nation, P. (1999). A vocabulary-size test of controlled productive ability. *Language Testing*, 16(1), 33-51.
- Lee, G., & Wallace, A. (2018). Flipped learning in the English as a foreign language classroom: Outcomes and perceptions. *Tesol Quarterly*, 52(1), 62-84.
- Lo, C. K., & Hew, K. F. (2017). A critical review of flipped classroom challenges in K-12 education: possible solutions and recommendations for future research. *Research and Practice in Technology Enhanced Learning*, 12(1), 1-22.
- Lu, M. (2008). Effectiveness of vocabulary learning via mobile phone. *Journal of Computer Assisted Learning*, 24(6), 515-525.
- Lyddon, P. A. (2015). The flip side of flipped language teaching. Paper presented at the Critical CALL – Proceedings of the 2015 EUROCALL Conference, Padova, Italy.
- Mahdi, H. S. (2018). Effectiveness of mobile devices on vocabulary learning: A meta-analysis. *Journal of Educational Computing Research*, 56(1), 134-154.
- Moranski, K., & Kim, F. (2016). 'Flipping' Lessons in a Multi-Section Spanish Course: Implications for Assigning Explicit Grammar Instruction Outside of the Classroom. *The Modern Language Journal*, 100(4), 830-852.
- Mori, Y., Omori, M., & Sato, K. (2016). The impact of flipped online Kanji instruction on written vocabulary learning for introductory and intermediate Japanese language students. *Foreign Language Annals*, 49(4), 729-749.
- Nation, P. (1982). Beginning to learn foreign vocabulary: A review of the research. *RELC journal*, 13(1), 14-36.
- O'Flaherty, J., & Phillips, C. (2015). The use of flipped classrooms in higher education: A scoping review. *The Internet and Higher Education*, 25, 85-95. doi:10.1016/j.iheduc.2015.02.002
- Oh, E. (2017). The Effect of Peer Teaching via Flipped Vocabulary Learning on Class Engagement and Learning Achievements. *Multimedia-Assisted Language Learning*, 20(3), 105-127. doi:10.15702/mall.2017.20.3.105
- Roehl, A., Reddy, S. L., & Shannon, G. J. (2013). The flipped classroom: An opportunity to engage millennial students through active learning. *Journal of Family and Consumer Sciences*, 105(2), 44-49.
- Rossiter, M. J., Abbott, M. L., & Kushnir, A. (2016). L2 Vocabulary Research and Instructional Practices: Where Are the Gaps? *The Electronic Journal for English as a Second Language*, 20(1), 1-25.
- Santos, M. E. C., Lübke, A. i. W., Taketomi, T., Yamamoto, G., Rodrigo, M. M. T., Sandor, C., & Kato, H. (2016). Augmented reality as multimedia: the case for situated vocabulary learning. *Research and Practice in Technology Enhanced Learning*, 11(1), 1-23. doi:10.1186/s41039-016-0028-2
- Sasao, Y., & Webb, S. (2018). The guessing from context test. *ITL-International Journal of Applied Linguistics*, 169(1), 115-141.
- Solak, E., & Cakir, R. (2015). Exploring the Effect of Materials Designed with Augmented Reality on Language Learners' Vocabulary Learning. *Journal of Educators Online*, 12(2), 50-72.
- Thornbury, S. (2006). *How to teach vocabulary*: Pearson Education India.
- Wang, J., An, N., & Wright, C. (2018). Enhancing beginner learners' oral proficiency in a flipped Chinese foreign language classroom. *Computer Assisted Language Learning*, 1-32. doi:10.1080/09588221.2017.1417872
- Wanner, T., & Palmer, E. (2015). Personalising learning: Exploring student and teacher perceptions about flexible learning and assessment in a flipped university course. *Computers & Education*, 88(C), 354-369.
- Wong, K., & Chu, D. W. (2014). Is the Flipped Classroom Model Effective in the Perspectives of Students' Perceptions and Benefits? Paper presented at the International Conference on Hybrid Learning and Continuing Education.
- Zhang, H., Song, W., & Burston, J. (2011). Reexamining the Effectiveness of Vocabulary Learning via Mobile Phones. *Turkish Online Journal of Educational Technology-TOJET*, 10(3), 203-214.

Appendix A

The Effect Of Multiple Graphical Representations On Learning Algorithms

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Abstract

Computational thinking is included among the 10 top skills that will be needed for success in the near future. A well-trying method to develop this skill is teaching and learning programming, but this is a challenging task. Among reasons researchers highlight that programming assumes the understanding of computer algorithms that are inherently abstract entities. A suggested method to bridge this impediment is algorithm visualization. The AlgoRythmics tool generates such a teaching-learning environment that includes multiple algorithm visualization methods: dance choreography videos and computer animations. In the present study we proposed to analyze the strengths and weaknesses of this kind of multiple graphical representation. Experiment results emphasize that students (especially novices) failed to benefit from the multiple graphical representation (video + animation). Interestingly, if single representation was used, novice students achieved better results when they studied the algorithms by dance choreography videos compared to computer animations.

Keywords: *Computational thinking; teaching-learning programming; algorithm visualization; multiple graphical representations*

Introduction

Teaching-learning programming is a challenging task. Accordingly, first year programming courses have the highest dropout rates in comparison with other courses, despite the high popularity of Computer Science subjects (O'Brien & Humphreys, 2016). Among reasons researchers highlight that programming assumes the understanding of computer algorithms that are inherently abstract entities. In line with Knuth's famous quote, "an algorithm must be seen to be believed", teachers try to bridge this impediment by algorithm visualization (Knuth, 1968, Section 1.1, Page 4).

Technologies of algorithm visualization usually includes video or computer-based animations that graphically illustrate algorithms in terms of their high-level operations. If the learning process includes both video and animation students are faced with multiple graphical representation. Most of the previous studies (Schwonke, Berthold, & Renkl, 2009) in this field analyzed the pros and cons of this method using static representations. In the present study we proposed to analyze the strengths and weaknesses of environments that include both video and animation based illustrations of computer algorithms.

Students who participated in the experiment were invited to study sorting algorithms in the AlgoRythmics (<http://algo-rythmics.ms.sapientia.ro/>) environment. In line with previous studies novices failed to benefit from watching both the video and the animation of the algorithm. They performed better by viewing the animation twice. On the other hand, if the environment did not change, novice students achieved better results when they watched the dance choreography video twice than in the case of watching the computer animation repeatedly.

Computational Thinking, Algorithms And Algorithm Visualisation

According to Wing computational thinking (CT) is the fourth basic skill next to reading, writing and arithmetic. Wing suggested that CT is a "universally applicable attitude and skill set everyone, not just computer scientists, would be eager to learn and use" (Wing, 2006). In line with this, the Future Work Skills report of the Institute For The Future includes computational thinking among the 10 top skills that will be needed for success in 2020 (Davies, Fidler, & Gorbis, 2011).

We will use the term in accordance with its revised definition, i.e. as the thought process involved in formulating problems so that "their solutions can be represented as computational steps and algorithms" (Aho, 2012). In their attempt to define CT, the International Society for Technology in Education (ISTE, 2017) and the American Computer Science Teachers Association (CSTA, 2017) identified several related concepts: data collection, data analysis, data representation, problem decomposition, abstraction, algorithms, automation, parallelization and simulation. Correspondingly, promoting CT is a complex and challenging task. A well-trying method to develop this skill is teaching and learning programming. According to the authors of (Mannila et al., 2014) study, programming promotes CT if it includes all phases of the programming process: analysis, decomposition, design and implementation (coding). Végh and Stoffová (2017) concludes that one of the reasons why programming is so challenging for the first-year computer science students is that it assumes comprehending computer algorithms characterized by abstract data structures, and dynamic change of data. To bridge the gap between abstract concepts and real life objects

algorithm visualization comes to our help. The term algorithm visualization (AV) refers to the graphical illustration of a computer algorithm that represents the high-level operations of the algorithm, usually with the purpose of enhancing the understanding of its procedural behavior. AV technologies include video or computer based animations that illustrate how the algorithm works in action (Katai, 2014). Recent studies comparing instructional animation with static pictures confirmed that animations have a higher educational effectiveness especially when procedural behavior needs to be represented. Accordingly, several algorithm visualization tools have been developed to present the steps of an algorithm using graphical effects (Tekdal, 2013).

Multiple Algorithm Visualization

Multiple representations have the potential to improve learning because different representations: (1) highlight complementary aspects of the material to be studied and (2) produce different effects on mental processing. Prior research in this field is based mostly on a so-called symbol-systems approach, since it focuses on learning with text and one additional graphical representation. On the other hand, learning materials, especially in STEM domains, usually include, beside the textual descriptions, multiple graphical representations (Rau, 2013).

Different graphical representations might be beneficial because they emphasize complementary aspects that can provide a more accurate model of the domain. On the other hand, while an extensive model can have remarkable positive effect on the learning process it can also lead to a cognitive overload in the pictorial part of the memory (Clark, Mayer, & Thalheimer, 2003) and shift the attention from the domain concepts that are represented to the actual representation instead of its interpretation. Additionally, to benefit from multiple graphical representation students need to understand each individual representation and make connections between them. In line with previous studies, domain experts can rely on their previous knowledge to interpret the different representations, while novices might have insufficient domain knowledge to effectively transfer between them (Rau, 2013). Consequently, the author of the previously cited paper concludes that students benefit from multiple graphical representations based on their skills.

Our goal was to test this phenomenon regarding multiple *algorithm* visualization using dynamic illustrations (videos and animations). We emphasize this aspect, because other studies focused mostly on static illustrations.

The Algo-Rythmics Enviroment

The project was started in 2007 at Sapientia University with the production of 6 dance choreography videos illustrating the following sorting algorithms: bubble-sort, insert-sort, selection-sort, shell-sort, merge-sort, quick-sort. The platform was extended since then with a new sorting algorithm: the heap-sort. In addition to the sorting algorithms searching algorithms such as the linear-search, binary-search and backtracking algorithms were produced with the help of professional art institutes using flamenco and ballet dance styles. These videos aim to offer students a sensory experiment using a creative approach. The article that presents the project details the goals of the project: “We focused on how dance can be involved in informatics education (sorting algorithms). The method takes additional multi-sensory elements into the programming-education through arts (dance, music, rhythm, theatrical role-playing). Combining these art forms teachers could create a multi-sensory learning environment that involves almost all the senses: visual, auditory, kinesthetic and tactile.” (Katai, Toth, & Adorjani, 2014)

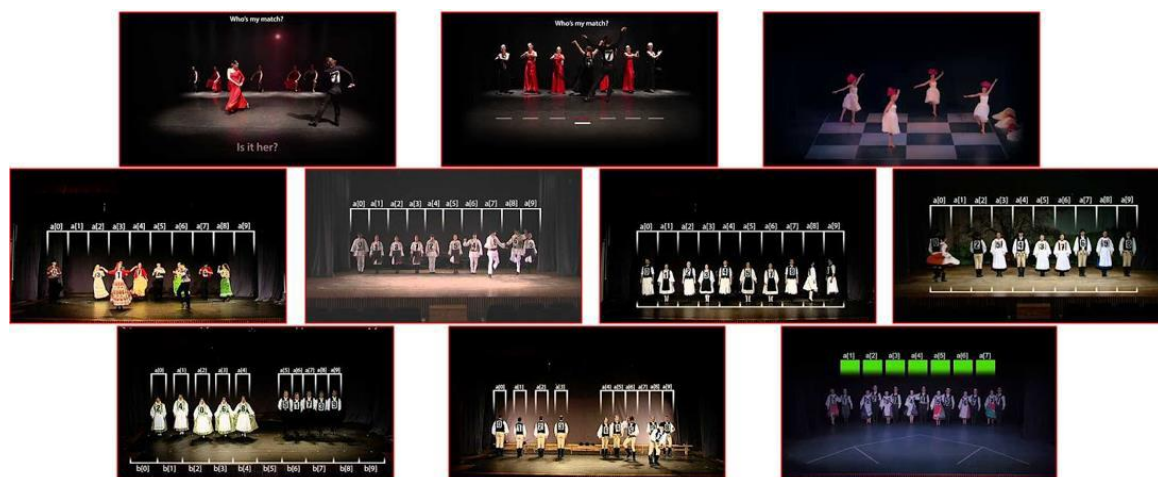


Figure 1. Searching (linear, binary, backtracking) and sorting (selection, bubble, insertion, shell, merge, quick, heap) algorithms

The environment introduces a web application as well (<http://algo-rhythmics.ms.sapientia.ro/>) that includes attached computer animations of the algorithms, and additionally invites users to actively participate in the learning process by reconstructing and orchestrating the studied algorithms.

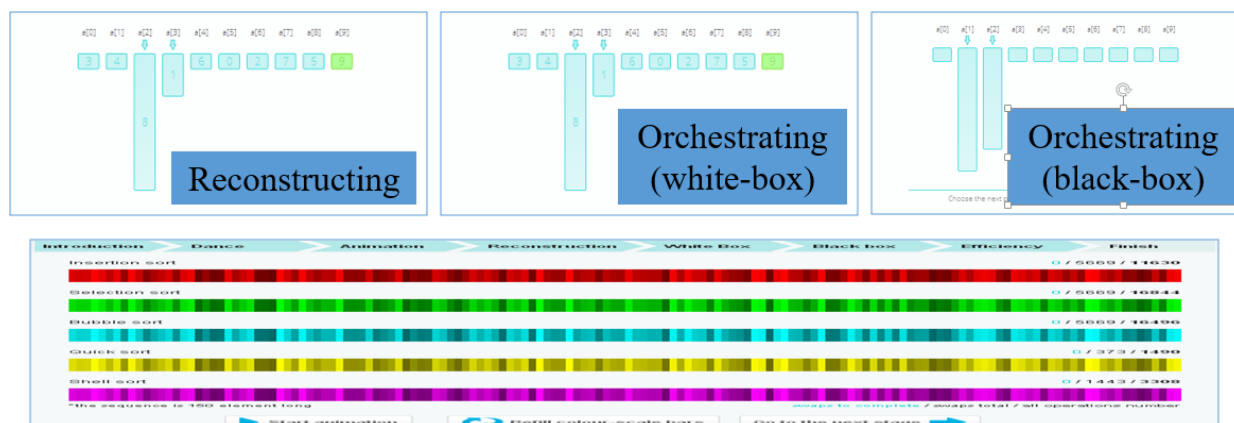


Figure 2. Studying algorithms in the Algo-Rhythmics environment

Method

The study we performed took place at Sapientia University during the educational year of 2017/18 when 181 students took our Programming-I course. The charts below depict the students' previous studies, the programs they enrolled in and the number of year they have been studying programming in their high-school years.

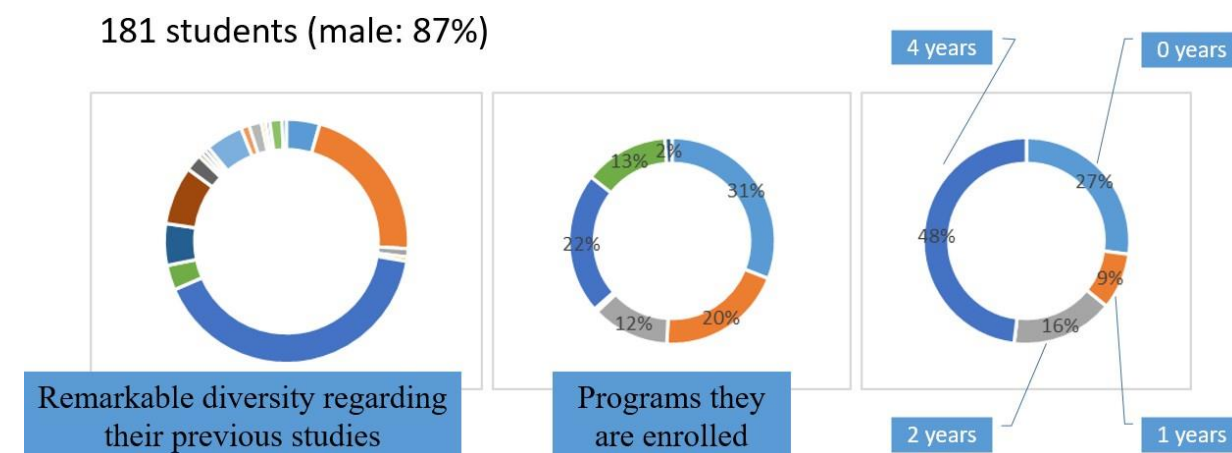


Figure 3. Programming-I course at Sapientia University: participants (2017/18)

The first diagram shows the remarkable diversity of the previous high school curriculum that includes subject such as human studies, biology, chemistry or mathematics and computer sciences. The second chart lists the enrollment programs including computer sciences and several engineering programs. In addition to the third chart we emphasize that students with 1 or 2 years of prior programming studies were initiated into searching and quadratic sorting algorithms, while students with 4 years of prior knowledge studied even the concept of algorithm complexity.

Before the experiment students received a minimal intro in programming and were familiarized with the environment on a minimal level by watching and superficially analyzing the video and animation of bubble- and selection-sort algorithms.

Participants and procedure

In the first experiment students enrolled into engineering programs were divided into two groups. The first group watched the computer based animation of the insertion sort algorithm twice. Out of the 46 students taking part on the experiment 23 had no prior programming knowledge, and the other 23 studied programming from 1 to 4 years. The second group was invited to watch the dance choreography once followed by the watching the animation once. Out of the 56 participants of this group 18 had no prior knowledge and 38 students studied programming from 1 to 4 years.

The task after watching the animation twice, respectively the video once and the animation once was to reconstruct the algorithm on a random input.

The second experiment carried out, grouped the students enrolled into engineering programs into two groups, so that the first one watched the animation four times (21 novice students and 25 students with prior knowledge in programming) and the second one the video two times (26 students with no prior knowledge and 20 students with 1 to 4 years of previous programming studies). The reason for playing the animation 4 times and the video only twice was that all students spend about the same time on watching the videos and animations (as the length of the video is about the double time compared to the length of the animation). The algorithm represented by the video and animation was the shell sort, which is a more complex algorithm compared to the insertion sort of the previous experiment.

The same task was assigned to students, reconstructing the algorithm on a random input.

Results And Discussion

The result of the first experiment showed that in both cases students performed similarly, there was no significant difference between watching the animation twice or the video combined with the animation. Students with no programming experience performed slightly better when watching the animation twice, while students with some prior knowledge performed better with the combined option (see Table 1 and Figure 4).

	Without prior knowledge	With prior knowledge	Entire group
Animation twice	69.13%	73.47%	71.3%
Video + Animation	60.83%	77.36%	72.05%

Table 1. Performance results of the first experiment

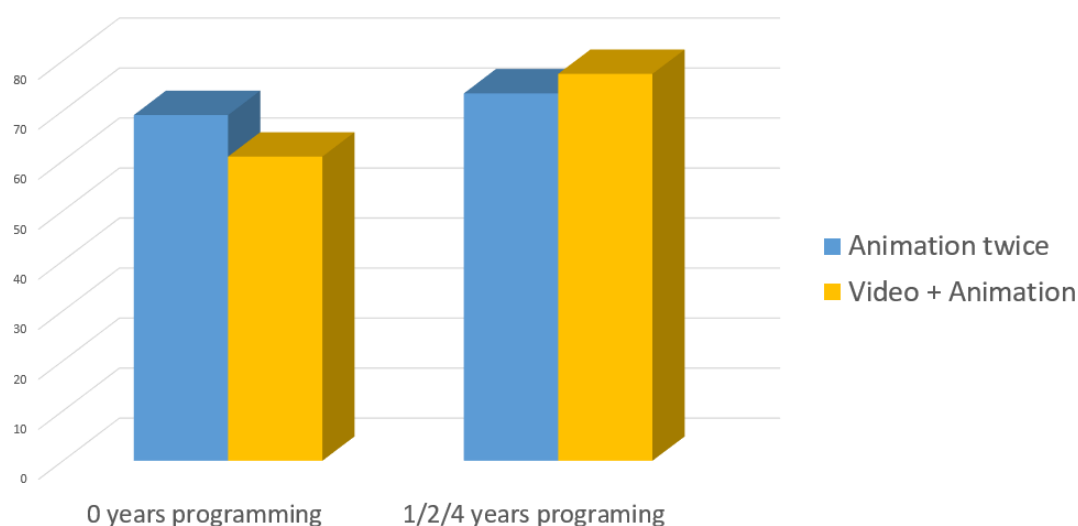


Figure 4. Results of the first experiment (insertion sort)

Surprisingly, but in line with previous studies both groups (with or without prior knowledge in programming) failed to benefit from the multiple representation of the algorithm.

The results of the second experiment are surprising as there is a significant difference in the case of novice students, they performed significantly better ($p=0.01$, 29.52% vs. 51.15%) when watching the video twice. In case of students with prior knowledge the difference was also substantial, but not statistically significant (see Table 2 and Figure 5).

	Without prior knowledge	With prior knowledge	Entire group
Animation four times	29.52%	57.6%	44.78%
Video two times	51.15%	70.75%	59.67%

Table 2. Performance results of the second experiment

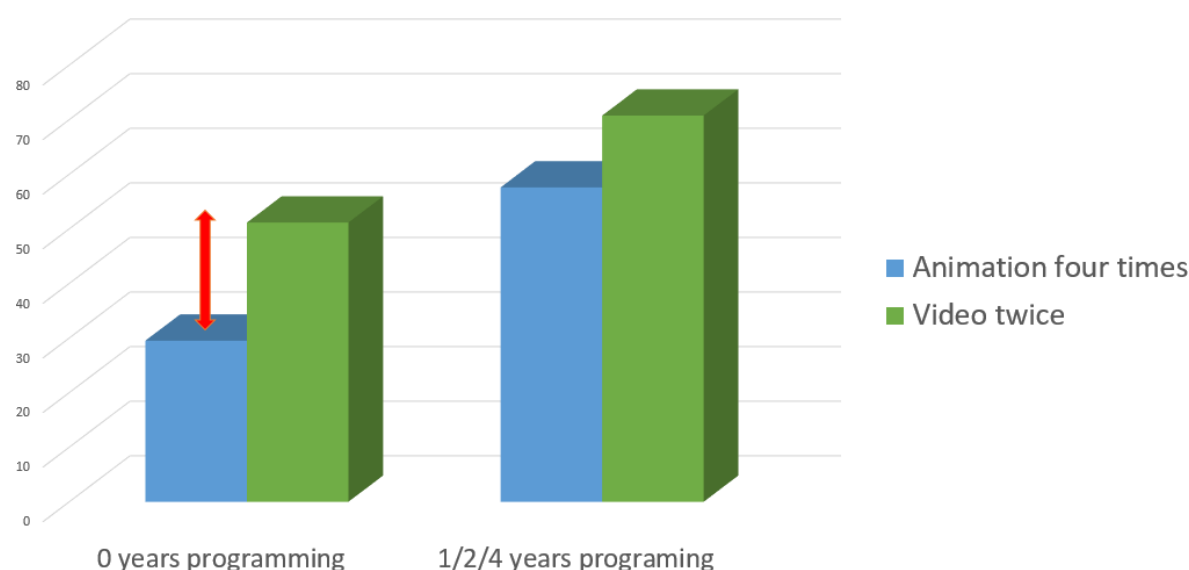


Figure 5. Results of second experiment (shell sort)

Taking into account both groups the difference (in favor of the video) is also significant with a p value of 0.03 (44.78% vs. 59.67%).

Conclusions

A possible reason why students failed to benefit from the multiple representation of the algorithm (video illustration plus computer animation) is that they were disturbed by the change of the environment. They were incapable to connect the two representations without being distracted from the logic of the algorithm. In line with previous studies novices were more affected.

On the other hand, interestingly, if the environment did not change, both groups achieved better results when they watched the dance choreography video twice then in the case of watching the computer animation repeatedly. These results, favoring our video illustration versus computer animation, before being generalized, obviously, have to be tested on other algorithms too.

References

- Aho, A. V. (2012). Computation and computational thinking. *The Computer Journal*, 55(7), 832-835.
- Clark, R. C., Mayer, R. E., & Thalheimer, W. (2003). E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning. *Performance Improvement*, 42(5), 41-43.
- Davies, A., Fidler, D., & Gorbis, M. (2011). Future work skills 2020. *Institute for the Future for University of Phoenix Research Institute*, 540.
- Katai, Z., Toth, L., & Adorjani, A. K. (2014). Multi-Sensory Informatics Education. *Informatics in Education*, 13(2), 225-240.
- Katai, Z. (2014, June). Selective hiding for improved algorithmic visualization. In *Proceedings of the 2014 conference on Innovation & technology in computer science education* (pp. 33-38). ACM.
- KNVTH, D. (1968). The art of computer programming Vol.1.
- Mannila, L., Dagiene, V., Demo, B., Grgurina, N., Mirolo, C., Rolandsson, L., & Settle, A. (2014, June). Computational thinking in K-9 education. In *Proceedings of the working group reports of the 2014 on innovation & technology in computer science education conference* (pp. 1-29). ACM.
- O'Brien, C., & Humphreys, N. I. M. J. (2016). Concern over drop-out rates in computer science courses [On-line]. Available: <http://www.irishtimes.com/news/education/concern-over-drop-out-rates-in-computer-science-courses-1.2491751>
- Rau, M. A. (2013). Conceptual learning with multiple graphical representations: Intelligent tutoring systems support for sense-making and fluency-building processes.
- Schwonke, R., Berthold, K., & Renkl, A. (2009). How multiple external representations are used and how they can be made more useful. *Applied Cognitive Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition*, 23(9), 1227-1243.
- Tekdal, M. (2013). The Effect of an Example-Based Dynamic Program Visualization Environment on Students' Programming Skills. *Educational Technology & Society*, 16(3), 400-410.

- Végh, L., & Stoffová, V. (2017). Algorithm Animations for Teaching and Learning the Main Ideas of Basic Sortings. *Informatics in Education*, 16(1), 121-140.
- Wing, J. M. (2006). Computational thinking. *Communications of the ACM*, 49(3), 33-35.

The Effect On Teaching Effectiveness: A Multi-Level Analysis

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Abstract

The aim of this research was to examine the school and class factors that affecting teachers' teaching effectiveness by investigating the relative impacts of the variables as class and school factors at the micro and macro levels respectively. This study utilized quantitative survey design using two types of questionnaires. A total of 513 respondents comprised of 68 school administrators at the macro level and 445 teaching staff at the micro level in schools under the Office of Secondary Educational Service Area 25. The ratio between of samples was 20:1 meaning that 20 samples to each observable variable. The hierarchical linear model (HML) analysis was utilized to test the fixed effect and random effect of null model, simple model, and hypothesis model. Results of null model regarding the fixed effect analysis showed the mean score of teachers' teaching effectiveness was 3.237 ($\gamma_{00}=3.237$ at significant level (0.01) $t = 99.329$ (while the random effect analysis showed the statistical significance for the mean score of teachers' teaching effectiveness was 0.01) Wald $Z = 3.619$ (and the variance in parameter estimation was 0.038, while the intra- class correlation coefficient) ρ was 0.285. Next, results of the simple model regarding fixed effect analysis showed that the mean score of teaching effectiveness was 3.208 ($\gamma_{00}=3.208$ at significant level (0.01) $t = 28.480$.(Analysis of random effects from simple model showed that school differences u_{0j} at significant level (0.01) Wald $Z = 3.106$ (and a variance in parameter estimation of 0.007. Finally, results of the hypothesis model relating to fixed effects showed a mean of teaching effectiveness of 3.213 ($\gamma_{00}=3.213$ at significant level (0.01) $t = 6.815$ (meanwhile analysis of random effects showed a decrease in values relative to the null model analysis .School differences u_{0j} showed at significant level (0.05) Wald $Z = 1.920$ (and a variance in parameter estimation of 0.005.

Keywords: *Classroom factors; school factors; teachers' teaching effectiveness*

Introduction

Teaching effectiveness is important because effective teaching assists student learning. According to Chianese (2015), an effective teacher can have an enriching effect on the daily lives of students and their lifelong education and career aspirations are also have a direct influence in enhancing student learning. Sirisooksilp, Ariratana, and Tang's (2015) study found that there are two types of leadership styles namely supportive leadership and participative leadership of school administrators have significantly affecting teachers' teaching effectiveness. They also found that these two leadership styles have jointly predicted teachers' teaching effectiveness for 56.80 percent at the significance level as 0.01. This implies that school administrators should promote, practice, and improve these two leadership styles to increase teachers' working effectiveness.

Somprach, Prasertcharoensuk, and Tang (2016) studied on the factors that affecting the effectiveness of World Class Standard Schools in Thailand. Their findings showed that strategic planning factor were identified as most effective factor but teacher professional development factor had the least capacity. Consequently, their results revealed that there were four significant predictors namely information and communication technology, teacher professional development, internal process management, and the focus on students and stakeholder were factors that have successfully contributed 65.60 percent variance of effectiveness of Thai World Class Standards Schools.

Prasertcharoensuk and Tang (2017) investigated the effect of strategic leadership factors of administrators on school effectiveness under the Office of MahaSarakhm Primary Educational Service Area 3, Thailand. Findings from 510 samples indicated that all the comparison result either strategic leadership of administrators or school effectiveness was significantly difference to school size respectively. In addition, the structural equation model of strategic leadership factors which affecting school effectiveness was fitted but there was no significant effect of administrators' strategic leadership factors toward school effectiveness at 0.05 level.

Conceptual Framework And Research Hypothesis

The main aim of this study was to examine the effect of school-level factors and classroom-level factors on teaching effectiveness in schools under the administration of the Office of Secondary Educational Service Area 25, Thailand. Therefore, this study was conceptualized that school-level factors and classroom-level factors influence the teachers' teaching effectiveness at macro and micro levels. Specifically, researchers evaluated the relative impact of factors that exists at classroom and school levels of analysis on teachers' teaching effectiveness.

The variables in this study include classroom-level factors, school-level factors, and teaching effectiveness. Classroom-level factors are (i) bio-social characteristics of teachers; (ii) social support for teachers; (iii) teaching performance, and (iv) teaching atmosphere. On the other hand, school-level factors encompass (i) school size; (ii) academic leadership; (iii) school culture, and (iv) school atmosphere. Teaching effectiveness is concerned with particular teacher dealing with students in a particular environment as teacher attempts to achieve a particular instructional goal by presenting the ideas and activities involved in a teaching unit that most facilitates the regular and systematic development of the students (Thawinkarn, Tang, & Ariratana, 2018). In regard to Thawinkarn et al.'s (2018) definition, teaching effectiveness which acts as a dependent variable refers to (i) academic achievement; (ii) satisfaction of teacher's teaching performance, and (iii) participation of parents and community. The proposed conceptual framework is shown in Figure 1 below:

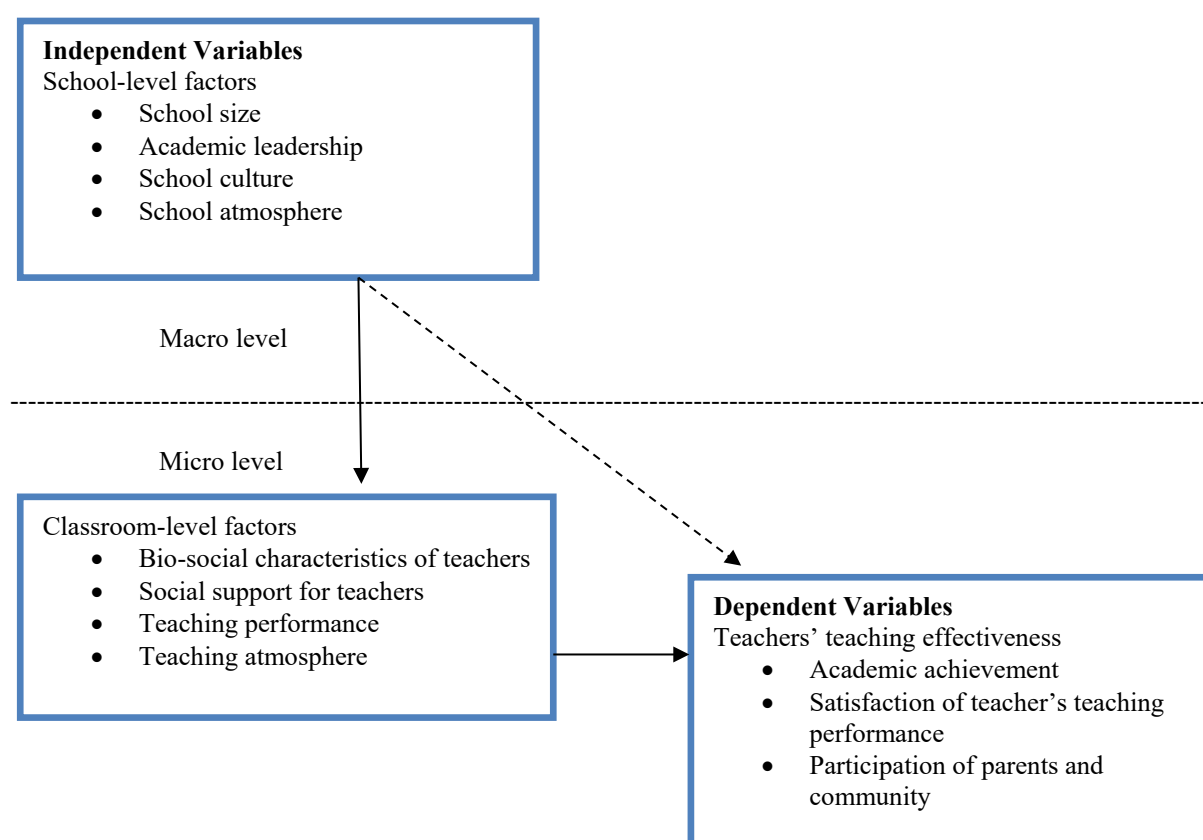


Figure 1: Conceptual Framework

The first model to test is a null model which was conducted on the dependent variables without taking into account any independent variables. The null hypothesis 1 was tested on the extent that the fixed effect and random effect on teachers' teaching effectiveness as follows:

Ho₁: There is no fixed and random effects of null model

When the micro level variables could be used to explain the teachers' teaching effectiveness, researchers would be able to perform to test the effects on the simple model. To what extent that the fixed and random effects on teachers' teaching effectiveness, null hypothesis 2 was tested:

Ho₂: There is no fixed and random effects of simple model

Finally, researchers used the multi-level analysis to test the fixed and random effects of hypothesis model on teachers' teaching effectiveness as indicated in Ho₃

Ho₃: There is no fixed and random effects of hypothesis model

Method

Survey design was employed using questionnaire as a method to collect quantitative data. A total of 3,914 population of this study consisted of 188 administrators at the school organizational level (macro) and 3,726 teachers or teaching staff at classroom level (micro) from 28 schools under the Office of Secondary Educational Service Area 25, Thailand. Multistage sampling technique followed by proportional simple random sampling technique was administered to select samples according to the two levels. Therefore, the target groups were divided into two levels, namely school-level and classroom-level. At the school-level, there were 50 schools, with 68 administrators acting as respondents. The schools and classroom were randomly selected from different school size such as small, middle, large, and extra-large size schools. Since researchers employed Hierarchical Linear Modeling (HLM), a large sample size is needed in order to find accurate group variation. Hair, Back, Babin and Anderson's (2013) proposed that the proper ratio of samples is 20:1 or 20 samples per one observable variable. Since there were 21 observable variables in this study, the required sample size was 445 samples of teachers. On this line of reasoning, simple random sampling technique was utilized to select 513 of classroom to fulfill Hair et al. (2013) suggestion that sample size should not less than 100.

Two types of survey questionnaire were used in this study catering for macro and micro levels respectively. The two types of questionnaire were administered in the Thai language to ensure that the respondents could understand about the statements. This survey questionnaire method benefits this study in terms of obtaining data more efficiently as time, energy, and costs would be minimized (Wyse, 2012), hence provides an excellent means of measuring attitudes and orientation in a large population which can, therefore, be generalized to a larger population (Gay, Mills, & Arirasian, 2012).

Results Of The Study

Results of this study are presented in accordance with the research hypothesis that is indicated above. The initial result is the descriptive results related to the three variables namely classroom-level factors, school-level factors, and teachers' teaching effectiveness. This is followed by results from HML analysis for null hypothesis testing.

Descriptive Results

Descriptive results showed that teachers' teaching effectiveness was at moderate level. Specifically, the components of teachers' teaching effectiveness satisfaction of teaching performance and participation of parents and community were identified at high level whereas academic achievement was at low level. Furthermore, descriptive results of school-level factors were generally evaluated to be at highest level such as academic leadership, school culture, and school atmosphere was evaluated to be at high level. Besides, 40 percent of the schools that researchers investigated are categorized as small size schools. On the other hand, the bio-social characteristics of teachers as classroom factors revealed that 70.18 percent of the teachers are female, 32.11 percent were 41 to 50 years old, 55.04 had a bachelor's degree, and 38.30 percent had more 20 years of teaching experience. Other classroom-level factors were found at high level such as school atmosphere, teaching performance, and social support for teachers, in descending order.

Null Model Analysis

The micro-level analysis of HML was conducted in two steps. The first step (null model) was conducted on the dependent variables without considering any independent variables. As indicated in Table 1, the results of fixed effect test showed that the total mean score of teachers' teaching effectiveness was 3.237 ($\gamma_{00}=3.237$ with a (statistical significance of 0.01). The test of random effect showed that the statistical significance for the mean of teaching effectiveness was 0.01) Wald Z= 3.619 (, and the variance in parameter estimation was 0.038, while the intraclass correlation coefficient (p) was 0.285. The school variance was 28.50 percent meaning that the classroom variables were able to indicate teaching effectiveness. Therefore, researchers were able to use the simple model analysis for the second step (simple model).

Table 1: Results of null model from fixed effect and random effect

Fixed effect	β	Standard Error	t-test	df	p-values
INTRCPT, γ_{00}	3.237**	0.033	99.329	48.961	<0.001
Random effect	β	Standard Error	Wald Z	p-values	
School differences (U_{0j})	0.038**	0.011	3.619	<0.001	
Classroom differences (r_{ij})	0.096	0.007	13.9927	<0.001	

**p<0.001

Simple Model Analysis

Based on Table 2, the results of fixed effect test showed that the total mean of the teachers' teaching effectiveness was 3.208 ($\gamma_{00}=3.208$ with a statistical significance of (0.01) $t = 28.480$).(Independent variables at the classroom-level that provided positive effects on teaching effectiveness were social support for teachers ,teaching performance ,and teaching atmosphere ,with every factor having a statistical significance of 0.01 .The regression coefficient of each factor was 0.333, 0.113, and 0.171 ,respectively .This implies that promotion of social support for teachers ,of teaching performance ,and of teaching atmosphere can improve teaching effectiveness. Analysis of random effect showed that school differences(U_{0j}) having a statistical significance of 0.01 (Wald $Z = 3.106$) and a variance in parameter estimation of 0.007. Independent variables at the classroom-level showed variance of dependent variables at 52.62 percent, as shown in Table 2.

Table 2: Results of simple model from fixed effect and random effect

Fixed effect	β	Standard Error	t-test	df	p-values
INTRCPT, γ_{00}	3.208**	0.113	28.480	416.934	<0.001
WOMEN, γ_{10}	0.033	0.022	1.494	414.632	0.136
AGE2, γ_{20}	-0.056	0.048	-1.178	418.658	0.239
AGE3, γ_{30}	-0.084	0.056	-1.495	417.087	0.136
AGE4, γ_{40}	-0.114	0.065	-1.770	419.628	0.077
BHD, γ_{50}	-0.001	0.105	-0.012	410.120	0.990
MD, γ_{60}	0.020	0.105	0.193	410.663	0.847
EXP2, γ_{70}	0.040	0.051	0.784	421.422	0.433
EXP3, γ_{80}	0.096	0.056	1.698	421.119	0.090
EXP4, γ_{90}	0.095	0.063	1.516	421.993	0.130
EXP5, γ_{100}	0.126	0.066	1.894	421.991	0.059
SPON, γ_{110}	0.333**	0.028	11.770	421.959	<0.001
BEHAV, γ_{120}	0.113**	0.035	3.234	415.828	0.001
TEAAT, γ_{130}	0.171**	0.034	5.064	407.545	<0.001
Random effect	β	Standard Error	Wald Z	p-values	
School differences (U_{0j})	0.007**	0.00237	3.106	0.002	
Classroom differences (r_{ij})	0.041**	0.00292	13.892	<0.001	

** $p < 0.01$

Hypothetical Model Analysis

Hypothetical model analysis includes all the independent variables for every level. Analysis of the fixed effects showed a mean of teachers' teaching effectiveness as 3.213 ($\gamma_{00}=3.213$ at a statistical significance of (0.01) $t = 6.815$).(The school-level factors)macro-level independent variables(on teaching effectiveness was not statistically significant. However, the school-level factors that provided a positive effect on teachers' teaching effectiveness were: being a large- size school and having 5-10 years of teaching experience, with a statistical significance of 0.05 ($\gamma_{83}=0.430$, $t = 1.998$), and being an extra-large size school and teaching performance with a statistically significance of 0.01 ($\gamma_{123}=0.385$, $t = 2.891$). However, being an extra-large size school and teaching atmosphere was shown to provide a negative effect on teachers' teaching effectiveness, with a statistically significance of 0.05 ($\gamma_{133}= 0.244$, $t = -1.986$). Analysis of random effects showed a decrease in values relative to the null model analysis. School differences (U_{0j}) showed a statistically significance of 0.05 (Wald $Z = 1.920$) and a variance in parameter estimation of 0.005. The classroom model (micro level) indicated a 37.50 percent variance of dependent variable, as shown in Table 3.

Table 3: Results of hypothesis model analysis from fixed effects and random effects

Fixed effects	β	Standard error	t-test	df	p-values
INTRCPT, γ_{00}	3.213**	0.471	6.815	334.049	<0.001
Being a small size school, γ_{01}	0.278	0.732	0.379	330.709	0.705
Being a large size school, γ_{02}	-0.100	0.183	-0.548	321.031	0.584
Being an extra large size school, γ_{03}	-0.167	0.505	-0.330	335.603	0.742
Being an academic leader, γ_{04}	-0.370	1.071	-0.346	327.762	0.730

School culture, γ_{05}	0.054	0.036	0.162	317.670	0.871
School atmosphere, γ_{06}	0.290	0.328	0.884	330.381	0.377
WOMEN, slope β_{1j}, γ_{10}	-0.033	0.064	-0.517	332.387	0.605
Being a small size school, γ_{11}	-0.042	0.085	-0.491	337.496	0.624
Being a large size school, γ_{12}	0.087	0.086	1.008	340.740	0.314
Being an extra large size school, γ_{13}	0.144	0.078	1.856	339.291	0.064
Being an academic leader, γ_{14}	0.117	0.144	0.813	340.114	0.417
School culture, γ_{15}	-0.122	0.203	-0.600	340.312	0.549
School atmosphere, γ_{16}	-0.047	0.203	-0.230	340.993	0.818
AGE2, slope β_{2j}, γ_{20}	0.049	0.124	0.396	339.471	0.693
Being a small size school, γ_{21}	-0.240	0.169	-1.421	337.359	0.156
Being a large size school, γ_{22}	-0.113	0.176	-0.641	338.771	0.522
Being an extra large size school, γ_{23}	-0.145	0.170	-0.850	339.506	0.396
Being an academic leader, γ_{24}	0.028	0.318	0.089	334.728	0.929
School culture, γ_{25}	-0.053	0.449	-0.119	332.652	0.905
School atmosphere, γ_{26}	-0.046	0.440	-0.105	339.026	0.916
AGE3, slope β_{3j}, γ_{30}	0.022	0.145	0.149	338.368	0.882
Being a small size school, γ_{31}	-0.084	0.196	-0.430	339.581	0.667
Being a large size school, γ_{32}	-0.139	0.206	-0.673	331.028	0.501
Being an extra large size school, γ_{33}	-0.110	0.199	-0.551	334.211	0.582
Being an academic leader, γ_{34}	0.234	0.382	0.613	338.354	0.540
School culture, γ_{35}	0.118	0.525	0.226	337.871	0.822
School atmosphere, γ_{36}	-0.104	0.500	-0.209	340.935	0.835
AGE4, slope β_{4j}, γ_{40}	-0.086	0.172	-0.497	338.574	0.620
Being a small size school, γ_{41}	-0.053	0.236	-0.222	336.471	0.824
Being a large size school, γ_{42}	-0.080	0.234	-0.343	335.287	0.732
Being an extra large size school, γ_{43}	-0.014	0.230	-0.060	335.955	0.952
Being an academic leader, γ_{44}	0.058	0.429	0.136	340.923	0.892
School culture, γ_{45}	0.047	0.593	0.078	339.600	0.937
School atmosphere, γ_{46}	0.256	0.573	0.447	340.985	0.655
BHD, slope β_{5j}, γ_{50}	0.119	0.454	0.262	326.195	0.794
Being a small size school, γ_{51}	-0.244	0.713	-0.342	326.346	0.733
Being a large size school, γ_{52}	-0.053	0.081	-0.652	340.638	0.515
Being an extra large size school, γ_{53}	-0.106	0.476	-0.222	326.446	0.824
Being an academic leader, γ_{54}	0.195	1.045	0.187	323.945	0.852
School culture, γ_{55}	-0.157	0.179	-0.877	339.725	0.381
School atmosphere, γ_{56}	0.084	0.209	0.401	336.488	0.689

MD,slopeβ_{6j}, γ_{60}	0.097	0.452	0.214	326.713	0.831
Being a small size school, γ_{61}	-0.196	0.713	-0.275	327.620	0.783
Being an extra large size school, γ_{63}	-0.066	0.473	-0.140	326.544	0.888
Being an academic leader, γ_{64}	0.171	0.103	0.165	323.740	0.869
EXP2,slopeβ_{7j}, γ_{70}	-0.147	0.144	-1.019	340.260	0.309
Being a small size school, γ_{71}	0.119	0.189	0.627	340.269	0.531
Being a large size school, γ_{72}	0.174	0.211	0.822	340.942	0.412
Being an extra large size school, γ_{73}	0.406*	0.185	2.198	338.297	0.029
Being an academic leader, γ_{74}	0.185	0.333	0.556	336.794	0.578
School culture, γ_{75}	0.293	0.442	0.664	340.764	0.507
School atmosphere, γ_{76}	-0.437	0.419	-1.043	340.841	0.298
EXP3,slopeβ_{8j}, γ_{80}	-0.095	0.170	-0.557	335.536	0.578
Being a small size school, γ_{81}	0.107	0.214	0.501	340.394	0.617
Being a large size school, γ_{82}	0.266	0.225	1.185	340.597	0.237
Being an extra large size school, γ_{83}	0.430*	0.215	1.998	340.645	0.047
Being an academic leader, γ_{84}	0.264	0.357	0.741	339.971	0.459
School culture, γ_{85}	-0.084	0.535	-0.156	340.863	0.876
School atmosphere, γ_{86}	-0.218	0.516	-0.422	340.909	0.673
EXP4,slopeβ_{9j}, γ_{90}	-0.130	0.182	-0.716	339.689	0.474
Being a small size school, γ_{91}	0.115	0.237	0.484	339.767	0.629
Being a large size school, γ_{92}	0.239	0.247	0.970	340.600	0.333
Being an extra large size school, γ_{93}	0.432	0.232	1.857	339.802	0.064
Being an academic leader, γ_{94}	0.053	0.413	0.128	338.487	0.898
School culture, γ_{95}	0.136	0.596	0.228	338.908	0.820
School atmosphere, γ_{96}	-0.327	0.583	-0.561	335.489	0.575
EXP5,slopeβ_{10j}, γ_{100}	-0.006	0.196	-0.028	340.373	0.978
Being a small size school, γ_{101}	0.039	0.257	0.150	340.995	0.881
Being a large size school, γ_{102}	0.107	0.261	0.410	340.072	0.682
Being an extra large size school, γ_{103}	0.348	0.246	1.415	339.978	0.158
Being an academic leader, γ_{104}	0.140	0.423	0.332	339.521	0.740
School culture, γ_{105}	-0.061	0.624	-0.098	340.990	0.922
School atmosphere, γ_{106}	-0.577	0.628	-0.919	340.342	0.359
SPON, slopeβ_{11j}, γ_{110}	0.379**	0.099	3.833	330.088	<0.001
Being a small size school, γ_{111}	0.052	0.130	0.398	335.688	0.691
Being a large size school, γ_{112}	-0.058	0.125	-0.462	336.437	0.644
Being an extra large	-0.060	0.113	-0.526	333.902	0.599

size school, γ_{113}					
Being an academic leader, γ_{114}	-0.144	0.179	-0.804	340.716	0.422
School culture, γ_{115}	0.013	0.259	0.052	331.438	0.959
School atmosphere, γ_{116}	-0.014	0.316	-0.045	337.716	0.964
BEHAV, slopeβ_{12j}, γ_{120}	-0.154	0.111	-1.386	340.561	0.167
Being a small size school, γ_{121}	0.089	0.156	0.570	331.336	0.569
Being a large size school, γ_{122}	0.195	0.135	1.445	339.291	0.149
Being an extra large size school, γ_{123}	0.385**	0.133	2.891	340.815	0.004
Being an academic leader, γ_{124}	0.143	0.228	0.626	338.651	0.532
School culture, γ_{125}	-0.323	0.291	-1.112	340.701	0.267
School atmosphere, γ_{126}	0.077	0.350	0.221	337.870	0.825
TEAAT, slopeβ_{13j}, γ_{130}	0.317**	0.107	2.957	338.552	0.003
Being a small size school, γ_{131}	-0.052	0.153	-0.338	340.831	0.736
Being a large size school, γ_{132}	-0.076	0.133	-0.569	334.930	0.570
Being an extra large size school, γ_{133}	-0.244*	0.123	-1.986	335.963	0.048
Being an academic leader, γ_{134}	0.081	0.208	0.389	338.185	0.698
School culture, γ_{135}	0.174	0.274	0.635	340.725	0.526
School atmosphere, γ_{136}	0.039	0.305	0.127	340.976	0.899
Random effect	β	Standard Error	Wald Z	p-values	
School differences (U_{0j})	0.005*	0.002	1.920	0.049	
Classroom differences (r_{ij})	0.042**	0.003	12.498	<0.001	

**p<0.01; *p<0.05

Discussion And Conclusion

Descriptive results showed that the overall teachers' teaching effectiveness was at moderate level. However, two of the components of teachers' teaching effectiveness showed at highest level namely satisfaction of teaching performance and the participation of parents and community. Nevertheless, low academic achievement was initially indicated by the low 2016 O-NET scores, thus low academic achievement as a component of teachers' teaching effectiveness was an inevitable result. This result is consistent with Sirisooksilp et al. (2015).

School-level factors are naturally generated by school administrators, teachers, and the involved personnel, as mentioned by Somprach et al. (2016). Somprach et al. revealed that school-level factors such as leadership, management of resources, and organizational atmosphere were significantly affecting school effectiveness while classroom-level and student-level factors are at second and third place, respectively.

Classroom-level factors were generally identified at high level and arranged in descending order as teaching atmosphere, teaching performance, and social support for teachers. This implies that good cooperation between teachers and students can generate effective teaching and learning. This is supported by Thawinkarn et al.'s study (2018) who emphasized that a safe learning environment, with no disruptions to teaching and learning, and clear school vision are important elements to improve teachers' teaching effectiveness. Besides, teachers have to play their essential roles in the direction of teaching, priority setting, assessment process, and showing leadership in teaching.

Nevertheless, school administrators should be open-minded and able to adapt to any strategy that assists the school in creating an effective teaching environment. School administrators should create an atmosphere of high expectations, requiring teachers to indicate their success with students' learning that resulting in all basic skills. Meanwhile, teachers should show their dedication to teaching by planning activities in basic skill learning for students and also by regularly following up on students' progress. This implies that positive bonds between school and homes would encourage parents to support the school mission in order to accomplish optimal results.

Results of fixed effect analysis revealed that the overall teachers' teaching effectiveness was 3.206 with a statistical significance of 0.01. This implies that classroom-level factors which acted as independent variables that provided a positive effect on teachers' teaching effectiveness were social support for teachers, teaching performance, and teaching atmosphere at significant level as 0.01. It can be concluded that promotion of social support for teachers, teaching performance, and teaching atmosphere can improve teachers' teaching effectiveness. This result is supported by Prasertcharoensuk and Tang (2017).

The school-level factors analysis showed that the mean of teachers' teaching effectiveness was 3.213 with a statistical significance of 0.01. The effect of school-level factors failed to affect teachers' teaching effectiveness when taking into account the constants in the analysis. On the other hand, school-level factors are subordinate factors that help teachers in their classroom management. Researchers would like to suggest the Office of Secondary Educational Service Area 25 to incorporate teacher development strategies to enhance their knowledge, communication skills, and teaching competencies in order to improve the educational quality.

On top of that, a demonstration of various teaching techniques and assessments has to implement and improve individual academic achievement among students. Friendly supervision and suitable information technology has to be introduced to elevate teachers' teaching effectiveness. In addition, school administrators, teachers, and other involved parties should form networking to establish a learning community so that enable the Thai society to respond to the concept of an Asian Community. Moreover, good teaching morale and ethics have to be continuously supported in order to build pride in the teaching occupation, as well as to lead students by example.

References

- Chianese, G. (2015). Developing and assessing teaching effectiveness. *Procedia – Social and Behavioural Sciences*, 191, 692-695. doi: 10.1016/j.sbspro.2015.04.218
- Gay, L. R., Mills, G. E., & Airasian, P. W. (2012). *Educational research competencies for analysis and application* (10th ed.). Boston, MA: Pearson.
- Hair, J.F., Back, W.C., Babin, B.J., & Anderson, R.E. (2013). *Multivariate data analysis* (7th ed.). [Kindle version]. Retrieved from <http://www.amazon.com/>
- Prasertcharoensuk, T. & Tang, K. N. (2017). The effect of strategic leadership factors of administrators on school effectiveness under the Office of MahaSarakham Primary Educational Service Area 3. *Kasertsart Journal of Social Sciences*, 38, 316-323.
- Sirisooksilp, S., Ariratana, W., & Tang, K. N. (2015). The impact of leadership styles of school administrators on affecting teacher effectiveness. *Procedia-Social and Behavioral Sciences*, 186, 1031-1037. doi: 10.1016/j.sbspro.2015.04.022
- Somprach, K., Prasertcharoensuk, T., Tang, K. N. (2016). Factor affecting the effectiveness of Thai secondary world class standard school. *International Journal of Learning and Teaching*, 8(1), 20-29.
- Thawinkarn, D., Tang, K. N., & Ariratana, W. (2018). Relationship between perceived directors' leadership and classroom quality of primary schools in Thailand. *Kasetsart Journal of Social Sciences*, 39, 230-235.
- Wyse, S.E. (2012). *4 main benefits of survey research*. Retrieved from www.snapsurveys.com/

The Effects Of Emotional Intelligence And Intuitive Thinking On Decision Making And Management Skills

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Abstract

Emotional intelligence is the sense of one's own feelings and the feelings of other individuals. Emotional intelligence is gathered under five main headings. These: 1. A person's awareness of their own feelings, 2. Managing your own feelings, 3. Motivation of the person himself, 4. Empathy, 5. Social skills. The ability to immediately understand or know something based on emotions is intuition. Intuition helps to make decisions that feel safe. Scientists have discovered that the feelings born to us are the second brain. The reason for this is the large number of neurons that cover the intestinal walls. But those who are strong in intuition know that their feelings are filled with wisdom and intuition. Very powerful people with intuition need to spend time and time alone. So they can gather their inner powers and audition themselves. That is why such people have a very introverted personality. "Decision" is a choice between alternative actions in case of uncertainty. While trying to make a good decision, it must evaluate the positive and negative aspects of each option according to certain criteria and take into account all options. Uncertainty, perfectionism, fear of failure, anxiety and stress; are among the emotional difficulties that affect decision making. Especially in strategic decisions, risk and uncertainty increase. Management skills are grouped under three headings: Conceptual skills, human skills and technical skills. Depending on the level of management of an administrator, the need for these skills varies. Emotional intelligence and intuitive thinking can affect the number of decision-making criteria.

Introduction

The life is a learning process. Therefore, the people must master the ability to continue to learn as a self-directed and lifelong learner. Emotional intelligence can be learned and it also increases learning power. Emotional intelligence is conceptualized as an ability that can be taught, learned, and changed (Birks & Watt, 2007: p.368). The skills associated with emotional intelligence, such as perceiving, understanding, using, and managing emotions, can be improved through training that specifically addresses these skills (Johnson, 2015: p.183). Emotional intelligence is directly related to interpersonal communication. People with intrapersonal problems can be defined as those who struggle due to personal internal conflicts or anxiety. Whereas a certain degree of anxiety is useful for performance, to an excess it can become debilitating and lead to many other problems (Hendren, 1988: p.596). Emotional intelligence may significantly diminish employees' withdrawal intentions because of the ability to better regulate emotions. Being in positive affective states is of importance in the sense of not becoming despondent in the face of daily and even more profound obstacles occurring in organizational life (Carmeli, 2003, p.797). Managers seek alternative ways of obtaining and interpreting information and knowledge. Here, managerial intuitive potential begins to play an important role. Intuition is considered to be one of the least defined and operationalized elements of human capital (Fields, 2000). In recent years, there has been an increased interest in intuition. This is due to the characteristics of the environment in which modern managers are forced to work. Intuition enables decision making in situations of lack or excess of information, in conditions of risk and uncertainty, under time pressure and in the case of individual problems. It can be noted that contemporary decision-makers, especially at the strategic level, deal with exactly such situations and conditions. Based on the literature, it can be stated that intuition is most often defined as the act of cognition without rational inference. Optionally, it is recognized as a way of learning that takes place beyond consciousness, in which a decision-maker acquires knowledge, but is unable to identify the source of this knowledge. Intuition is used in every decision-making process, but with varying intensity. It may also be additional information in the event of an information gap. It acts as a kind of "signpost" that directs a decision-maker towards a favourable solution (Malewska, 2015: p.24). Management skills are grouped under three headings: Conceptual skills, human skills and technical skills. Depending on the level of management of an administrator, the need for these skills varies. Emotional intelligence and intuitive thinking can affect the number of decision-making criteria. How effective is emotional intelligence and intuitive thinking on management and decision making skills?

Emotional Intelligence Concept And Definition

The success of the individual in both business and social life is influenced by many other factors besides IQ. One of these factors is emotional intelligence. Emotional intelligence has different sub-dimensions such as being aware of one's own feelings, understanding others' feelings, adapting to new situations and circumstances, solving problems between individuals, controlling individual feelings and being independent (Türker, 2016, p.7). Salovey and Mayer (1990) introduced the concept to the literature. They have studied the dimensions of emotional

intelligence; (1) being aware of emotions, (2) being able to cope with emotions, (3) being able to motivate oneself, (4) being able to notice others' feelings, and (5) being able to engage in relationships (Tuğrul, 1999: p.15). These dimensions can be expressed as dimensions that constitute emotional intelligence. Researchers have generally expressed emotional intelligence as "the ability of individuals to deal with emotions" (Wong & Kenneth, 2002: p.245). Erkuş (1998) defined the concept as having the necessary mental capabilities for selecting, forming and adapting any environmental position. Goleman (1996) defines the concept; "The individual has defined himself as able to act, to continue in spite of incompetence, to be able to postpone satisfactorily by controlling the prosperity, to regulate his mood, to empathize, to hope, to not allow problems to be prevented from thinking".

Emotional intelligence, in general, refers to the ability of an individual to have the ability to understand and use emotions, as well as being defined as the ability of an individual to be aware of their emotions and the feelings of the people around them (Nelson et al., 2003: p.9). Nelson et al. (2003) identified thirteen different dimensions of emotional intelligence, called the Emotional Skills Assessment Process, in the individual. Researchers; They developed a total of 213 expressions to measure the factors that they call what they call aggression, respect, consolation, empathy, decision making, leadership, self-esteem, stress management, difficulty in coping, time management, business ethics and change needs, tested on their students. Min (2012) suggests that some factors of DBDS may be necessary to be successful in the tourist guidance profession; They have adapted the short version to tourist guides that include factors such as seeking, difficulty coping, time management, business ethics, change need and stress management. It has been emphasized that in both studies (Nelson et al., 2003 & Min, 2012), in which the individual's emotional intelligence is an intelligence that improves emotional intelligence skills, emotional intelligence may be possible if efforts are made to detect and eliminate weak abilities. The development of emotional skills and, consequently, emotional intelligence opens the way for the individual to be more successful in social and professional life.

Intuitive Decision-Making

Emotional nature, expression and responses are unwelcome in the business world. People acting on their emotional impulses are usually not seen as credible. We emphasise rationality and rational decision-making. By controlling our emotions, we suppress them, thereby also suppressing creativity (Kovacic et al, 2013: p.3). If we are able to trust ourselves and what we feel, intuition can take us beyond the borders of the known and act as a new partner in learning, action and acquiring of information necessary for holistic decision-making. In spite of very strong and positive initial feedback we find that the business world is still very reserved towards intuition. We all live with it, but we are reluctant to talk about it. The circumstances in which we use intuition are usually turbulent and chaotic, with complex and unstructured problems, quick shifts in consumer expectations, constantly shortened cycle of product development, the need for efficient decision making without all necessary information, etc. We therefore use intuition in critical situations under the pressure of time when we cannot rely on other sources of information or there is no time to obtain the necessary information.

Senge et al. (2008) find that we make decisions and adhere to habitual patterns when we feel fear or pressure. Senge stresses that in the learning process an individual only hears what he or she can recognise, while the interpretation of the heard message depends on one's beliefs, past sensations and experience. He continues that due to the tendency to maintain entrenched patterns of behaviour an individual is only ready to change his or her actions within the boundaries of the known. This represents horizontal interaction between the phases of thinking and action where an individual exhibits only minor changes in actions. Using vertical interaction between the two phases we are able to reach deeper within ourselves which can result in radical changes in personality. Through the process of learning an individual deepens their knowledge of self. They discover their deeper personal levels, which in addition to thoughts also include emotions and will. Usually, this leads to uncovering hidden virtues which people can observe, develop and use consciously. In turn, this often leads to a change in personality, but only if they are able to recognise and change their habitual patterns.

At the deepest levels of learning, intuition is able to connect hidden threads of thought, emotions and will between seemingly unrelated ideas. Thus, we gain more comprehensive insight, and consequently the ability to make holistic decisions. Holistic decision-making leads to more comprehensive acting, particularly from the aspect of socially responsible actions of individuals, groups and the society. Strategic business decisions are aimed at the future and thus very rarely revisable. The usefulness of knowledge and experience in this process is very limited therefore we rely on intuition and creativity. It is a proven fact that more intuitive decisions are made on the strategic management level than on the tactical and operational levels. Everyone uses intuition whether we are aware of it or not. Until we are able of conscious use of intuition, it is something that "happens" instead of being used. Therefore, we need to develop the ability to sense intuition and gain experience on how we use it as individuals (Kovacic, 2012: p.13). The process of intuition based decision-making is a useful business tool with an alternative approach and a different view of the decisionmaking process.

Management Skills

Skill; from the knowledge that one earns through education, from his experiences, intelligence and innate abilities. "Management skills" are the factors that make the management case successful. According to Katz's Theory, a successful manager has triplet managerial skills (conceptual, human and technical). Managerial skills are required to implement quintuplet functions of management (planning, organizing, directing, controlling, evaluating) (Seyedinejat et al., 2014: p.34). Managerial skills are one of reasons in consecutive organizational successes. Management effectiveness and efficiency require managerial skills. The first scientific and structured discussion of "Management skill" was presented by Robert L. Katz. The article called "skills of an affective administrator", was published in Harvard Business Review in January 1995. He has classified the required skills for a manager in three groups herein mentioned briefly but in the following sections, due to their pivotal role, each is explained separately and completely. According to his theory, technical skill is more important in lower management levels and conceptual skill is more significant in upper management levels and human skill is regarded equally important in all three management levels (Mirsepassi, 1991: p.23). Technical skill implies an understanding of, and proficiency in, a specific kind of activity, particularly involving methods, process, procedures or techniques. Technical skill involves special knowledge, analytical ability within that specialty and facility in the use of the tools and techniques of the specific discipline (Robbins & Decenzo, 1998). Human skill is the ability to understand, create motivation and work with employees. According to Robert Katz, human skill is the ability to work effectively as a group member and to build understanding and cooperative effort in the team he leads. Human skill is the ability of manager to work effectively as a group member and to build effective understanding and cooperative effort in the team he leads (Ahmadi, 2011).

One of the triple management skills is conceptual skill also known as perceptual skill, analytical skill, the skill based on general understanding, theoretical skill and cognitive skill. The skill based on general understanding is referred to as the power to consider institute as a whole unity i.e. manager must recognize how different functions of organization depend on one another and change in each part necessarily influences other parts. This skill can be extended to the understanding of the relationship between the said institution and industry in general and also society and political, social and economic factors of an entire nation. By recognizing such relationships and understanding the important elements in any situation, the manager would be able to act in a way that leads to the improvement of organization (Razaghi et al., 1991: p.35).

Conclusion

In this study, it is examined that relations of emotional intelligence and intuitive thinking with decision making skills. Furthermore, how this kind of relations influences management skills are discussed. One of the most important of management skills is decision making. Also, one of the most important elements of emotional intelligence is intuition. Our decisions affect our entrenched habits. The decision-making provides us with solutions for achieving the wanted benefits with as few unwanted consequences as possible. The circumstances in which we are making decisions are often not entirely clear and the available information usually limited. The question of being able to obtain adequate information for qualitative decision-making is always present. Intuition, knowledge and experience are the three natural channels that provide us with information necessary for holistic decision-making. We acquire knowledge based on learning. We acquire experience based on our actions. Our knowledge is affirmed and deepened through practical application and complemented by experience. We need to develop the ability to quickly and lastingly learn from our experiences. Repeating same experiences over and over and revisiting the same situations because we are unable to learn our lessons quickly and lastingly is futile endeavour. Another important aspect is the fact that learning and acting draw information from the conscious sphere, while intuition draws from the unconscious. If we make decisions based only on the conscious aspect, we subject to oversight and unilateral thinking. By searching our inner selves and using intuition we can reach information in the unconscious sphere which complements the information in the conscious. Only by merging the two information flows can we obtain adequate information for holistic decision-making. Decision-making process primarily depends on awareness developed through the processes of learning and acting. We also need to emphasise that there are two diametrically opposite types of consciousness: (1) Consciousness directed inwardly towards its centre and (2) consciousness directed outwardly. A regular person's consciousness is entirely outwardly directed. It is immersed in the outer world. Intuitive decision-making requires redirecting our consciousness from the outside towards the inside. The process of learning enables us to reach deeply within ourselves and uncover hidden personal qualities. Attempting to better utilise one's inner potential often leads to personal change. Accordingly, we change our existing behavioural patterns and start acting differently. Our actions become more holistic, and consequently we become more socially responsible as individuals, organisations and the society. Although holding on to the conscious and rational aspects of decision-making might be safer, this intuition based model for making business decisions is encouraging us to go beyond the borders of comfort.

Managers' effectiveness and efficiency requires having management skills and implementing these skills in various organizational situations and positions leads to achieving the objectives. Therefore, one can say that the manager, who has the required management skills and implements them in appropriate situations and conditions, is successful in fulfilling his duties and roles. Thus an important factor for being successful in management is management skill and ability to implement it properly. Decision making has long been regarded as a cognitive process resulting in the selection of a course of action among several alternatives. Especially in the business environment, the decision making has been based on rational analysis. However, the time available to examine data and relationships has been reducing. Moreover, the information needed for the analysis prior to decision making is often unavailable. Managers face a growing dissatisfaction with the established decision making processes. With a growing rate of the unprecedented change in the environment, intuition is becoming an important part in the decision making process.

References

- Ahmadi, M. (2011). Fundamentals of organization and management (General Management). (2th ed.). Sari-Iran: Pajoheshhaye Farhangi Publication.
- Birks Y.F. & Watt I.S., (2007). Emotional intelligence and patient-centred care. *Journal of the Royal Society of Medicine*, 100(8), (pp.368-374).
- Carmeli, A. (2003). "The relationship between emotional intelligence and work attitudes, behavior and outcomes", *Journal of Managerial Psychology*, 18(8), (pp.788 – 813).
- Erkuş, A. (1998). "Goleman"ın Duygusal Zekâ Görüşünün Psikometrik Açıdan Eleştirisi ve Dinamik Etkileşimsel Model Önerisi" *Türk Psikoloji Yazıları*, 1(1), (pp.31-40).
- Fields A.F., (2000). Intuition engineering, *Organizational Engineering Institute*.
- Goleman, D. (1996). 'Duygusal zekâ neden IQ'dan daha önemlidir?', 39. baskı, Ankara: Varlık Yayınları.
- Hendren R.L. (1988). Predicting success and failure of medical students at risk for dismissal. *J Med Educ.*, 63(8), (pp.596-602).
- Johnson, D. R. (2015). Emotional intelligence as a crucial component to medical education. *International Journal of Medical Education*, 6, (pp.179-183). doi: 10.5116/ijme.5654.3044
- Kovacic, V. (2012). A business model that reveals the background to the use of intuition in business relationships and decisions. V: IRDO Novice, Institute for the Development of Corporate Social Responsibility, Maribor, no. 6 / V, (pp.13-16).
- Kovacic, V., Bulc, V. & Battelino, U. (2013). Intuitive decision-making –changing habits through new business approaches, models and solutions. 8. *International IRDO Conference*, 7-9 March.
- Malewska, K. (2015). Intuition in decision making –theoretical and empirical aspects. *The Business and Management Review*, 6(3), (pp.23-31).
- Min, J.C.H. (2012). "A Short-form measure for assessment of emotional intelligence for tour guides: Development and evaluation", *Tourism Management*, 33, (pp.155-167).
- Mirsepasi, N. (1991). Necessary of management skill, management studies. Faculty of Management and Accounting, Allameh Tabatabai University, (8), (pp.23-29).
- Nelson, D. B. & Low, G. R. (2003). Emotional intelligence: Achieving academic and career excellence, New Jersey: Prentice Hall.
- Razaghi, M.E., Seyedinejat, S.S. & Dousti, M. (2014). Prioritizing managerial skills based on Katz's theory cast study: the managers of sports and youth in Mazandaran Province. *Pamukkale Journal of Sport Sciences*, 5(1), (pp.33-47).
- Robbins, P., & Decenzo, D.D. (1998). Fundamentals of management. Essential concepts and applications. Prentice Hall, Inc.
- Salovey P. & Mayer J.D. (1990). 'Emotional Intelligence' Imagination, Cognition and Personality, 9, (pp.185-211).
- Senge, P. et al. (2008). Presence: Exploring Profound Change in People, Organizations, and Society. Nicholas Brealey Publishing, London, UK.
- Tuğrul, C. (1999). "Duygusal Zekâ" *Klinik Psikiyatri*, 1, (pp.12-20).
- Türker, A. (2016). Effect of emotional skills assessment process on customer satisfaction: a study on tourist guides. *Journal of Travel and Hospitality Management*. 13(2), (pp.6-20).
- Wong, C.S., Kenneth S. L. (2002). "The Effects of Leader and Follower Emotional Intelligence on Performance Attitude: An Exploratory Study" *The Leadership Quarterly*, 13(3), (pp.243-274).
- Ticha, I., Hron J. & Fiedler J. (2010). Managerial decision making – importance of intuition in the rational process, *Agric. Econ. Czech*, 56(12), (pp.553–557).

The Effects Of Reading Not Stereotyped Illustrated 3-6 Years Children Books On The Creativity Of Children By Showing Pictures Or Not

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Day by day the importance of the creativity in whole development of children is increasing. Creativity can affect all developmental features of children directly or indirectly like academic, social emotional, artistic etc. When examined the illustrated 4-6 year olds children books, it can be seen a lot of stereotype pictures in many books. These kinds of books can cause to ruin the creative drawings of children. On the other hand, some qualified illustrated books may support the creativity of children with using stereotype pictures.

So, this research focuses to show how children's creativity skills in drawings are affected by not stereotype illustrated books when are read children with showing or not showing the pictures of stories. The study was done with about 80 private preschool children from 5 classrooms. 3 qualified illustrated children books were chosen to read the children. The study was semi-experimental. Firstly, researchers read the chosen book 1 without showing to children. Then, drawings were wanted by children what they imagined, thought and understood. After 10 days researchers showed the illustrations of book 1 to children when they were reading the story. After that again drawings were wanted by children what they imagined, thought and understood from the story. The second and third books were read children with same way. Three books application for this study were taken about 35 days. Results were analyzed by three researchers by examining the drawings of children according to four main categories which are done by Lowenfeld about the child draws. These categories are color, shape, space and expressiveness. Colors which were used by children were examined according to color types, toning and how children can have a command of the colors. In terms of shape category; details, movement expression, used objects and image richness in the draws of children were examined. When space category was examined these were looked; whether or not children have space sense and the skills how they can put the objects on the space. In the last category; expressiveness; how much children have a grasp of reading story and how much they understood the story were examined. All categories were analyzed by using 5 point likert scale.

The Exploration of Meanings of Study for Married Immigrant Women Becoming University Students

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Abstract

The purpose of this study is to explore the academic experiences of married immigrant women as university students and to suggest ways to support their study. This study interviewed 6 married immigrant women, and analyzed the reasons why they continued their studies, the difficulties in studying, and the coping with their difficulties. This study suggested a support plan for marriage immigrant women to foster their competence as a global leader. This study contribute to a hope that married immigrant women are able to become a part of Korean society as well as a private diplomat between Korea and their mother countries.

Keywords: *Married immigrant women as university students, academic experience, difficulty in studying, academic support plan, within-case analysis*

1. Introduction

Due to the informatization and globalization, diverse people cross the borders to emigrate, and diverse immigrants started gathering into Korea as well. With the increase of diverse types of immigrants for labor, marriage, and study, the central and even local governments established the measures for the integration through new policies and systems. In order to newly adapt themselves to Korean society, the immigrants live as new members of Korean society by overcoming various difficulties and conflicts. Especially, contrary to other types of immigrants, the married immigrant women face a turning point of new life by performing their roles as daughter-in-law, wife, and mother in Korea(Chunyang Li & Misuk, Park(2018)).

According to the Ministry of Justice(2018), there are about 283,000 married immigrant women in Korea. Out of them, total 125,750 women live as complete members of Korea by acquiring Korean nationality. With the increase of married immigrant women, the Korean government established/enforced the policies for married immigrant women, and even for their husbands, children, and their families. Such policies and systems helped the married immigrant women to stably settle down in Korean society. As their children grow up, these married immigrant women look back on themselves and have interest in activities for themselves. They could contribute to society through diverse volunteer activities and also achieve the self-growth through activities for self-development. Especially, people who raise and educate children in the educational system of Korea increasingly challenge new studies. Like this, people who try hard for self-development and self-growth live a bountiful life equipped with self-consciousness and insight through free and creative thinking(Kang, Hee-Sook·Lee, Jin-Heon, 2009). Just like the married immigrant women who stably settled down, as the settlement period of immigrants gets longer, it would be necessary to have researches for self-development and self-growth.

Thus, the objective of this study is to explore the meanings of academic experience for the married immigrant women attending university of Korea, and then to suggest the measures for promoting the self-growth of married immigrant women. For this, the in-depth interview was conducted/analyzed targeting the married immigrant women entering university. The results of this study could be used as basic data for promoting the self-growth of married immigrant women in Korea.

2. Married Immigrant Women and Study

With the increase of international marriage in Korea since 1990, the legal immigration of married immigrant women began. Even though their immigration is originated from personal choice, in the hidden side, the social, economic, and political factors caused by the capitalistic system are contained(Misuk Park & Mijeong Lee(2015)). There are total 157,431 married immigrants in Korea, and out of them, 131,254 immigrants are the married immigrant women, which is about 84% of the whole. In terms of their nationality, Chinese people(37%) are the most, which is followed by Vietnam, Japan, Philippines, and Cambodia in order. Besides them, including 125,750 naturalized immigrants by acquiring Korean nationality, the total number of married immigrant women in Korea are about 283,000(The Ministry of Justice. 2018). With the increase of married immigrant women, Korean society performs the integrated support policies for helping them to stably adapt themselves to Korean society by providing diverse support policies and services. Multicultural Families Support Centers are providing language education, social adaptation education, employment education, and parents education. The married immigrant women are protected through the enactment of Multicultural Families Support Act. Such policies helped the married immigrant women to stably settle down in Korean society as a confident member of Korean society.

According to Maslow(1943), humans continuously put efforts into self-growth. He also said that humans' desires would reach the stage of unity after going through the stages from physiological desire to desires for safety,

affiliation, respect, and self-realization. Also, Kolb(1984) called the creative process of knowledge through changes in experience 'experiential learning'. Jarvis(1987) said that the context of learning and learners' environment should be all considered for learning. Like this, the experience through diverse environments and contexts is led to self-growth and self-realization. Especially, the learning experience makes learners attempt to understand and solve their problems based on their personal experiences in the past. Through the critical self-reflection and introspection, learners lead the self-growth by recomposing or resignifying the semantic system(Seo Lynne Jeong & Young Hwa Key, 2011)

Like this, the new learning experience of university life to the married immigrant women who have stably settled down in Korean life, draws new meanings of their behaviors and also provides them with opportunities for behavioral changes and self-growth. Therefore, this study aims to explore the meanings of learning through the learning experience of married immigrant women attending Korea National Open University in Korea.

3. Research Methods

This study explores the meanings of academic performance process, experienced by married immigrant women who have stably settled down in Korea while attending university in Korea. The research was conducted from October 2017 to August 2018, and the research method was based on the qualitative research. Conducting the in-depth interview targeting the married immigrant women, the meanings of academic performance were analyzed. The research participants were the six married immigrants attending Korea National Open University. Their general information is as follows.

<Table 1> General information of research participants

Section	Age	Residence period in Korea	Hometown	Race	Academic background in homeland	Major
Research participant 1	37	7Y	Harbin	Han	High school graduate	Chinese language & literature
Research participant 2	41	10Y	Shenyang	Han	High school graduate	Chinese language & literature
Research participant 3	35	8Y	Shenyang	Han	Junior college graduate	Life science
Research participant 4	35	9Y	Jilin	Han	Middle school graduate	Chinese language & literature
Research participant 5	39	9Y	Weihai	Han	University graduate	Chinese language & literature
Research participant 6	45	5Y	Heilong Jiang	Korean in China	High school graduate	Chinese language & literature

Total six research participants included four women in their 30s and two women in their 40s. They lived in Korea from five years to ten years. The homeland of all the participants was China such as Harbin, Shenyang, Jilin, Weihai, and Heilong Jiang. In terms of race, there were five Han Chinese and one Korean in China. Regarding the academic background in homeland, there were three high school graduates, one middle school graduate, one junior college graduate, and one university graduate. All the research participants are currently attending Korea National Open University. In terms of major, there were five majors in Chinese language & literature and one major in life science.

For the data collection, the in-depth interview was performed after getting the written consent of research participation first. The in-depth interview was performed 1-2 times with each participant. Each interview lasted around one hour in a quiet cafe. The interview atmosphere was free, so that the research participants would not feel pressured. When the data was saturated, the interview stopped. As all the research participants were fluent in Korean language, the interview was conducted in Korean. The in-depth interview data was recorded after receiving the consent from the research participants, and the recorded data was all transcribed.

For the data analysis, the keyword work was performed focusing on the main themes of the transcribed data. In the analysis process, it was coded in each theme word by continuously and repetitively comparing through the

repetitive comparative analysis method by Glaser & Strauss(1967). Also, the reliability and validity of this study were increased by sending the analyzed contents to the research participants through mail in order to verify them, and also sending the categorized data to a colleague qualitative researcher for the verification.

4. Research Results

1) Recognized by husband and family

The married immigrant women who immigrated in Korea through marriage felt greatly happy about being able to study. In the beginning, they went to Multicultural Center to learn Korean language and also to adapt themselves to Korean culture. After learning about how to go to university in Korea, they gradually prepared for it with teacher's help. The university education became a chance for them to be recognized by husband and his family.

"Before starting study, I felt like my husband looked down on me. After starting study, he praised and encouraged me like 'You are smart, You can do it'. When I entered university, I even received congratulatory money." (Research participant 2)

"I got praised by husband's family. They said, 'You are so great!'." (Research participant 6)

2) Adaptation to the reality of education

It was not definitely easy for the married immigrant women to attend university in Korea. There were several difficulties for them to study as the courses were based on online classes due to the characteristics of Korea National Open University. When preparing for the qualification examination with Multicultural Center, considering the characteristics of married immigrants, the Korean language teachers slowed down classes or repetitively taught in case when they could not understand. In online courses of university, however, it was tough for them to catch up fast-speaking Korean. In order to cope with this realistic problem, they were using diverse methods.

"Even when listening to online courses, not many things are memorized in head. There are some parts I cannot understand. So different from lectures I took in the past. It is hard to understand academic words." (Research participant 1)

"In the center, the teacher who taught us slowly and repetitively told us. But, in the online courses, there is almost nothing I can understand. So I studied really hard like listening to them repetitively in order to get ready for finals. Sometimes, I cannot understand anything of a course even after listening to it numerous times." (Research participant 3)

3) Study through study groups with senior students

The married immigrant women who felt hardship in university life sought for their own methods to maintain their study. Joining a study group with senior students, they provided what they could do well to senior students, and they complemented their insufficient part through senior students. As most of them majored in Chinese language & literature, they taught the grammar and vocabulary of Chinese to Korean seniors while the seniors helped them on writing reports.

"I entered the Dept. of Chinese Language. So the 2nd & 3rd-year seniors teach the subjects we don't know to us and also give feedbacks on our reports. We teach Chinese language to them. So I often go to Learning Center in weekends." (Research participant 4)

"Writing reports is the most difficult thing to me. I look for data in library, internet, and books. I get lots of help from seniors. I sometimes ask them questions and they retouch my work." (Research participant 5)

4) Happiness of helping child education

The married immigrant women used to feel afraid of child education as their Korean skills were not sufficient without understanding the school system of Korea. Especially, as the child education methods of Korean parents were different from theirs in homeland, mostly, they could not intervene in child education. After that, the child education naturally depended on father or the child solved his/her own problems, so that diverse problems occurred. In the process of preparing for the qualification examination to enter university in Korea, they learnt about the education methods, curriculum, and textbook contents of Korea. Having confidence in child education, they helped their children's learning and spent more time with them. This became a chance to obtain the emotional stability of children and also the respect for mother from children. They were feeling happy for it.

"I would like to tell other people to study. It is tough, but fruitful. If I don't study, I cannot teach my children. I don't want to become a stupid mother." (Research participant 1)

"Nowadays, when my kids are studying, I can teach math problems and help them with homework. If I didn't study, I wouldn't know anything about math exam paper. But, now, I can solve anything as I have already done it before. I can even tell the meanings of English words to them." (Research participant 2)

5) Agent for self-growth

Maslow(1970) said that self-growth would be closely related to self-realization. When the married immigrant women entered university, they got psychologically stabilized, which became a chance to have the self-growth. As an alien of Korean society, they achieved the self-growth by overcoming the discrimination and prejudices, and cultivating the new competencies through learning. This self-growth became a power to survive in Korea and also an agent for seeking for new career for better life.

"My knowledge has been increased. So I have confidence. I think I have got smarter after studying." (Research participant 3)

"My dream was to graduate from high school and university. My husband knows how serious I am. I will continuously work harder to achieve my dream." (Research participant 6)

5. Conclusions

This study explored the meanings of academic experience of the married immigrant women attending university in Korea. In the results of conducting the in-depth interview with six married immigrant women attending Korea National Open University, the meanings of academic performance were drawn as follows. First, the academic performance in university became a chance for the married immigrant women to be recognized by their families. Second, through the academic performance, they had a chance to help their child education and also to commune with children about study. Third, through study, they obtained confidence and self-esteem, which became a new turning point. Fourth, study was an agent for self-growth, so that they could continuously work hard to achieve their dreams.

Like this, the university study provided a chance of self-growth and new career to the married immigrant women. Through such researches, our society should seek for the measures for vitalizing the provision of diverse opportunities to the married immigrant women, so that they could continue their study to achieve the self-growth.

REFERENCES

- Chunyang Li & Misuk, Park(2018). Second Language Acquisition for Children of Korean and Chinese Multicultural Family. AJMAHS, Vol 8, No 3, pp367-375.
- Hee Sook Kang & Jin Heon Lee. 2009). The Effect of Self-growth Program on College Student's Self-esteem and Self-perception. Journal of Youth Welfare. Vol 11, No 2. pp43-58.
- Jarvis, P.(1987). Adult Learning in the Social Context. London: Croom Helm.
- Kolb, D. A(1984). Experiential Learning-Experience as the Source of Learning and Development. Prentice Hall.
- Maslow.A.H.(1943). A theory of human motivation. Psychological Review. Vol 50. pp370-396.
- MiSuk Park & MiJeong Lee(2015). Research on the Motivation of Marriage Immigrant Women to Continue Education in Graduate School
- Seo Lynne Jeong & Young Hwa Key(2011). A Study on the Process of the Learning Using Experiences of Pre-Older Adults in a Graduate School Program . Research HRD, 2011, Vol 13, NO 4, pp137-170.

The Fourth Industrial Revolution And The Changes And Responsibilities Of Sport

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Abstract

The Fourth Industrial Revolution was raised in the 2016 World Economic Forum will bring a big change in our society as a whole. Sport is a social component and is greatly influenced by social change. At the Deep Mind Challenge with Google's Alpha Go and Sedol Lee, AI's victory suggests the need for a sense of crisis and response of big change from the fourth industrial revolution. The purpose of this study was to examine how sport will change according to the social changes caused by the Fourth Industrial Revolution and discuss the roles and responsibilities of sport in order to become a valuable sport in society. This research was conducted by literature study, conclusions were as follows.

First, sport will change both inside and outside. The internal changes in sport will bring about the technical development of sport participants, related regulations and institutions and supplies. The external changes in sport will bring about sport facilities, stadiums, sporting goods manufacturing, and various sport events.

Second, changes in social issues that are important to be accompanied by the fourth industrial revolution era are population aging, global warming, and changes in leisure awareness, which will lead to the development of silver sports, the activation of eco - sports, and the quality of participation in sports.

Third, the responsibility of the right sport in the social change according to the 4th Industrial Revolution era should be 1) The values of sustainable sports should be established. 2) Focus on promoting social capital so that social welfare through sports can be realized. 3) There should be a lot of discourse about ethics of sport fields. 4) The application of the fourth industrial revolution technologies to the sport should be applied in order to maintain the right sport value. 5) Sports science should become a more practical discipline, interact with the members of society and actively respond to these changes.

The Future Management Of Welfarehomes For Children In Thailand In Terms Of Management Strategy, Assistance And Coordination, And Providing Welfare And Services In The Next Decade

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Abstract

The purpose of this research is to examine the future management of welfare homes for children (WHC) in Thailand in terms of management strategy, assistance and coordination, and providing welfare and services in the next decade. This research is focusing on 3 dimensions of management strategy of WHC, assistance to and coordination of the abandoned children, and providing welfare and services. In this study, the data were collected from 18 experts who have long term experience in WHC in Thailand. The 18 experts were selected according to purposive sampling and snowball sampling techniques and they were categorized into 4 groups: 1) the executives who play a role in Thailand national policy of WHC. 2) the directors who are working in the government WHC 3) the directors who work in the private WHC and 4) the social workers, academics, professors, and experts who have experience in WHC and the outcomes from the interview were created the rating scale questionnaires. The outcomes from the expert used for conclusions regarding the future management of WHC in Thailand were created according to the methodology of Ethnographic Delphi Futures Research (EDFR). The results of this study show that the future management of WHC in the next 10 years on management strategy will focus more on personnel who are working in the WHC in terms of recruiting staff and providing a fair benefit to employee. While the assistance to and coordination of the abandoned children is focusing on networking which is government organization, non-government organization, community and other organizations are working together with WHC in term of assist and coordination. And providing welfare and services of the WHC will focus more on children centralization which considering the needs of every child individually.

Keywords: *Future Management; Welfare Home for Children; Management strategy; Assistance and coordination; providing welfare and services*

Nomenclature

EDFR

WHC

Ethnographic Delphi Futures Research

Welfare Home for Children

Introduction

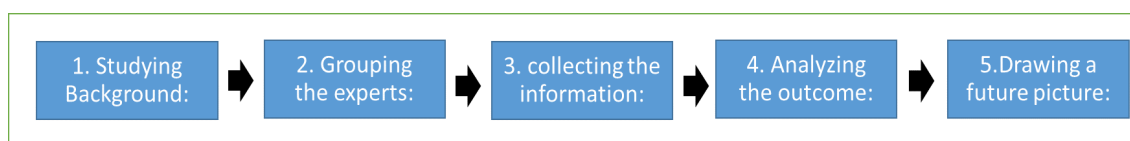
The first Thai welfare home for children was located in a Buddhist temple. The Buddhist temple is the center of the community and provides all kind of services such as religious activities, education, entertainment, and social work. It is also a belief of Thai people that if there is an abandoned child he or she should be sent to the Buddhist temple and be taken care of by the monks.(Wanvisa Siwan, 2013). The Buddhist temple is not mainly built for taking care of the abandoned children. In 1890, the government of Thailand built a temporary home for abandoned children in Bangkok as a result of the increasing number of abandoned children, and then in 1911 Thai government built the first WHC in Bangkok. Since the starting point of WHC in Thailand until now (2018) more than 400 WHC have been built all around the country and located in many places. They were safe and secure, registered, and under the supervision of the Department of Social Development and Welfare of Thailand. (Department of Social Development and Welfare, 2013)

Currently, there are 30 government WHC, 138 non-government WHC, and more than 200 non-registered located all around the country. A WHC is categorized by the needs of the children and can accommodate 6-200 children according to the accommodation, personnel, and financial support. (Department of Children and Youth, 2015) Some WHC have had to be shut down and many WHC have a potential to be shut down according to the rapid changes in terms of poor management, financial support, economic, politic, and social interest (Rapee Kamhom, 2006). As a result, the management should be concerned and relate more about the recent situation because the failure of management might affect a big number of children who stay in WHC. According to the boiled frog theory by Tichy and Sherman (1993), which explained the metaphor for the inability of people or organization to react to significant changes that occur gradually or to events which have become commonplace, the WHC in Thailand is like a frog who is sitting in boiling water, if they do not know how to handle what will be happen in the future. Most of WHC still manage in the same way, same style, and still using Child Protection Act (2003) as a core for managing the welfare home for children which is out of date and as a result, the welfare homes for children might be a candidate for resembling a frog in boiling water.

Methodology

This study deployed EDFR, which is a future study about the future management of WHC in Thailand in the next decade, to construct the information from the WHC experts (Chumpol Poolpatarachewin, 2016). The researcher divided the procedure of this study into 5 stages (see Figure 1):

1. Studying Background: studying and collecting the information about the background of both government and private WHC by focusing on history, management style, and problems in terms of management from the beginning until now.
2. Grouping the experts: contacting the experts and asking them to be an information-giver to this study and grouping them into 4 groups for the comprehensive information from experts who have different aspects and points of view related to WHC which is 1) the executives who play a role in Thailand national policy of WHC 2) the directors who are working in the government WHC 3) the directors who work in the private WHC and 4) the social worker, academics, professors, and experts who have experience regarding WHC.
3. Collecting the information: for this stage, the researcher divided the procedure into 3 parts: 1) interview the experts and create a set of questionnaires from their information — 30 items of management strategy, 30 items of assistance and coordination, and 30 items of providing welfare and services 2) ask the experts to rate the probability of each items in the questionnaire. 3) ask the experts to confirm their answers from the first round.
4. Analyzing the outcome: gather together the information to analyze with the basic statistics such as percentile, median, inter quartile range and recruit the future management items to find the consensus from the 3 main topics (management strategy, assistance and coordination, and providing welfare and services) by rating in “high and highest level”, mode is over 3.50 and each item is confirmed with the 18 experts, scope of the quartile range is not over 1.50, and the satisfaction is over 80 percent.
5. Drawing a future picture: using the outcome from this study to draw a future picture of WHC management related to 3 main topics (management strategy, assistance and coordination, and providing welfare and services)



Results

The result from The Future Management of WHC in Thailand in the next 10 years, which contains the 90 possibility items for future management of WHC and is categorized into 3 main topics (30 items per each main topic): management strategy, assistance and coordination, and providing welfare and services.

The future management in term of management strategy of WHC which 53.33 % highest qualify and 20 % high qualify (19/30 items) in Figure 2 according to the selection criteria are (1) having a standard quality assessment system for WHC related to the content of each WHC (2) having a reasonable ratio between staff and children in WHC (3) having a shared knowledge and driving WHC into the same direction among the staff (4) developing all the skills of the staff for taking care of the children (5) creating a common sense approach and good relationship between staff, children, and WHC (6) creating values, organizational culture which benefit children in WHC (7) having a good system to manage budgets and all kinds of donations which benefit children in WHC (8) having an educational exchange program between WHC, related organizations, and the local community (9) using social media such as Facebook, Line, and Instagram for public relationship to provide information, activity, and contact with others (10) changing vision, mission, and operation related to the current situation (11) clearly changing the

laws about the identification of children who are staying in WHC (12) the framework of WHC should be flexible and rely on the situation (13) categorizing the special needs of the children more specifically (14) reducing the complicated procedure for using a budget for helping children in WHC (15) more focus on recruiting people who work with the children in WHC (16) having a good system to provide a fair benefit to people who work in WHC (17) managing the increasing number of donors, donations, and financial support properly (18) using WHC as a hub for training people in the surrounding community to assist children when they are in trouble (19) giving a chance to children who are in WHC to be a part of managing WHC.

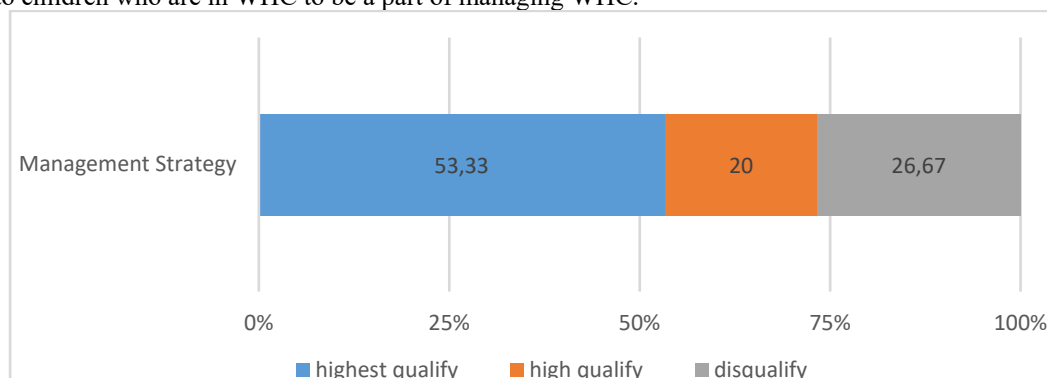


Figure 2. The result of Management strategy items which highest qualify, high qualify, and disqualify

The future management in term of assistance and coordination of WHC which 43.33 % highest qualify and 16.67 % high qualify (18/30 items) in Figure 3 according to the selection criteria are (1) using networking for screening and assisting children (2) investigating the background of children in all detail as much as possible (3) processing all kinds of documents for children in WHC should be facilitated by one officer (4) helping and healing children in WHC should be considering the relative, neighbor, and community where the children come from as the same time relatives, neighbors and the local community can play a part on helping and healing damaged children (5) cooperating with local hospitals in terms of providing child psychiatry and forensic science (6) reducing process and period of time to using the budget for helping the children (7) arranging enough budget for assistance and coordination (8) arranging budget for the changing assistance and coordination situation in the future (9) the WHC nearby should support and help each other (10) sharing the personnel and other support between WHC (11) inviting government organizations, non-government organizations, the local community, and people to get involved with WHC (12) the staff who are working in WHC has to dedicate themselves to learn more about assistance and coordination (13) planning ahead about how to handle the growing number of children who are coming to stay at WHC (14) making an individual plan for each child (15) creating a network in the community to prevent damage and help children in their community (16) assisting and coordinating in the same standard and direction (17) government WHC should be a back-up for non-government WHC in terms of assistance and coordination (18) using social media such as Line and Messenger to communicate between social workers in WHC

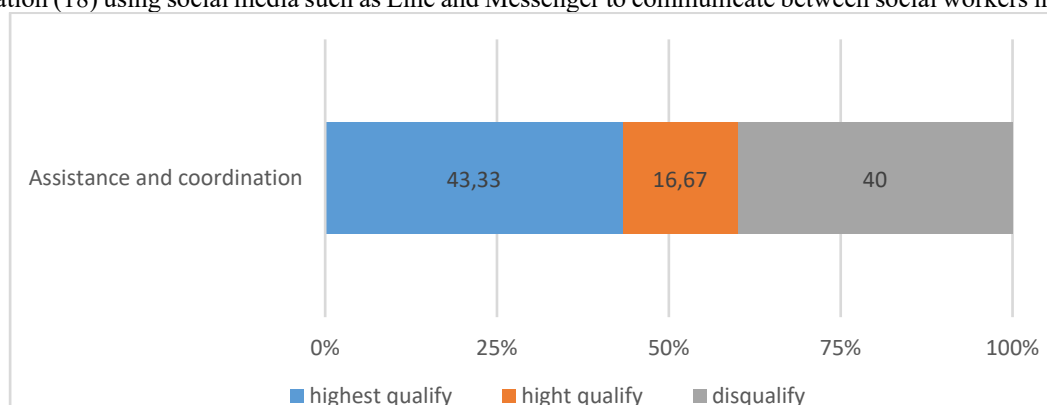


Figure 3. The result of Assistance and coordination items which highest qualify, high qualify, and disqualify

The future management in terms of providing welfare and services of WHC which 30 % highest qualify and 33.33% high qualify (22/30 items) in Figure 4 according to the selection criteria are (1) promoting more about substitute family, foster family, and adoptive family (2) reducing the procedures of searching for substitute family, foster family, and adoptive family for children in WHC (3) supporting children more about their talents and interests (4) teaching children in WHC to become a giver rather than a receiver (5) children in WHC should rely on themselves rather than rely on others (6) helping each child in WHC to develop themselves to become a quality adult (7) adjusting children's negative attitude about being children who stay in WHC (8) using all kinds of

activities for developing, healing and building life skills for children in WHC (9) providing creative activities to fulfil children's development (10) cooperating more with community, government, religious organization, and people in this area to get involved with providing welfare and services (11) focusing more on giving love, warmth, and attention to children in WHC (12) children who stay with their relatives arranged by WHC is more beneficial than children who stay in WHC (13) creating a common sense among children in WHC to be aware that they are also a part of community (14) helping children in WHC to know about self-reliance, and how to help themselves, have courage, and self-confidence (15) creating more choices in life for children in WHC (16) keep in contact with parents, relatives, and the community where children in WHC come from (17) providing welfare and services by being aware of age, need, and development status of individual children (18) controlling the activities which are run by visitors and others should go together with WHC activities (19) involving parents and community to be a part of providing welfare and services (20) using local culture, tradition, and belief to get involved in the providing welfare and services (21) helping children to discover their talents and practice them more often (22) governments have awareness more about the immigrant children, stateless children, and foreigner children. In conclusion, the 59 items are qualified the selection criteria regarding to the 90 possibility items of future management of WHC (see Figure 5)

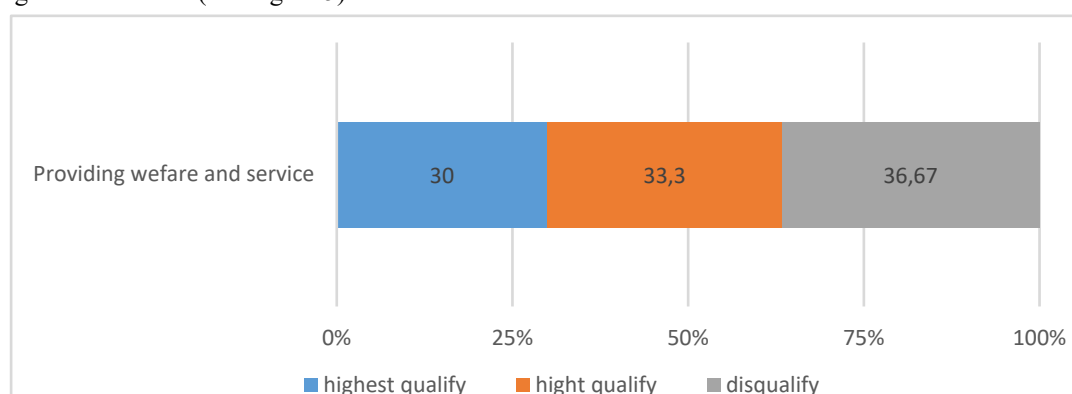


Figure 4. The result of

providing welfare and service items which highest qualify, high qualify, and disqualify

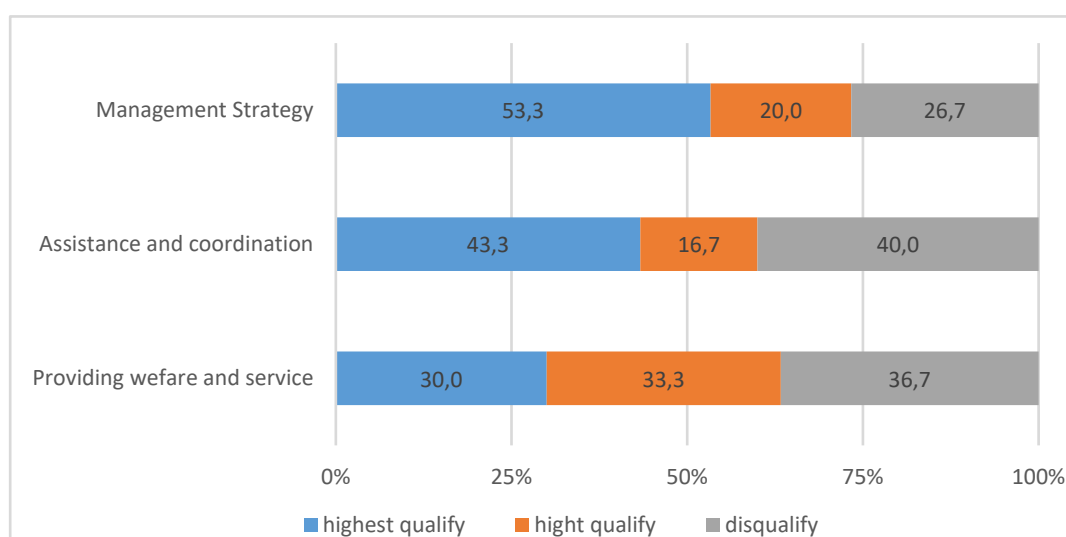


Figure 5. The total result of future

management in term of management strategy, assistance and coordination, and providing welfare and services (59/90 items) which highest qualify, high qualify, and disqualify

Conclusion

The results of this study show that the future management of WHC in the next decade in terms of management strategy is more about focusing on personnel who are working in the WHC in terms of recruiting staff and providing a fair benefit to employee. The future management WHC picture in terms of management strategy is more concerned with recruiting people to work in WHC with regard to quality of the staff, knowledge, skills, behavior, abilities, competency, attitude, human relationship, and job satisfaction. As a result, employees who are working in WHC are the key to indicate success or failure of WHC. If WHC have a good staff and each of them is an expert in their duty, self-development, and ready to learn and ability to adjust to new things, the employee will play an important role in the next decade according to the result of this study. Meanwhile WHC should provide a fair benefit to the employee, if they do not get a fair benefit, they might feel insecure and look for a new job

which gives them security in their life and at the end WHC will lose personnel and put the future of WHCs in danger.

While the results of this study also show that the assistance and coordination of the children in WHC is focusing on networking. Especially WHC, government organizations, non-government organizations, community and others organizations are working together with WHC in terms of assisting and coordination. The future management WHC picture in terms of assistance and coordination of the children in WHC will be a picture of assisting, coordinating, and working together between government organizations, non-government organizations, community and others organizations. It makes assistance and coordination system more effective than the last previous (one man show). It will be helpful, useful, and cover all dimensions in terms of assisting and coordinating and also help children to prevent the crisis when they are in trouble.

And the results of this study show that providing welfare and services of the WHC is more focusing on children centralization with consideration for the needs of every child as an individual. The future management WHC picture in terms of providing welfare and services will be considering the needs and benefit of children individually the most. According to these differences, each child has different needs and specific problems, and they need to be addressed specifically and individually, WHC cannot set up the same standard of welfare and services for every child because it might work with some child but it may not work with another child. It will help and benefit children a lot and the provision of welfare and services will more effective.

References

- Chumpol Poolpatarachewin. (2016). Futures Research. Documents for Academic Seminar. Chulalongkorn University.
- Department of Children and Youth. (2015). Annual Report 2016. Bangkok: Department of Children and Youth.
- Department of Social Development and Welfare. (2013). Private Nursery and Orphanages: Qualification of Applicants, Operators, Caretakers in accordance with The Ministerial Regulations, the Rules, Procedures, and Conditions for Obtaining a License to Establish a Nursery 2006. Retrived from <http://61.19.238.233/nursery/Content/Guest/Recommend.aspx>
- Rapee Kamhom. (2006). Social welfare in Thai society. Bangkok: Prikwangraphic.
- Tichy, N. and Sherman, S. (1993). Control Your Destiny or Someone Else Will. New York: Harper.
- Wanvisa Siwan. (2013). Cultural Values change in Today's Society. Academic articles on social issues. Faculty of Social Sciences, Naresuan University.

The Global Social Responsibility Levels Of The Prospective Social Studies Teachers

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Abstract

The purpose of the study is to measure the social studies teacher candidates' level of social responsibility. In this regard, it has been tried to determine the levels of teacher candidates in terms of the variables of gender, class level, parental education level and number of siblings. The study was designed as a mixed method study. The quantitative part was conducted with survey model and the qualitative part was done with case study. The sampling of the quantitative part included 283 teacher candidates and the sampling of the qualitative part had 8 teacher candidates. Teacher candidates were selected at the level of each grade. The purposive sampling type has been utilized as the sampling type. According to the simple correlation test between the dimensions, there was a positive low level of correlation between ecological responsibility dimension and action-oriented responsibility; a positive medium level of correlation between ecological responsibility and altruist responsibility; a positive low level of correlation between ecological responsibility and national responsibility dimensions. There was a positive medium level of correlation between action-oriented responsibility and altruist responsibility. Moreover, there was a low level of correlation between altruist responsibility and national responsibility dimensions.

Introduction

Responsibility is a phenomenon ongoing from the day when the mankind exists up to the present. This phenomenon has its origin within the family, develops and shapes in time by the influence of social circle and education. Therefore, it can be regarded as the individual's fulfilling the duties and responsibilities anticipated by the society (Başer, 2015). In Turkish Language Association Turkish Dictionary (2018), the concept of responsibility is defined as the one's undertaking the consequences of his own behaviours or the outcome of any case within the realm of his own authority, personal liability and obligation. Responsibility is the individual's complying with, fulfilling his duties, respecting to the others and claiming responsibility for the consequences of his own behaviours (Erol, Elagöz and Şahbaz, 2010). Responsibility is the key point for the citizens of democratic societies (Nakamura and Watanabe-Muraoka, 2006). Individuals who have sense of responsibility act in a sound manner and judiciously in their decisions related to family, friend and inner circle in private and to society and state in general (Ergül and Kurtulmuş, 2014). Responsibility is one of the most important traits of human characteristics. A responsible individual fulfils the duties and liabilities to his own part at the right time and as is desired. Having responsibility is also the way of winning the respect, hearts and minds of people. Maybe, the first and foremost is its enabling us to have a grip on our own lives. In terms of overcoming the problems in every aspect of communal living, to have the sense of responsibility is significant. To approach the hardships of life with sense of responsibility supports us to be able to change some things (Sezer, 2008). It is expected that responsible individuals are more successful in social and communal life and attain their goals (Taylı, 2013). An official who does not duly perform his duties, a neighbour who is not beneficial to his around, an individual who cannot meet his own needs, a student who does not do his homework or have his class properly and timely is quite likely to have problems in communal living. An individual who is aware of fulfilling his/her responsibilities will be more responsive in order to do better. Thus, a more liveable world can be handed down the next generations (Aktepe, 2015).

Sense of responsibility develops as of very early ages, by the influence of the circles. The thing which ensures this feeling of responsibility to arise and maintain is the society where individuals lead their lives in. Society employs this feeling by formal and informal means such as family, law, education and so on (Akgül, 2010). Sezer (2008) also states that the source of this sense is the society and values unique to the society. From this aspect, responsibility is not an innate feeling, but a conscious gained afterwards (Taylı, 2013). The concept gains a social status through the internalization of this feeling by the individuals and the society's gaining a sense of responsibility in the way desired. This case, in literature, is defined as social responsibility. Social responsibility is the state of readiness to act in a socially responsible manner (Berkowitz and Lutterman, 1968). It is that individuals realize the social problems and get into the act for the solution of these problems (Deveci and Eryılmaz, 2017). Social responsibility can also be defined as each individual's acting so as to provide benefit to the society in which he/she lives (Akıncı-Vural and Coşkun, 2011; Toker and Tat, 2013). The control mechanism function of

the culture or societies in which we exist makes the individual's responsibility societal (Akgül, 2010). Therefore, we can state that social responsibility is a phenomenon which shapes the behaviours of individuals. Individuals having sense of social responsibility take the influence of society or circles on their behaviours into consideration (Ergül and Kurtulmuş, 2015). The ones who have sense of social responsibility adopt the cultures and values of their societies more easily (Berman, 1990). They are in tendency to help the ones who need assistance in the society (Bobo, 1991). This concept directs individuals to collaborate for a common purpose and envisages for the outcomes of this collaboration to be shared (Yılmaz, 2011). In this case, for the individuals whose sense of responsibility has less developed or who do not have this sense at all to maintain relations with the society and their social circles will get hard.

Although the fact that the fund of knowledge has increased and sharing knowledge has been getting easy in the world we live in improves the one's welfare and ease, some certain problems are also brought with it. In addition to the global environmental issues such as famine, wars, global warming, many other problems with which the societies face such as religion, race, migration, terror and so forth are making life more difficult day by day (Başer, 2015). The main problems encountered in the globalizing world are categorized as environmental and ecological problems; social, economic, political problems and intellectual issues (Kılıçoğlu, Karakuş and Öztürk, 2012). These problems have an influence upon not only a society or country but also other people out of the society which we live in. In this case, being deaf to problem encountered anywhere in the world becomes out of the question (Başer, 2015). At the present time when communication is maintained as swift as thought, problems confronted by the nations become a concern involving large masses, by reaching up to a universal dimension. In order that these problems can be solved, it becomes highly important that individuals act as a citizen of the world, i.e. a global citizen, from now on and make co-decisions (Yazıcı, 2013). All these encountered problems reveal out how important the sense of global social responsibility is in today's world. Global social responsibility is the sense of responsibility possessed in order to overcome global social issues beyond individual and local problems (Küçükşen and Budak, 2017). Globalization of social responsibility and its being considered in broader terms have widened the scope of social responsibility, and responsibilities under consideration that are intended for solving the social problems have extended to the solution of global issues (Başer, 2015). This situation assigns new roles and duties to the education provided in the schools in order to enable such a sense to be gained (Yazıcı, 2013). The fact that teachers' awareness about social responsibility has developed will also affect the viewpoints of the students whom they will educate. For this reason, it is required that teachers' social responsibility awareness must be developed just in the process when they receive their graduate education (Ergül and Kurtulmuş, 2014). It must be ensured that students recognize social problems within the scope of instruction programs implemented at various stages of education, and circumstances under which they will get into the act for the solution of problems must be established (Deveci and Eryılmaz, 2017). In this sense, it can be stated that the subject having the function of bringing forth this awareness to the students at higher education level is the subject of Community Service Practices. In the face of increasing social demands, universities have also included social responsibilities besides their primary duties such as education-training and research. It can be stated that universities, through the lectures on social responsibility, aim at raising individuals who can work towards a solution instead of being a mere spectator to the social problems. By the lectures on social responsibility (Community Service Practices) which state and foundation universities have included in their curricula, students comprehending their individual roles in lending a hand to the ones in need are going to lead the drive for building the civil society for democracy, as the adults of the future (Toker and Tat, 2013).

Community Service Practices have the quality of being a subject which aims at enabling prospective teachers to gain the sense of social responsibility both theoretically and practically, and enhancing the skills of collaboration, solidarity, effective communication and self-evaluation in the course of practice (Topluma Hizmet Uygulamaları Dersi Yönergesi/Instructional Directive for Community Service Practices/THUDY, 2011). With this instruction, prospective teachers gain skills for realizing current issues and bringing a solution to these. Prospective teachers' social consciousness, sense and awareness of social responsibility are developed (Uğurlu and Kırıl, 2011; Küçüköğlu, Ozan and Taşkın, 2016). That prospective teachers participate in various projects within the scope of social responsibility has influence over the development of their sense of responsibility (Kocadere and Seferoğlu, 2013). The fact that teaching is one of the professions requiring social responsibility demonstrates how important the gains from this instruction are. The prospective teachers who receive this instruction;

- are conscious of local problems / produce solution to these.
- are conscious of global problems / produce solution to these.
- are an active participant in solving local and global problems.
- devise new projects against local and global problems.
- take an active role in new projects against local and global problems / work in cooperation.
- establish an effective communication both in and out of the project scope while carrying out the projects.

- participate in scientific activities such as panel discussions, conference, congress, symposium and etc., as audience, speaker or organizer/supervisor.
- enhance their self-evaluation skills.
- use their creative thinking abilities and skills in all these activities (THUDY, 2011).

The development of awareness and sense of social responsibility on both individual and social bases through the subject of Community Service Practices will serve for social development. Moreover, this subject will contribute to the development of voluntariness phenomenon in individuals. The case that individuals perform works for the benefit of the society and world without looking out for their own interests sets a good example of both voluntariness and social responsibility (Saran, Coşkun, İnal-Zorel and Aksoy, 2011). Furthermore, considering that today's university students are actually the society leaders of tomorrow (Harris, Lang, Yates and Kruck, 2011), the role and importance of this subject in enabling that the role of social responsibility consciousness is gained will be understood.

While all individuals have responsibilities, it is required for some of them to act more responsibly towards this. Since teaching is a universal profession, it is significant that teachers have required qualifications and personal characteristics. In order that a society can embody responsible individuals, it is necessary that primarily teachers possess these characteristics. Ryan (1960), Good and Grouws (1979), Rosenshine and Stevens (1986) and Confrey (1990) emphasize that it is necessary for a teacher to have more outstanding traits compared to the other occupational groups. The fact that teaching is a profession holding social responsibility; teachers undertake considerable missions in shaping the societies' future; and teachers' being regarded as the figures to lead and convert the society requires the development of the sense of social responsibility during their undergraduate education (Yılmaz, 2011). It is essential that teachers, since they enable their students to gain the sense of social responsibility, have this conscious first (Deveci and Eryılmaz, 2016). Some certain branches and/or fields of teaching profession come into prominence in making the ones gain responsibility. Social Studies subject is a significant one in raising good and effective citizens. Deveci and Eryılmaz (2017) state that responsibility and social responsibility is inherent in Social Studies subject and it provides substantial contributions in citizenship education.

When the body of literature is reviewed, it is observed that studies related to responsibility, social responsibility and global social responsibility such as (Berkowitz and Lutterman, 1968; Berman, 1990; Bobo, 1991; Nakamura and Watanabe-Muraoka, 2006; Sezer, 2008; Akgül, 2010; Erol, et.al 2010; Akıncı-Vural and Coşkun, 2011; Harris, et. al 2011; Saran, et. al 2011; Yılmaz, 2011; Kocadere and Seferoğlu, 2013; Özen, 2013; Taylı, 2013; Toker and Tat, 2013; Ergül and Kurtulmuş, 2014; Selanik Ay and Dal, 2014; Yeşil, 2014; Aktepe, 2015; Başer, 2015; Başer and Kılınç, 2015; Sezer and Çoban, 2016; Deveci and Eryılmaz, 2016; Deveci and Eryılmaz, 2017; Küçükşen and Budak, 2017) are present. Studies for responsibility mainly focus on values education; studies for social responsibility are mostly dealt on corporational basis and in the scale of enterprises. As for the studies on global social responsibility (Başer 2015; Küçükşen and Budak, 2017), their being limited in number draws the attention. In education, especially for Social Studies education which is directly related to social and communal living, social responsibility and global social responsibility are considered important. In this context, the objective of this research is to evaluate the global social responsibility levels of prospective Social Studies teachers who will raise the individuals to be the teachers of future and citizens of tomorrow. Accordingly, prospective Social Studies teachers' global social responsibility levels were tried to be determined on the basis of variables of gender, class level, mother and father's educational level and number of siblings.

Method

Research Model

This study has been designed as a mixed method research. Mixed method is explained as the approach by which qualitative and quantitative methods are employed in combination (Balcı, 2009). In the quantitative part of the study, descriptive survey model was used. Descriptive survey model is the research within the scope of which data are obtained in order to determine the specific features of a study group (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz and Demirel, 2012). In the qualitative part of the study, case study was used. Case study is the method by which a social group is analyzed as based on time and space (Büyüköztürk et. al, 2012).

Study Group

For the quantitative part of this study, 283 and in the qualitative part, 8 prospective teachers participated. Prospective teachers were selected from each class level. In this sense, the sample of the study is purposeful sampling. Purposeful sampling is the most appropriate type of sampling for the research which is selected in accordance with the research objective (Balcı, 2009). In this study, as the evaluation of the global social responsibility levels of prospective Social Studies teachers is aimed, this sampling type has been preferred.

The 55,5% of the prospective teachers participating in the study ($f=132$) is female, and the 44,5% of them ($f=106$) is male. Of the participant prospective teachers, 56 are the 1st year undergraduate, 73 are the 2nd year undergraduate, 61 are the 3rd year undergraduate students and 48 are at the 4th year undergraduate level. 17 of the prospective teachers are 18, 33 of them are 19, 56 of them are 20, 61 of them are 21, 33 of them are 22 years, 38 of them are up to 23 old.

In the qualitative part of the study, 8 prospective teachers participated. Prospective teachers have been determined in the way that one female and one male are present at each class level.

Data Collection Tool

In this study, in order to collect quantitative data, "The Scale for Global Social Responsibility" developed by Başer and Kılınç (2015) have been used. The scale was applied by the researchers, in the spring term of the academic year 2018-2017, to the prospective teachers at the undergraduate level of 1st, 2nd, 3rd and 4th year. In the qualitative scope of the study, questions structured as open-ended were prepared according to the dimensions (action-oriented, ecological, altruistic and national social responsibility) of the quantitative scale. The prospective teachers were asked to answer those questions in the structured interview form. In that context, the prospective teachers were addressed the following questions:

1. Have you ever taken part in social responsibility activities (Civil society organizations, benevolent associations, international organizations, Community Service Practices, voluntary activities, and so on)? State your reasons for participation.
2. What do you perform individually for protection of the environment? If you do not, state why.
3. How would your point of view be on a case/an issue which you have not experienced "by yourself" within the boundaries of Turkey (e.g. I concern / I do not concern about it.)? State the reasons for this.
4. Do you show awareness to a matter experienced in any country of the world? State the reasons for this.

Analysis of Data

Data obtained from the quantitative part of this study were analyzed by SPSS 21, by carrying out the analyses of Kolmogorov-Smirnov homogeneity test, independent samples t-test, one-way ANOVA and simple correlation. The qualitative part of the study was analyzed by descriptive analysis. Previous to the analysis, data obtained from the prospective teachers were coded, for instance; 1.F.P.T (1st year undergraduate female-prospective teacher), M.P.T. (4th year undergraduate male-prospective teacher). Afterwards, data were analyzed within the context of each question. Data obtained from this part of the study were used in order to support the quantitative part. For the purpose of ensuring the reliability of this part of the study, investigator triangulation was carried out. Investigator triangulation is expressed as the triangulation strategy as based on which data analysis is carried out by two or more researchers independently and their findings are compared (Patton, 2014). In order to ensure the reliability of the study, the other two researchers (2 Social Studies instructors as research associates) partaking in the study were asked for their opinions. Researchers gathered for the points on which they had dissented and it was tried to arrive at agreement.

Findings

In this part of the study, findings obtained through the answers that the prospective teachers have given to the scale of global social responsibility are included. Accordingly, the answers given by the prospective teachers for the scale were analyzed and evaluations were carried out in terms of the variables of gender, class level, parents' educational background and number of siblings. In addition to this, the relation among the dimensions in the scale was revealed and presented below in tables.

Descriptive statistics for the scores which prospective teachers have received from the scale as relevant to the dimensions of action-oriented, ecological, altruistic and national social responsibility are presented in Table 1.

Table 1: Teacher candidates' global social responsibility scores

Dimension	n	Lowest	Highest	\bar{X}	ss
Action Oriented Responsibility (12 items)	238	12	60	43,90	8,3
Ecological responsibility (5 items)	238	5	25	21,40	3,54
Altruist Responsibility (7 items)	238	7	35	26,32	3,4
National responsibility (6 items)	238	6	30	23,06	3,32
Global social responsibility (35 items)	238	30	150	109,27	14,43

When the lowest, middle and highest scores for awareness that can be obtained from the dimensions in the scale are examined, it is counted as the lowest score 12 (12x1), the middle score 30 (12x2,5) and the highest score 60 (12x5) in the dimension for action-oriented responsibility; the lowest score 5 (5x1), the middle score 12,5 (5x2,5) and the highest score 25 (5x5) in the dimension for ecological responsibility; the lowest score 7 (7x1), the middle score 17,5 (7x2,5) and the highest score 35 (7x5) in the dimension for altruistic responsibility; the lowest score 6 (6x1), the middle score 15 (6x2,5) and the highest score 30 (6x5) in the dimension for national responsibility.

Considering the findings in Table 1, as based on these scores, it has been found out that the action-oriented, ecological, altruistic and national responsibility scores of prospective teachers are above the middle score. The case in which these scores indicating prospective teachers' action-oriented, ecological, altruistic and national responsibilities differ according to gender variable was investigated and the findings obtained in consequence of the independent samples t-test performed for the mentioned case are presented in Table 2.

Table 2: Independent t-test results of teacher candidates, according to the gender regarding the dimensions of the global social responsibility scale

Dimensions	Gender	n	\bar{X}	ss	t	p
Action Oriented	Female	132	44,83	8,47	1,934	0,54
	Male	106	42,75	7,97		
Ecological	Female	132	21,61	3,84	,984	0,326
	Male	106	21,15	3,14		
Altruist	Female	132	27,06	3,24	3,881	,000*
	Male	106	25,41	3,31		
National	Female	132	22,61	3,23	-2,346	,020*
	Male	106	23,62	3,38		

*p<,05

When Table 2 is reviewed, it is seen that the averages of the altruistic and national responsibility scores received by the prospective teachers differ according to gender variable ($p=0,00$, $p=0,020$ $p<0,05$). Besides this, between the scores for ecological responsibility and the ones for action-oriented responsibility, a statistically significant difference has not been detected. As regards to the altruistic responsibility, female students have a higher score average ($\bar{X}=27,06$) than male students have ($\bar{X}=25,41$); but for the average of national responsibility scores, it is higher in the case of male students ($\bar{X}=21,59$) compared to female students ($\bar{X}=22,61$).

Another variable in the research is class level. For the class level, findings relevant to the students' action-oriented, ecological, altruistic and national responsibility scores are included in Table 3.

Table 3: Descriptive statistics and one-way anova of teacher candidates according to the class level regarding the dimensions of the global social responsibility scale

F, \bar{X} , SS					Anova Results				
Dimension	Grade	n	\bar{X}	ss	S.V.	S. S.	sd	M.S.	f
Action Oriented	1. Grade	56	45,57	9,43	B. G.	303,656	3	101,219	1,480
	2. Grade	73	43,19	8,01	W. G.	15999,924	234	68,376	
	3. Grade	61	42,69	7,66	Total	16303,580	237		
	4. Grade	48	44,56	7,96					
	Total	238	43,90	8,29					
Ecological	1. Grade	56	22,07	3,96	B. G.	134,659	3	44,886	3,692
	2. Grade	73	21,96	2,92	W. G.	2844,618	234	12,156	
	3. Grade	61	21,16	3,37	Total	2979,277	237		
	4. Grade	48	20,08	3,83					
	Total	238	21,40	3,55					
Altruist	1. Grade	56	27,55	3,56	B. G.	137,433	3	45,811	4,209
	2. Grade	73	26,38	3,09	W. G.	2546,656	234	10,883	

	3. Grade	61	25,80	3,28	Total	2684,088	237		
	4. Grade	48	25,46	3,33					
	Total	238	26,32	3,37					
National	1. Grade	56	22,77	3,000	B. G.	54,824	3	18,275	1,663
	2. Grade	73	23,78	3,08	W. G.	2571,230	234	10,988	
	3. Grade	61	22,67	3,59	Total	2626,055	237		
	4. Grade	48	22,81	3,64					
	Total	238	23,06	3,33					

When Table 3 is reviewed, it is realized that the prospective teachers' ecological and national responsibility scores are very close. In addition, it has been observed that a difference exists in their action-oriented and altruistic responsibility scores. In order that the differentiation in these scores received by the students in terms of the variable of class level can be analyzed, one-way analysis of variance has been carried out. While a statistically significant difference according to class level was found between the action-oriented responsibility and altruistic responsibility scores obtained by the prospective teachers; a significant difference between their ecological and national responsibility scores was not found ($F=3,692$, $p<,05$; $F=1,480$, $p<,05$; $F=4,209$, $p<,05$; $F=1,663$, $p<,05$). The Tukey test comparison of the prospective teachers' action-oriented, ecological, altruistic and national responsibility scores as based on the variable of class level was made. Relevant results are given in Table 4.

Table 4: Tukey test comparison results for the class level variable of the dimensions in the global social responsibility scale for the prospective teachers

responsibility scale for the prospective teachers						
Dimensions		Class Level		Mean	Standard error	P
Ecological	1 st year	4 th year	1,99*	,66	,021	
	2 nd year	4 th year	1,88*	,65	,021	
Altruistic	1 st year	3 rd year	1,75*	0,61	,023	
	1 st year	4 th year	2,10*	,65	,008	

Based on Table 4, for the prospective teachers' ecological responsibility scores, a significant difference between the 1st and 2nd year and 4th year was found, in favour of the 1st and 2nd year undergraduate students. When their altruistic responsibility scores were examined, a significant difference between the 1st year and 3rd and 4th year was found, in favour of the 1st year undergraduate students. As is viewed overall, we can mention that the prospective teachers' responsibility levels decrease as the stages at which they receive education rise.

In the research, the prospective teachers' action-oriented, ecological, altruistic and national responsibility scores were also examined according to the age.

Table 5: Descriptive statistics and one-way anova of teacher candidates according to the age regarding the dimensions of the global social responsibility scale

F, \bar{X} , SS					Anova Results				
Dimension	Age	n	\bar{X}	ss	S.V.	S. S.	sd	M.S.	f p
Action Oriented	18	17	46,	12,44	B. G.	60,730	5	12,146	,966 ,440
	19	33	44,36	7,39	W. G.	2918,547	232	12,580	
	20	56	44,14	8,20	Total	2979,277	237		
	21	61	41,79	7,08					
	22	33	45,12	8,99					
	Other	38	44,53	8,00					
	Total	238	43,90	8,29					
Ecological	18	17	21,24	4,98	B. G.	421,868	5	84,374	1,233 ,295
	19	33	22,18	3,64	W. G.	15881,712	232	68,456	

	20	56	21,93	3,27	Total	16303,580	237		
	21	61	21,19	3,10					
	22	33	20,88	3,76					
	Other	38	20,82	3,59					
	Total	238	21,40	3,55					
Altruist	18	17	26,47	4,32	B. G.	104,426	5	20,885	1,878 ,099
	19	33	27,73	2,68	W. G.	2579,662	232	11,119	
	20	56	26,54	3,29	Total	2684,088	237		
	21	61	25,64	3,09					
	22	33	26,2	3,55					
	Other	38	25,87	3,60					
	Total	238	26,32	3,37					
National	18	17	23,12	3,12	B. G.	67,853	5	13,571	1,231 ,295
	19	33	22,79	3,36	W. G.	2558,202	232	11,027	
	20	56	23,57	2,98	Total	2626,055	237		
	21	61	23,03	3,28					
	22	33	21,94	3,28					
	Other	38	23,55	3,90					
	Total	238	23,06	3,33					

When Table 5 is reviewed, it is seen that the scores for prospective teachers' action-oriented, ecological, altruistic and national responsibility are very close. One-way analysis of variance was carried out so that the differentiation of prospective teachers' responsibility scores as based on their ages could be investigated. A statistically significant difference in the prospective teachers' action-oriented, ecological, altruistic and national responsibility scores according to the age has not been found ($F = ,966$, $p < ,05$; $F = 1,233$, $p < ,05$; $F = 1,878$, $p < ,05$; $F = 1,231$, $p < ,05$). In the research, the prospective teachers' action-oriented, ecological, altruistic and national responsibility scores were also analyzed according to the mother educational level.

Table 6: Descriptive statistics of and one-way anova teacher candidates according to the mother educational level regarding the dimensions of the global social responsibility scale

F. \bar{X} , SS		Anova Results								
Dimension	mother's educational status	n	\bar{X}	ss	S.V.	S. S.	sd	M.S.	f	p
Action Oriented	Primary school	141	44,28	7,96	B. G.	33,640	5	6,728	,530 ,754	
	Middle School	36	41,92	9,07	W. G.	2945,637	232	12,697		
	High school	29	46,45	7,34	Total	2979,277	237			
	Under graduate	6	47,50	12,18						
	Graduate	14	37,71	8,73						
	Not literate	12	44,58	5,57						
	Total	238	43,90	8,29						
Ecological	Primary school	141	21,62	3,28	B. G.	969,731	5	193,946	2,934,014	
	Middle School	36	20,78	4,17	W. G.	15333,849	232	66,094		
	High school	29	21,48	3,48	Total	16303,580	237			

	Under graduate	6	22,00	3,29					
	Graduate	14	20,57	3,55					
	Not literate	12	21,17	4,97					
	Total	238	21,40	3,55					
Altruist	Primary school	141	26,48	3,20	B. G.	85,251	5	17,050	1,522,184
	Middle School	36	25,64	3,97	W. G.	2598,838	232	11,202	
	High school	29	25,93	3,66	Total	2684,088	237		
	Under graduate	6	27,00	3,41					
	Graduate	14	25,36	2,71					
	Not literate	12	28,25	2,86					
	Total	238	26,32	3,37					
National	Primary school	141	23,14	3,44	B. G.	17,054	5	3,411	,303 ,911
	Middle School	36	22,75	3,41	W. G.	2609,001	232	11,246	
	High school	29	23,31	3,12	Total	2626,055	237		
	Under graduate	6	23,00	1,79					
	Graduate	14	23,36	3,95					
	Not literate	12	22,17	2,20					
	Total	238	23,06	3,329					

When Table 6 is reviewed, it is realized that the scores for prospective teachers' ecological, altruistic and national responsibility are very close. However, a differentiation has been observed in their action-oriented responsibility scores. One-way analysis of variance was carried out in order that the differentiation of the prospective teachers' these responsibility scores mentioned as based on the educational level of mother could be examined. A significant difference in the prospective teachers' ecological, altruistic and national responsibility scores according to the age has not been found ($F = ,530$, $p < ,05$; $F = 1,522$, $p < ,05$; $F = 0,303$, $p < ,05$). However, in their scores for action-oriented responsibility, a statistically significant difference has been found.

Tukey test comparisons of prospective teachers' action-oriented, ecological, altruistic and national responsibility scores in terms of the variable of mother educational level was performed. Relevant results are given in Table 8.

Table 7: Tukey test comparison results of teacher candidates, candidates according to mother educational level the dimensions of the global social responsibility scale

Dimensions	Mothers Educational Status		M.D.	Std. Error	p
Action Oriented	Primary School	Graduate	6,57*	2,27	,049
	High School	Graduate	8,73*	2,64	,014

According to Table 7, in terms of action-oriented responsibility, a statistically significant difference has been found between the ones whose mothers received the primary and high school education and the ones who completed their postgraduate studies, in favour of mother educational level at postgraduate education. Based on this, we can state that action-oriented responsibility levels increase as mother educational level increases.

In the research, the prospective teachers' action-oriented, ecological, altruistic and national responsibility scores according to the variable of father educational level were also analyzed.

Table 8: Descriptive statistics and one-way anova of teacher candidates according to father educational level regarding the dimensions of the global social responsibility scale

F, \bar{X} , SS					Anova Results					
Dimension	Father educational level	n	\bar{X}	ss	S.V.	S. S.	sd	M.S.	f	p

Action Oriented	Primary school	9	44,78	7,18	B. G.	133,602	5	26,720	2,198 ,055
	Middle School	6	44,28	7,80	W. G.	2759,179	227	12,155	
	High school	5	42,68	9,50	Total	2892,781	232		
	Under graduate	2	43,10	10,0					
	Graduate	5	39,60	9,02					
	Not literate	4	44,25	8,66					
	Total	2	43,90	8,23					
Ecological	Primary school	9	21,80	3,13	B. G.	263,684	5	52,737 ,775 ,569	
	Middle School	6	21,57	3,07	W. G.	15445,046	227	68,040	
	High school	5	21,03	4,27	Total	15708,730	232		
	Under graduate	2	21,14	3,18					
	Graduate	5	22,20	3,35					
	Not literate	4	16,25	6,75					
	Total	2	21,42	3,53					
Altruist	Primary school	9	26,74	2,75	B. G.	57,484	5	11,497 1,037 ,397	
	Middle School	6	26,07	3,71	W. G.	2516,232	227	11,085	
	High school	5	26,64	3,92	Total	2573,717	232		
	Under graduate	2	25,19	2,98					
	Graduate	5	25,40	1,82					
	Not literate	4	25,75	3,78					
	Total	2	26,36	3,33					
National	Primary school	9	23,50	3,42	B. G.	54,774	5	10,955 1,013 ,411	
	Middle School	6	23,03	3,17	W. G.	2455,835	227	10,819	
	High school	5	22,85	3,22	Total	2510,609	232		
	Under graduate	2	22,23	3,10					
	Graduate	5	21,2	3,70					
	Not literate	4	24,00	3,56					
	Total	2	23,08	3,29					

When Table 8 is reviewed, it is seen that the prospective teachers' action-oriented, ecological, altruistic and national responsibility scores are very close. One-way analysis of variance was carried out in order that the differentiation of the prospective teachers' these responsibility scores mentioned as based on the educational level of father could be examined. A significant difference in the prospective teachers' action-oriented, ecological, altruistic and national responsibility scores according to the age has not been found ($F= 2,198, p<,05$; $F= ,775, p<,05$; $F= 1,037, p<,05$; $F= 1,013, p<,05$).

In the research, the prospective teachers' action-oriented, ecological, altruistic and national responsibility scores according to the number of siblings were also analyzed.

Table 9: Descriptive statistics and one-way anova of teacher candidates according to number of siblings regarding the dimensions of the global social responsibility scale

E. \bar{X} , SS		Anova Results								
Dimension	number of siblings	n	\bar{X}	ss	S.V.	S. S.	sd	M.S.	f	p
Action Oriented	1	5	44,67	8,84	B. G.	38,504	3	12,835	1,018 ,385	
	2	6	44,38	7,67	W. G.	2938,213	233	12,610		

	3 and more	1	43,41	8,54	Total	2976,717	236		
	No siblings	7	40,57	4,28					
	Total	2	43,86	8,29					
Ecological	1	5	22,08	3,30	B. G.	149,080	3	49,693	,721 ,540
	2	6	21,24	2,98	W. G.	16052,043	233	68,893	
	3 and more	1	21,26	3,85	Total	16201,122	236		
	No siblings	7	20,14	4,74					
	Total	2	21,40	3,55					
Altruist	1	5	26,73	3,27	B. G.	24,211	3	8,070	,709 ,548
	2	6	26,24	3,16	W. G.	2652,684	233	11,385	
	3 and more	1	26,26	3,47	Total	2676,895	236		
	No siblings	7	24,86	4,30					
	Total	2	26,31	3,37					
National	1	5	22,39	3,61	B. G.	42,256	3	14,085	1,271 ,285
	2	6	22,95	2,92	W. G.	2582,664	233	11,084	
	3 and more	1	23,36	3,41	Total	2624,920	236		
	No siblings	7	24,14	3,34					
	Total	2	23,07	3,34					

When Table 9 is reviewed, it is seen that the prospective teachers' action-oriented, ecological, altruistic and national responsibility scores are very close. One-way analysis of variance was carried out in order that the differentiation of the prospective teachers' these responsibility scores as based on the number of siblings could be examined. A significant difference in the prospective teachers' action-oriented, ecological, altruistic and national responsibility scores according to the number of siblings has not been found ($F= 1,018$, $p<,05$; $F= ,721$, $p<,05$; $F= ,709$, $p<,05$; $F= 1,271$, $p<,05$).

Within the scope of the study, the relation among the prospective teachers' action-oriented, ecological, altruistic and national responsibility scores was also analyzed, and relevant results are presented in Table 12.

Table 10: Arithmetic mean, standard deviation and correlation values of variables

Dimension	\bar{X}	ss	1	2	3	4
1. Ecological Responsibility	43,90	8,29	1	,283**	,419**	,209**
2. Action Oriented Responsibility	21,40	3,55		1	,490**	,195**
3. Altruist Responsibility	26,32	3,37			1	,124**
4. National Responsibility	23,06	3,33				1

Considering the relation for the dimensions included in Table 10, low degree of positive correlation ($r=.283$, $p<,01$) between ecological responsibility and action-oriented responsibility; medium degree of positive correlation ($r=.419$, $p<,01$) between ecological responsibility and altruistic responsibility; and low degree of positive correlation ($r=.209$, $p<,01$) between ecological responsibility and national responsibility have been found. Also, medium degree of positive correlation ($r=.490$, $p<,01$) between action-oriented responsibility and altruistic responsibility, and low degree of positive correlation ($r=.195$, $p<,01$) between action-oriented responsibility and national responsibility have been found. Low degree of positive correlation ($r=.124$, $p<,01$) between altruistic responsibility and national responsibility has been found.

The findings obtained from the quantitative data in the study are as introduced above. Additionally, the reasons why the prospective teachers had developed action-oriented, ecological, altruistic and national responsibility were intended to be determined, as well. Based on this, four (4) questions were directed to the two (2) each of the prospective teachers from every stage of undergraduate education. The answers they gave to those questions were presented below.

The question "Have you ever taken part in social responsibility activities (Civil society organizations, benevolent associations, international organizations, Community Service Practices, voluntary activities, and so on)? State your reasons for participation." was directed to the prospective teachers. 5 of the prospective teachers stated that they had participated, and 3 of them stated that they had not. In the study, prospective teachers have given more than one answer to the questions. For this reason, the number of frequency is not equal to the number of prospective teachers participating in the study. Data obtained in this scope and information related to their frequencies are included in Table 11.

Table 11: Statistical data for the reasons of prospective teachers' taking in the social responsibility activities

Views	Participants	F
Lending assistance to the ones who need	1.F.P.T.-3.F.P.T.-4.M.P.T.	3
That helping the ones who need makes me happy	3.F.P.T.-4.F.P.T.	2
That I like taking responsibility and working in cooperation	3.M.P.T.-4.F.P.T.	2
Its enabling individual to get more active	3.M.P.T.	1
Making the ones who need happy	4.M.P.T.	1
That there has been no one to direct me in this way	2.F.P.T.-2.M.P.T.	2
That I do not have time	1.M.P.T.-2.M.P.T.	2
That I am not interested in these issues	2.M.P.T.	1
Total	8	14

As based on Table 11, it is realized that the prospective teachers have or have not taken their own parts in social responsibility activities due to different reasons. The prospective teachers stating that they have participated in the activities act in this way mostly in order to lend assistance to the ones in need ($f=3$). As for the prospective teachers stating that they have not participated in the activities, they put forward the reasons for not taking part through the opinions that there has been no one to direct me ($f=2$) and that I do not have time ($f=2$). Some of the prospective teachers answered this question of the study as the following:

3.M.P.T. *"I have taken part. I think that an individual must perform works in order to contribute to the nature and the society. This case enables the one to gain values such as responsibility and cooperation."*

4.M.P.T. *"I have participated in the social responsibility activities. My reason for doing so was that I was supposed to take part in the activities for some subjects. My aim was to aid my circle and the society, to enable that they were pleased, and to make them happy."*

The second question of the qualitative part of the study is "What do you perform individually for protection of the environment? If you do not, state why.". All of the prospective teachers have stated that they engage in the activities for protection of the environment. Data obtained by this question and frequencies are included in Table 12.

Table 12: Statistical data for the prospective teachers' views on the protection of the environment

Views	Participants	F
Warning the ones who throw litter	1.M.P.T.-2.F.P.T.-4.F.P.T.-4.F.P.T.	4
To pick and throw the rubbish I notice around into litter bin	2.M.P.T.-2.F.P.T.-4.F.P.T.	3
Not doing anything	2.M.P.T.-3.F.P.T.	2
Participating in the activities of environmental cleanup	3.F.P.T.	1
Denouncing the problems faced with to the authorities	3.M.P.T.	1
Trying to keep the environment clean	2.F.P.T.	1
Not to use environmentally hazardous substances	1.F.P.T.	1
Sharing via social media to create awareness	4.F.P.T.	1
Following the current news related to the environment	4.F.P.T.	1
Informing the ones who apply disinfectant wrong	4.M.P.T.	1
Total	8	16

As is seen from Table 12, it can be stated that the prospective teachers take part in different activities for the protection of the environment. The prospective teachers have expressed their views mostly as warning the ones who throw litter ($f=4$) and picking and throwing the rubbish I notice around into litter bin ($f=3$). Accordingly, it can be said that the prospective teachers' behaviours towards protecting the environment are generally for the rubbish thrown around. Some of the prospective teachers answered this question of the study as the following:

1.M.P.T. *"I warn the people and children around me. By telling about the mistakes they make, I enable them not to make again."*

2.M.P.T. *"I try to pick and throw it into the waste bin when I see around, on the ground. I do not think I do anything else."*

The question of "How would your point of view be on a case/an issue which you have not experienced "by yourself" within the boundaries of Turkey (e.g. I concern / I do not concern about it.)? State the reasons for this." was directed to the prospective teachers, as the third question of this study. 6 of the prospective teachers answered the question in the way that they concerned; 1 of them stated that it was based upon what the issue was; and 1 of them answered as I do not concern about it. Data obtained in this context and information on the frequencies are included in Table 13.

Table 13: Statistical data for the prospective teachers' concerning about the issues encountered in Turkey

Views	Participants	F
The idea that it is also possible for me to experience the same cases/issues one day	3.F.P.T.-2.F.P.T.-4.M.P.T.	3
That being aware towards social problems is a duty of every effective citizen	4.F.P.T.-4.M.P.T.	2
Being able to understand people by feeling empathy	3.M.P.T.-3.M.P.T.	2
That the problems encountered in my country also affect me	4.F.P.T.	1
I care about the problems related to human and environment	1.M.P.T.	1
If the problem is a particular concern to us, we have to be aware	1.F.P.T.	1
The problems which others experience are not my concern	2.M.P.T.	1
Total	8	11

The prospective teachers have stated that they would concern about the problems encountered in Turkey, by the reason of the idea that it is also possible for me to face with the same issue one day ($f=3$); based on the fact that being aware towards social problems is the duty of an effective citizen ($f=2$) and in order to be able to understand people by feeling empathy ($f=2$). As for the prospective teacher stating that it depends on what the matter is, the answer has been given as we have to be aware if the problem is a particular concern to us ($f=1$). The prospective teacher who has given the answer 'I do not concern' explained the reason for this by saying 'the problems which others experience are not my concern' ($f=1$). Some of the prospective teachers answered this question of the study as the following:

2.F.P.T. *"Of course, I concern about a problem encountered. Because every issue arising in our country should be a particular concern to us. If we are not experiencing it today, this does not mean that we will not face with this problem tomorrow."*

3.F.P.T. *"Sure, I concern. Since I think that it is possible to happen to me or people around me, I do everything that I can."*

The prospective teachers were finally asked for giving an answer to the question of "Do you show awareness to a matter experienced in any country of the world? State the reasons for this.". 6 of the prospective teachers have stated that they concern; 1 of them answered in the way that I do not concern and 1 in the way that I partially concern. Data obtained in this context and information on the frequencies are included in Table 16.

Table 14: Statistical data for the prospective teachers' concerning about the issues encountered around the world

Views	Participants	F
That the issues encountered in the globalizing world concern the whole humanity closely	4.F.P.T.-4.M.P.T.	2
That the cases happening in immediate surroundings affect us more	2.F.P.T.	1
Common problems related to the nature and humanity should be a matter of concern	1.M.P.T.	1
That the happenings to innocent people make me sad	1.F.P.T.	1
That a case occurring anywhere also affects other countries	4.M.P.T.	1
That our being aware towards social problems is assumed by our religion	4.M.P.T.	1
The probability that similar problems can be encountered in our country	4.M.P.T.	1
That only the situation of Turkish people and Muslims is a concern to me	3.M.P.T.	1
Total	8	9

The prospective teachers have stated that they would concern the problems experienced around the world by reason of the fact that problems encountered in this globalizing world are definitely of concern to the whole humanity ($f=2$). The prospective teacher who has given the answer 'I do not concern' explained the reason for this by saying 'the cases happening in the immediate surroundings affect us more' ($f=1$). Also, the prospective teacher stating a partial concern has explained the reason of this by putting forward the idea that only the situation of Turkish people and Muslims is a concern to me ($f=1$). Some of the prospective teachers answered this question of the study as the following:

1.F.P.T. *"Yes, I show awareness. Ultimately, we are all human and I believe that innocent people are everywhere. No one deserves to see wars and cruelty."*

4.F.P.T. *"Sure, I show awareness to the global matters. Even if I were not a citizen of the country where the problem was being experienced, I would act responsibly by approaching on the basis of humanitarian values. At the same time, any problem encountered anywhere in the globalizing world will also affect the other countries."*

Discussion And Conclusion

Considering the results of the study, while a statistically significant difference according to gender variable has been found in the altruistic dimension in favour of women and in the national responsibility dimension in favour of men, a significant difference has not been found in the other dimensions. In a study carried out by Berkowitz and Lutterman (1968), a significant difference in favour of women was revealed. Moreover, Akbaş (2004) found that females were more responsible than males, as based on gender variable. In the study by Abdi Golzar (2006), it was also observed that a significant difference was present in favour of women. In the research which Ercan (2009) carried out with the study group involving secondary school teachers, a significant difference according to gender variable was detected in favour of females. In the study which Altunay and Yalçinkaya (2011) performed with the participation of prospective teachers, a significant difference was again found in favour of women. In the study by Taylı (2013), with a study group consisting of high school students, a significant difference in favour of female students was found. Female students mostly have higher academic achievement during school years, as compared to male students (Paulson, 1996: 205). When considered that there is a positive relationship between achievement and responsibility (Lickel, Schamer and Hamilton, 2003; Wentzel, 1991), it is expected that the responsibility levels will be high for the female students demonstrating a higher academic achievement, in parallel. The fact that girls are raised so as to be more responsible due to the reasons arising from gender roles as of very early ages while being brought up supports this consequence. The case that the significant difference in the national responsibility dimension is in favour of male prospective teachers shows similarity with the results of the research which Küçükşen and Budak (2017) carried out with the high school students. That a significant difference according to gender variable could not be found between the individual and social responsibility scores within the scope of the research which Özen (2009) performed on a study group including primary school eighth graders also promotes this information attained at as a result of the research. Also, in the study which Başer (2015) carried out with prospective teachers and Sezer (2008) performed on a study group consisting of primary school students, a significant difference between genders was not detected. Similarly, Şahan (2011) did not attain at a significant difference as based on the variable of gender for the 8th graders, in the study within the scope of which those students' sense of responsibility was analyzed.

When the variable of class level is considered, in the altruistic and ecological responsibility dimensions, significant difference has been found. As based on the altruistic dimension, the 1st and 2nd year undergraduate students are more responsible than the 4th year ones. As related to the ecological dimension, 1st year undergraduate students are more responsible than the 3rd and 4th year ones. In other words, what is understood from this, lower stage of class has developed more responsibility as compared to the higher-stage class level. Various studies supporting this conclusion have been encountered in the body of literature. Duman (2014) reached at the result indicating that in comparison with the twelfth graders, the eleventh graders have more positive views on their schools' fulfilling the duties related to social responsibility. In their papers, Reason, Andrew and Kee (2013) concluded that continuing education at university level has a positive effect on the development of responsibility. However, in the study carried out by Başer (2015), differentiation according to the class level variable was not observed.

According to the variable of mother educational level, significant difference appeared in the action-oriented responsibility dimension. This difference is for the level of postgraduate education, against the level of primary and high school education. In the study by Taylı (2013), it was seen that the mother educational level had positive effect on the development of sense of responsibility. Also, in the study which Aladağ (2009) performed on a study group including primary school students, a similar result was attained at. Özen (2009) arrived at significant difference in the social responsibility levels according to the variable of mother educational level. According to this, as the mother's educational level rises, the levels of children's undertaking responsibilities increase. Since the ones who raise the child are mothers as prescribed by social role, we can state that mother's educational level has a positive influence upon the child's undertaking responsibility. Besides, Altunay and Yalçinkaya (2011) analyzed the prospective teachers' opinions on traditional, universal and hedonistic values according to mother educational level in their research, but a significant difference could not be found.

In the study, significant difference has not been found as based on the variable of father educational level. The study carried out by Başer (2015) and the study by Altunay and Yalçinkaya (2011) support this. But, in the research that Özen (2009) performed, significant difference was found in the social responsibility levels according to the variable of father educational level. According to this, if father is high school graduate or postgraduate, students' individual and social responsibility levels become significantly higher compared to all other educational levels of father. Duman (2014) obtained the result that students whose fathers were primary school graduate had stated positive views on the schools' fulfilling their duties related to social responsibilities more than the ones whose

fathers were college graduates or postgraduate. Taylı (2013), in the analysis made by controlling the influence of gender, introduced that father's educational background was determinative on responsibility. In this regard, it can be thought that students' individual and social responsibility levels also increase as father educational level rises.

In consequence of the research, a significant difference in all dimensions at the levels of global social responsibility of the prospective social studies teachers has not been found as based on the variable of the number of siblings. However, in the study by Özen (2009), a significant difference was found by the number of siblings. It was seen that the ones who were three siblings developed responsibility more. Actually, it is expected that the oldest sibling in a family has developed the sense of responsibility more. But in this study, the number of siblings is not regarded as an influential variable.

Based on the simple correlation test performed among the dimensions, low degree of positive correlation between ecological responsibility and action-oriented responsibility; medium degree of positive correlation between ecological responsibility and altruistic responsibility; and low degree of positive correlation between ecological responsibility and national responsibility were realized. Medium degree of positive correlation between action-oriented responsibility and altruistic responsibility, and low degree of positive correlation between action-oriented responsibility and national responsibility were found. Low degree of positive correlation between altruistic responsibility and national responsibility was found. In other words, as understood from this point, all dimensions interact.

The qualitative part has been prepared to promote the quantitative part of the study. Considering the results for this, it is seen that the prospective teachers have stated the reason of having action-oriented responsibility as lending assistance to the ones who need, and in the way that being in cooperation is for the benefits of the society. The reason of developing the sense of altruistic responsibility takes its source from the feeling of empathy. In the dimension of national responsibility, the prospective teachers have stated that showing awareness and/or acting responsibly is required since the problems encountered all around the world will affect everyone in the world. The reason for ecological responsibility arises from the fact that clean environment is important.

Suggestions

- This study has been carried out with the prospective teachers. It can also be performed by different sample groups.
- In order that prospective teachers' awareness towards global social responsibility can be expanded, it may be suggested that academicians assign various responsibilities to the prospective teachers through the extracurricular activities, within the process of education.
- The content of the subject of Community Service Practices may be rearranged in a way to promote the development of the prospective teachers' sense of global social responsibility.
- Studies with different sample group and in different methods can be performed.
- Being a member of civil society organizations has an effect upon global responsibility. Prospective teachers may be directed to the CSOs.

References

- Akgül, U. (2010). Kurumsal sosyal sorumluluk kavramına sosyal antropolojik bir yaklaşım. *Ankara Üniversitesi Dil ve Tarih Coğrafya Fakültesi Antropoloji Dergisi*, 24, 95-114.
- Akinci Vural, Z. B. & Coşkun, G. (2011). Kurumsal sosyal sorumluluk ve etik, *Gümüşhane Üniversitesi İletişim Fakültesi İletişim Dergisi*, 1, 61-87.
- Aktepe, V. (2015). 5.Sınıf öğrencilerinin sorumluluk değerinin geliştirilmesine yönelik bir performans görevi uygulaması. *K. Ü. Kastamonu Eğitim Dergisi*, 23 (4), 1511-1534.
- Balcı, A. (2009). *Sosyal bilimlerde araştırma*. 7. Baskı, Ankara: Pegem Akademi.
- Başer, E. H. (2015). *Sosyal bilgiler öğretmen adaylarının küresel sosyal sorumluluk düzeylerinin çeşitli değişkenler açısından incelenmesi*. Yayımlanmamış Yüksek Lisans Tezi, Dumlupınar Üniversitesi Eğitim Bilimleri Enstitüsü, Kütahya.
- Başer, E. H. & Kılınç, E. (2015). Küresel sosyal sorumluluk ölçeği: Geçerlik ve güvenirlik çalışması. *Sakarya University Journal of Education*, 5(3), 75-89
- Berkowitz, L. & Lutterman, K. G. (1968). The traditional socially responsible personality, *The Public Opinion Quarterly*, 32 (2), 169-185.
- Berman, S. (1990). Educating for social responsibility. *Educational Leadership*, 48 (3), 75-80.
- Bobo, L. (1991). Social responsibility, individualism, and redistributive policies. *Sociological Forum*, 6 (1), 71-92.
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş. & Demirel, F. (2012). *Bilimsel araştırma yöntemleri*. Geliştirilmiş 13. Baskı, Ankara: Pegem Akademi.

- Deveci, H. & Eryılmaz, Ö. (2016). Öğretmen adaylarının sosyal sorumluluk projesine katılımlarına ilişkin görüşleri: Let's do it! Türkiye örneği. *Uluslararası Avrasya Sosyal Bilimler Dergisi*, 7(25), 163-185.
- Deveci, H. & Eryılmaz, Ö. (2017). Sosyal bilgiler eğitiminde sosyal sorumluluk, Ed. Refik Turan, Hakan Akdağ, Sosyal bilgiler öğretiminde yeni yaklaşımlar III (96-113). Ankara: Pegem Akademi.
- Ergül, H. F. & Kurtulmuş, M. (2014). Sosyal sorumluluk anlayışının geliştirilmesinde topluma hizmet uygulamaları dersine ilişkin öğretim elemanlarının görüşleri. *Elektronik Sosyal Bilimler Dergisi*, 13 (49), 221-232.
- Erol, M. & Elagöz, İ. & Şahbaz, A. (2010). Sosyal sorumluluk anlayışının işletmelerde düzeylerinin belirlenmesi üzerine bir araştırma, *Muhasebe ve Finansman Dergisi*, 46 (1), 58-65.
- Harris, A. L., Lang, M., Yates, D. ve Kruck, S. E. (2011). Incorporating ethics and social responsibility in is education. *Journal of Information Systems Education*, 22 (3):183-189.
- Kılıçoğlu, G., Karakuş, U. & Öztürk, T. (2012). Günümüz dünya sorunlarına yönelik tutum ölçeği geçerlik ve güvenirlik çalışması. *Turkish Studies* 7 (4), 2209-2224.
- Kocadere S. A. & Seferoğlu, S. S. (2013). Topluma hizmet uygulamaları dersinin işleniş: uygulama örnekleri ve süreçte ilişkin öğrenci görüşlerinin değerlendirilmesi. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 34, 75-89.
- Küçüköğlu, A., Ozan, C. & Taşkın, A. (2016). Topluma hizmet uygulamaları dersi sürecinin yansıtıcı günlükler yoluyla incelenmesi. *İlköğretim Online*, 15(3), 787-803.
- Küçükşen K. & Budak, H. (2017). Lise öğrencilerinin sosyal değer tercihlerinin küresel sosyal sorumluluk düzeylerine etkisi. *İnsan ve Toplum Bilimleri Araştırmaları Dergisi*, 6 (3), 1813-1826.
- Nakamura, M. ve Watanabe-Muraoka, A. M. (2006). Global social responsibility: Developing a scale for senior high school students in Japan. *International Journal for the Advancement of Counselling*, 28 (3) 213- 226.
- Özen, Y. (2009). *İlköğretim 8. sınıf öğrencilerinin kişisel ve sosyal sorumluluk yordayıcılarının incelenmesi*, Yayınlanmamış Doktora Tezi, Atatürk Üniversitesi, Sosyal Bilimler Enstitüsü, Erzurum.
- Özen, Y. (2013). Sorumluluk duygusu ölçeğinin geliştirilmesi; geçerlik ve güvenirliği. *Journal of European Education*, 3(2), 17-23.
- Patton, M. Q. (2014). Nitel araştırma ve değerlendirme yöntemleri. Mesut Bütün, Selçuk Beşir Demir (Çev. Ed.), 3. Baskıdan Çeviri, Ankara: Pegem Akademi Yayıncılık.
- Saran, M. Coşkun, G., İnal-Zorel, F. & Aksoy, Z. (2011). Üniversitelerde sosyal sorumluluk bilincinin geliştirilmesi: Ege üniversitesi topluma hizmet uygulamaları dersi üzerine bir araştırma. *Journal of Yasar University*, 22(6), 3732-3747.
- Selanik Ay, T. & Dal, S. (2014). İlköğretim öğrencilerinin yazılı anlatım ürünlerine göre sorumluluk değeri algıları. *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*, 22, 78-93.
- Sezer, T. (2008). *İlköğretim 6. sınıf sosyal bilgiler dersinde sorumluluk değerinin öğretimine ilişkin öğretmen görüşleri*. Yayınlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Sezer, A. & Çoban, O. (2016). Ortaokul Öğrencilerinin Sorumluluk Değeri Algıları. *Uşak Üniversitesi Eğitim Araştırmaları Dergisi*, 2(1), 22-39.
- Taylı, A. (2013). Sorumluluğun bazı değişkenler açısından değerlendirilmesi. *Muğla Sıtkı Koçman Üniversitesi, Sosyal Bilimler Enstitüsü Dergisi*, 30, 68-84.
- Toker, H. ve Tat, M. (2013). Sosyal sorumluluk: Kamu ve vakıf üniversiteleri öğrencilerinin sosyal sorumluluğa ilişkin bilgi düzeyleri ve algılarının ölçülmesi. *Selçuk Üniversitesi İletişim Fakültesi Akademik Dergisi*, 8 (1), 34-56.
- Topluma Hizmet Uygulamaları Dersi Yönergesi, (2011). <http://www.cumhuriyet.edu.tr>
- Uğurlu, Z. & Kırıl, E. (2012). Öğretmen adaylarının topluma hizmet uygulamaları dersinin işleyiş süreci ve kazanımlarına ilişkin görüşleri. *Karabük Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 2 (1), 59-93.
- Yazıcı, Ö. (2013). Ortaöğretim öğrencilerinin günümüz dünya sorunlarına yönelik tutumları. *Turkish Studies*, 8 (6), 807-823.
- Yeşil, R. (2014). İlköğretim okullarında görev yapan öğretmenlerin sorumluluk eğitimi stratejilerinin incelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 29 (2), 282-294.
- Yılmaz, K. (2011). Eğitim fakültelerinin sosyal sorumluluğu ve topluma hizmet uygulamaları dersi: Nitel bir araştırma. *Kuramsal Eğitimbilim*, 4 (2), 86-108.

The Impact Of Achieved Education On The Wages Of Ict Professionals In The Czech Economy

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Abstract

Information and communication technologies are one of the driving forces of advanced economies (ICT). How ICT professionals are remunerated as compared to other workers shows the importance of this industry in a certain state. This article analyzes the remuneration of ICT professionals in the Czech Republic by achieved education. For our analysis, we used data from the Labor Force Survey that contains annual information about wages and salaries in the Czech economy. We analyzed data time series, using the MS Excel platform and functionality. Based on our analysis, we have concluded that the structure of ICT professionals on the Czech market changed during the researched time period of 2000– 2007 – the group of ICT professionals with a secondary education strengthened by 10 percentage points to the detriment of the group of ICT professionals with a university education. We have also concluded that the median wage of all ICT professionals is above the median wage in the Czech Republic. We have not been able to prove a correlation between year-to-year changes in the median wage of ICT professionals and year-to-year changes in GDP.

Keywords: *Level of education, year-to-year wage increase, elementary education, secondary education, university education, GDP, ICT professionals.*

Introduction

Information and communication technologies (ICT) have become an integral part of our existence. From the very beginning in the 1950s and 1960s until the present. The dependency of entire society on ICT is critical from a technological standpoint. Information and communication technologies are practically used in all banking transactions on the global market as well as in transportation, logistics and international trade (Matejka & Vltavská, 2013). ICT also play a major role in public administration and local governments where the need for highly qualified ICT professionals keeps growing due to an ever-increasing data volume (trend big data) and the implementation of cloud computing technologies and open data concepts (Novotný, Doucek & Fischer, 2016). We can also see how ICT application in business and non-business sectors increases the competitiveness of individual regions and states (Mand'ák & Nedomova, 2014).

The relevance and importance of ICT professionals is regularly declared and presented at different economic forums and in publications, both local (Doucek, Nedomova, Maryska, 2015) and international. However, the key question is whether or not the growing wages of ICT professionals are actually in line with ICT professionals' importance for the Czech economy (Hanclova, & Doucek, 2012, Šimpach & Langhamrová 2014).

Wages in this industry, which are often higher than average wages in the rest of the economy, represent an important dimension of ICT implementation (Torrent-Sellens, 2008; Hanclova et al, 2015; Marek, Doucek, 2016). This is also a topical discussion on equality – whether or not the same work is remunerated equally, i.e. whether or not there is equality in the remuneration of ICT professionals in the Czech economy (Fischer & Vltavská 2012).

Based on our longtime research, we analyze different aspects of the impact of information and communication technologies on human society as well as on microeconomics and macroeconomics.

Problem Formulation

Our article presents the structure of ICT professionals in the Czech economy by achieved education and analyzes the median wage of ICT professionals in the Czech economy during 2000 – 2017 by achieved education. We mostly compare the trend in wages represented by median earnings. For the purposes of our research, we formulated the following research questions:

RQ1: How did the structure of ICT professionals in the Czech economy by achieved education change between 2000 and 2017?

RQ2: What is the median wage in the Czech Republic and the median wage of ICT professionals by achieved education?

RQ3: Is there a correlation between year-to-year changes in the median wage of ICT professionals and year-to-year changes in GDP?

Material And Methods (Data Collection)

The Average Earnings Quarterly Survey is harmonized with the Structure of Earnings Research of the European Union (see Commission Regulation (EC) No. 1916/2000, as amended) and provides information about the gross monthly wage (salary), hourly earnings and wage (salary) components, i.e. bonuses, extra pay and reimbursements. The gross monthly wage in our data file is a multiple of hourly earnings in the second quarter and average monthly work hours in individual years. Average work hours were rounded off. We also show the number and structure of hours worked (e.g. overtime) and not worked (e.g. sick leave and vacation). The Average Earnings Information System (AEIS) includes Regional Statistics of Labor Cost (RSLC) that provides detailed information about the difference in wages in the individual regions of the Czech Republic. The Average Earnings Quarterly Survey is sponsored by the Ministry of Labor and Social Affairs (MLSA) and managed by a commission comprising of the representatives of the MLSA, the Czech Statistical Office (CSO), the Ministry of Finance, the Czech National Bank, the Czech-Moravian Confederation of Trade Unions, The Union of Industry and Transportation of the Czech Republic, the Center for Economic Research and Graduate Education of Charles University and the Economics Institute of the Czech Academy of Sciences (CERGE EI), the University of Economics in Prague and other institutions. The AEIS is prepared by TREXIMA.

For our research, we classified ICT professionals in the Czech economy in accordance with the CZ-ISCO methodology (ISCO, 2015) that divides ICT professionals into the following three main groups (CZSO, 2014):

- ICT managers (CZ-ISCO 133);
- ICT specialists (CZ-ISCO 25);
- ICT technicians (CZ-ISCO 35).

The wages during the researched time period are shown as the median instead of the average. The median represents the middle of all identified wages, i.e. 50% of employees have higher earnings than the median and 50% of employees have lower earnings than the median. The median is usually a better indicator of earnings than the average because it is not affected by extreme earnings and it directly shows the earnings of the “middle employee.”

Our data were processed, using mainly MS Excel and also big data processing tools, which in our case was Microsoft SQL Server and SPSS statistics software.

GENERAL DATA CHARACTERISTICS

Our analyses always work with data for the second quarter of the relevant year because such data are more stable than data for other quarters. The size of the analyzed sample of ICT professionals gradually increased from over 8,000 in 2000 to over 50,000 in 2017. The size of the analyzed sample concerning the entire Czech Republic increased from the original one million to over two million.

RESULTS AND DISCUSSION

The analyzed data were processed in MS Excel to obtain answers to our research questions.

RQ1: How did the structure of ICT professionals in the Czech economy by achieved education change between 2000 and 2017?

The trend in the structure of ICT professionals in the Czech economy from 2000 to 2017 is shown in [Figure 1].

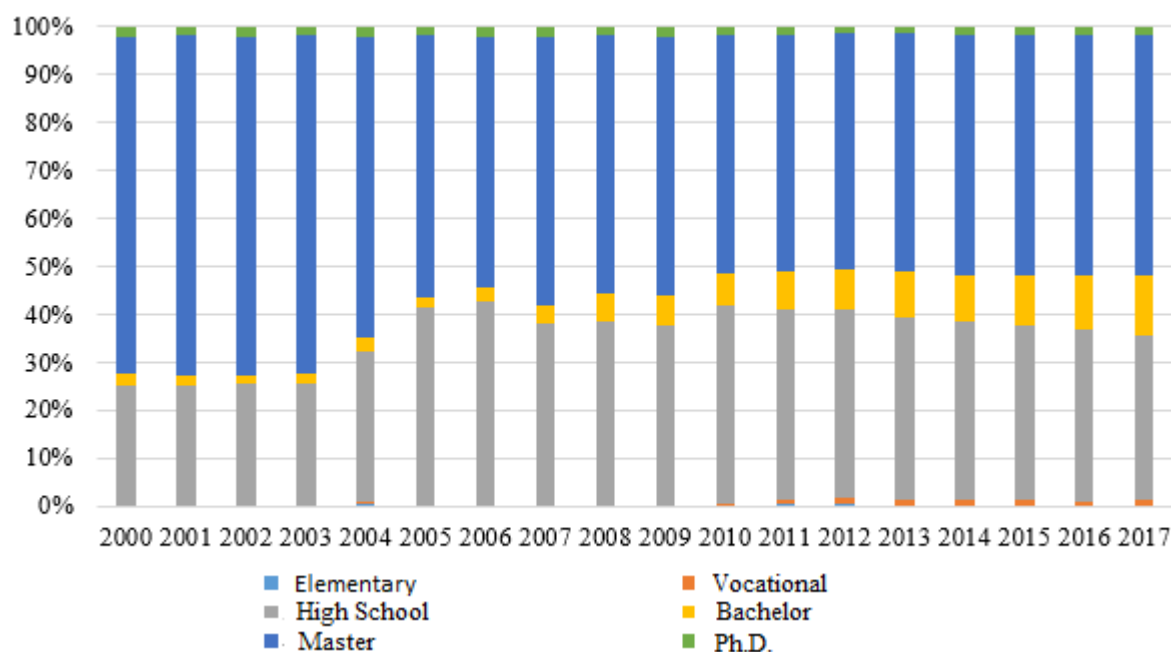


Figure 1: The structure of ICT professionals in the Czech economy by achieved education (Source: authors. Data Trexima)

The data in [Figure 1] show that an elementary and vocational education is not practically represented. The percentage of ICT professionals with an elementary education is very insignificant. During the research time period, we identified ICT professionals only during three years and their percentage did not exceed 0.50%. The percentage of ICT professionals with a vocational education is small – 1.00% in 2011 and 1.09% in 2017. It means about one percentage point. The percentage of ICT professionals with a complete secondary education during the researched time period kept growing – from 25.17% in 2000 to 34.44% in 2017. The percentage of ICT professionals with a bachelor's degree went up during the researched time period from 2.57% in 2000 to 12.49% in 2017. The percentage of ICT professionals with a master's degree is the highest – 70.20% in 2000 and 50.27% in 2017. This decreasing trend is the result of a new perception of ICT professions. Contrary to the past, these professions now require only a secondary education. The percentage of ICT professionals with a Ph.D. decree was 2.07% in 2000 and 1.71% in 2017.

Overall, the percentage of ICT professionals with a university education dropped during the researched time period (74.83% in 2000 and 64.47% in 2017). On the other hand, the percentage of ICT professionals with a secondary education went up (25.17% in 2000 and 35.53% in 2017). It is important to point out that the absolute number of ICT professionals keeps growing. Therefore, even though there was a relative decrease in the percentage of ICT professionals e.g. with the highest education (Ph.D.), their absolute number went up.

RQ2: What is the median wage in the Czech Republic and the median wage of ICT professionals by achieved education?

In order to compare the median wage for each education level of ICT professionals with the median wage in the Czech Republic, we had to include in the chart the median wage in the Czech Republic. The chart shows the share of each level of education on the median wage in the Czech Republic. Therefore, if the chart shows that the level of education is 40% in positive numbers, it means that the median wage in this level of education is a 1.4 multiple of the median wage in the Czech Republic. These relations are shown in [Figure 2], where the median represents 0 on the Y axis.

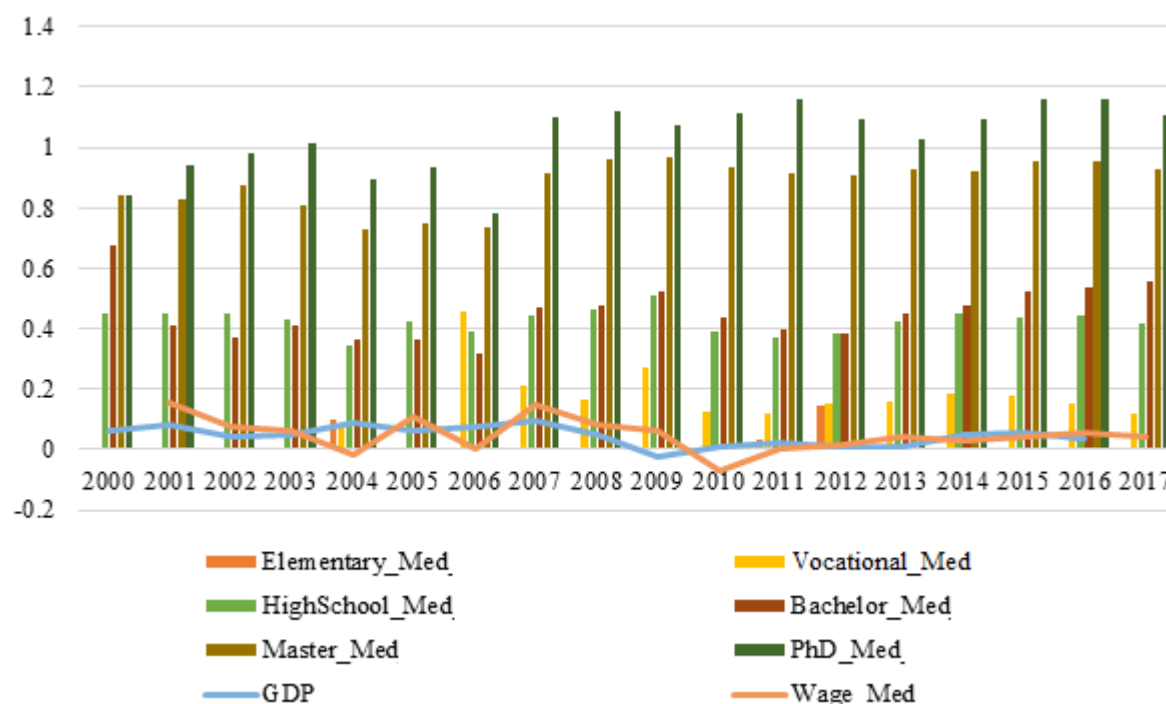


Figure 2: The trend in the median wage of ICT professionals during 2000 – 2017 by achieved education and its comparison with the median wage in the Czech Republic (Source: authors. Data Trexima)

For a better comparison of the trend over time and the trend in the entire economy, the chart also shows year-to-year changes in GDP and year-to-year changes in the median wage of ICT professionals. [Figure 2] shows that the median wage for practically all levels of education of ICT professionals is above the median wage in the Czech Republic and that the median wage of ICT professionals with a university education (a master's degree and Ph.D. degree) went up considerably between 2006 and 2007.

The median wage of ICT professionals with a vocational education during the researched time period was on average a 1.27 multiple of the median wage in the Czech Republic. The median wage of ICT professionals with a complete secondary education was on average a 1.40 multiple of the median wage in the Czech Republic. The median wage of ICT professionals with a bachelor's degree was similar to that of the ICT professionals with a complete secondary education but was quickly going up during the past five years of the researched time period. [Figure 2] shows that the median wage of ICT professionals with a bachelor's degree was 1.42 times higher than the median wage in the Czech Republic mainly thanks to the last six years of the researched time period. The median wage of ICT professionals with a master's degree was 1.79 higher and the median wage of ICT professionals with a Ph.D. degree was even 1.88 times higher than the median wage in the Czech Republic.

The medians of all levels of education of ICT professionals basically represent an increase in the multiple of the median wage in the Czech Republic in the long run. In particular, in the case of ICT professionals with a master's degree and Ph.D. degree.

RQ3: Is there a correlation between year-to-year changes in the median wage of ICT professionals and year-to-year changes in GDP?

To answer this question, we also analyzed the GDP in the Czech Republic. The data are provided in [Figure 3].

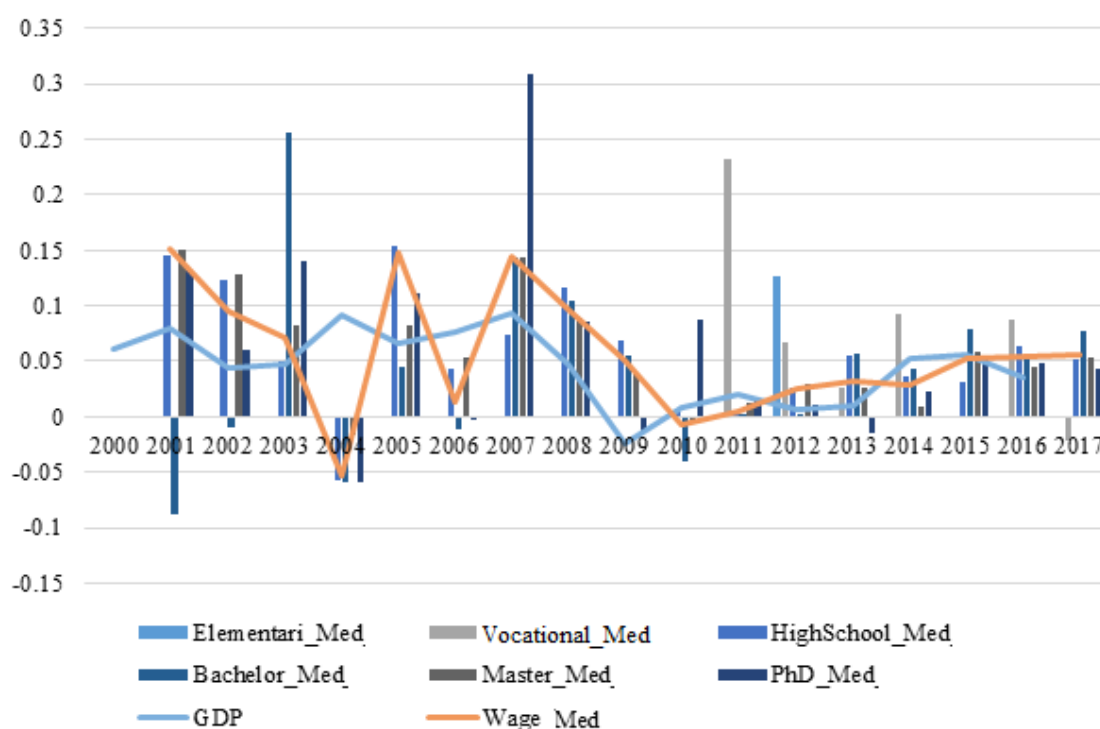


Figure 3: Year-to-year changes in the wage of ICT professionals in the Czech Republic during 2000 - 2017 by achieved education (Source: authors. Data Trexima)

[Figure 3] shows a big disarray in annual increments of median wages. A big fluctuation in individual years for different levels of education indicates an acute shortage of ICT professionals of certain professions (ICT technicians – e.g. in 2003, 2011, 2014, 2015 and 2016 and ICT specialists in 2003 and 2007) during certain periods of time. Starting in 2015, year-to-year increments were relatively stable, and ICT professionals with a lower level of education show the highest year-to-year increment.

After having verified the assumptions, we used a correlation analysis to identify a correlation between the trend in the wage of ICT professionals (regardless of their achieved education) and the trend in GDP. The correlation coefficient for relations in the current year was 0.3776. We were unable to prove any statistically significant correlation between year-to-year changes in the GDP of the Czech Republic and year-to-year changes in the median wage of ICT professionals.

Conclusion

The overall conclusions of our analysis are as follows:

RQ1: How did the structure of ICT professionals in the Czech economy by achieved education change between 2000 and 2017?

- The percentage of ICT professionals with an elementary education is very insignificant.
- The percentage of ICT professionals with a secondary education in the Czech Republic during the researched time period went up from 25.17% in 2000 to 35.53% in 2017.
- The percentage of ICT professionals with a university education (a bachelor's degree, master's degree and Ph.D. degree) during the researched time period went down from 74.83% in 2000 to 64.47% in 2017.

Due to changes in the classification of ICT professions in the Czech Republic, we can expect that the percentage of ICT professionals with a complete secondary education and a bachelor's degree will go up because many ICT professions that used to require a master's degree were reclassified to a bachelor's degree or even a secondary education.

RQ2: What is the median wage in the Czech Republic and the median wage of ICT professionals by achieved education?

- The median wage for all levels of education of ICT professionals was above the median wage in the Czech Republic.

- The ratio between the median wage in the Czech Republic and the median of the level of education regularly increased during the past six years only in the case of ICT professionals with a bachelor's degree; other levels of education oscillate around the average multiple of the median wage of the Czech Republic.
- Average multiples of the median wage in the Czech Republic for the median wage of ICT professionals by achieved education are provided in [Table 1].

Table 1: A comparison of the median wage by achieved education and the median wage in the Czech Republic

Level of education	Multiple of the median wage in the Czech Republic
Vocational	1.27
Complete secondary	1.40
Bachelor	1.42
Master	1.79
Ph.D.	1.88

RQ3: Is there a correlation between year-to-year changes in the median wage of ICT professionals and year-to-year changes in GDP?

We were unable to prove this correlation. After having verified the assumptions for a correlation analysis, we calculated a correlation coefficient of 0.378, which is a very weak correlation.

Acknowledgements

Paper was processed with contribution of long term institutional support of research activities by Faculty of Informatics and Statistics, University of Economics, Prague (IP400040).

References

- CZSO. (2014). *IT odborníci*. Retrieved from https://www.czso.cz/csu/czso/lidske_zdroje_v_informacni_spolecnosti_it_odbornici
- Doucek, P., Nedomová, L., & Maryška, M. (2015). Is it attractive to be the ICT professional in the Czech economy? In *IDIMT 2015 - Information Technology and Society - Interaction and Interdependence* (pp.73-87). Linz: Trauner Verlag Universitet. ISBN 978-3-99033-395-2
- Fischer, J., & Vltavská, K. (2012). Intermediate Consumption of ICT Products and Its Impact on Economy of the Czech Industries. In *IDIMT-2012 - ICT Support for Complex Systems* (pp.115-121). Linz: Trauner Verlag Universitet. ISBN 978-3-99033-022-7
- Hanclová, J., & Doucek, P. (2012). The impact of ICT capital on labor productivity development in the sectors of the czech economy. In *IDIMT 2012 - ICT Support for Complex Systems* (pp.123-133). Linz: Trauner Verlag Universitet. ISBN 978-3-99033-022-7
- Hanclova, J., Doucek, P., Fischer, J., & Vltavska, K. (2015). Does ICT capital affect economic growth in the EU-15 and EU-12 countries? *Journal of Business Economics and Management*, 16(2), 387-406. doi:10.3846/16111699.2012.754375
- ISCO. (2018). *Klasifikace zaměstnání (CZ-ISCO)*. Retrieved from <https://www.czso.cz/csu/czso/klasifikace-zamestnani-cz-isco-n-f4yhpe3xt8>
- Mand'ák, J., & Nedomova, L. (2014). Measuring Performance of European ICT Sectors Using Output-Oriented DEA Models. In *IDIMT-2014 - Networking Societies – Cooperation and Conflict* (pp.79–86). Linz: Trauner Verlag Universitet. ISBN 978-3-99033-340-2
- Marek, L., & Doucek, P. (2016). Vývoj mezd a příjmové nerovnosti u ict odborníků v české republice. *Politická Ekonomie*, 64(8), 922-938. doi:10.18267/j.polek.1118
- Matejka, M., & Vltavska, K. (2013). The Czech Wage Distribution in the Context of ICT Sector. In *IDIMT-2013 - Information Technology Human Values, Innovation and Economy* (pp. 63–70). Linz: Trauner Verlag Universitet. ISBN 978-3-99033-083-8
- Novotný, O., Doucek, P., & Fischer, J. (2016). ICT and its Impact on Economy and Society – Quest For Data. In *IDIMT-2016 - Information Technology, Society and Economy Strategic Cross-Influences* (pp. 15–20). Linz: Trauner Verlag Universitet. ISBN 978-3-99033-869-8
- Šimpach, O., & Langhamrová, J. (2014). The Impact of ICT Growth on Households and Municipalities in the Czech Nuts-3 Regions: The Application of Cluster Analysis. In *IDIMT-2014 - Networking Societies - Cooperation and Conflict* (pp. 63-70). Linz: Trauner Verlag Universitet. ISBN 978-3-99033-340-2
- Torrent-Sellens, J. (ed.). (2008). *La empresa red: tecnologías de la información y la comunicación, productividad y competitividad*. Madrid: Ariel, 2008. ISBN 978 84 344 4277 1.

The Impact Of Micro-Teaching Practices

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Abstract

The purpose of this study is to determine the effect of micro-teaching practices on prospective teachers. The research was carried out in Düzce University Faculty of Education Classroom Teaching Science and Technology Teaching course. Within the scope of this course, the effects of the practices which have been made with micro-teaching were investigated. After the weekly micro-teaching practice, prospective teachers are asked to evaluate the practices. Quantitative data in the research using the mixed research design was obtained with the "Micro-teaching Peer Review Form"; qualitative data were obtained by open-ended questionnaire. According to the results obtained, as the week progressed, the average of the quantitative data points increased; it has been determined that prospective teachers offer more suggestions in qualitative data. This can be explained as the fact that prospective teachers learn many things from micro-teaching and show that they have developed themselves, while at the same time helping them to think about more alternative practices. In this regard, it has been determined that prospective teachers are aware of their mistakes by evaluating themselves and their peers while developing their teaching abilities, and that they are able to overcome their weaknesses by recognizing their weaknesses and strengths.

The Influence of a Concept Mapping-Based Exam on Students' Exam Performance

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Absrtact

The aim of the study was to explore the effect of Concept Mapping (CM) exam on students' retention and students' exam performance. Two sets of exams were developed: a regular format exam and a Concept Mapping-Based Exam. The Concept Mapping-Based Exam contained a blank concept maps similar to the ones in the 7th-grade student's science book. Both exams have the same number of questions. Seventy students from grade 7th at Al-Arqam Ibn-Abil-Arqam School, one of the Basic Education schools in Oman, were the sample of the study and were taught two units from the 7th-grade students' science book by the regular teaching method and by the same teacher. Thirty students participated in taking the exam, 16 were to do the regular exam and 16 were to do the Concept Mapping-Based Exam. The exams were distributed to them randomly. The study showed that the students who took the Concept Mapping-Based Exam outscored those who took the regular one. It is interesting that the study showed there was a positive correlation between recalling information and the presence of Concept Maps in the 7th-grade student's science book as the exams showed.

Introduction

Teachers need to know how their students learn to help them excel in their learning. In other words, it is important for teachers to know how students process, store and retrieve information. Some teachers teach students without having much formal knowledge of how students learn (Fry, Ketteridge, & Marshall, 2009). Therefore, teachers need to use techniques/approaches to help students learn information more effectively.

There are no simple answers to the questions 'how do learners learn?' and 'how teachers bring about learning?' The knowledge about the relationship between teaching and learning is still incomplete, but teachers do not know enough about learning to be able to make some firm statements about types of action that will usually be helpful in enabling learning to happen (Fry, Ketteridge, & Marshall, 2009).

Some literature shows that students learn through organizing the new information in a certain schema. Schema is the map about a certain topic or theme that helps the learners to put new information into a meaningful context (Anderson, 1984, p. 5). To do this, learners have to activate their schemata to interpret the texts and to make sense and this is called the schema theory which "focuses on the role of the individual in the comprehension process and how background knowledge and interests influence the reader' interpretation" (Omaggio, 1993).

Ausubel states that "as a result of this type of anchorage to cognitive structure, the newly-learned material is no longer dependent for its incorporation and retention on the frail human capacity for assimilating and retaining arbitrary associations" (Ausubel, 1967: 20). Morton (2018) maintains that "Concept mapping tools allow you or your students to visually depict a system of relationships by creating a map in which nodes represent ideas or facts, and lines or connectors between nodes represent relationships". This came along with the Schema Theory which suggests that learners take new information and stores it in pre-existing hierarchies or channels (Dye, 2000) and reduce the amount of incoming information through deleting the unimportant ones, they will easily store the information into their long term memory instead of the working memory and then they can remember them quickly (Sweller, 1988).

Vanides, Yin, Tomita, & Ruiz-Primo (2005) maintain that the teachers can have insights into how learners organize and represent knowledge when their students create Concepts Maps.

The Concept Maps can be also used as a tool to assess students' learning. Tuan & Thuan (2011) argue that Concept Mapping has been proven to be a powerful instructional tool which assists teachers to assess learners' understanding and make connections between concepts explicitly. Ruiz-Primo (2004) maintains that the use of Concept Maps to evaluate student declarative knowledge structure is appealing. A student's map directly reflects, to some degree, a student's understanding in a domain; there is a potential in using concept maps as assessment instruments.

Varghese (2009) views the use of Concept Map as an effective way of looking at what is inside the learner's mind and reveals a conceptual understanding that is not generally identifiable by other assessment tools such as written tests.

This can be a useful strategy for assessing the knowledge learners have before engaging in further learning or a new program or course (Hay, Kinchin & Baker, 2008).

The Significance Of The Study

In Oman Government schools, students' learning assessment is based on the traditional test. The items in the traditional test can be written in various formats such as multiple choice, matching, true/false, short answer, and essay. Some of these tests require students to memorize knowledge. The aim of this study is to explore the effectiveness of using Concepts Maps as an assessment tool for students' performance. Approving effectiveness, teachers can use Concept Maps as tools to assess their students' performance, helping to recall information easily in the process they learned information.

The Study Questions And Hypothesis

What impact does Concept Maps have over students' retention?

Is there any significant difference in the performance of students taking Concept Maps exam and of those taking normal exam?

Context Of The Study

The Government schools in Oman underwent an educational reform in 1998 and the Ministry of Education introduced a new schooling system called "Basic Education system" in the academic year 1999-1998 (Al-Issa & Al-Bulushi, 2012). The new system consisted of 10 years of Basic Education (Grades 1 to 10) and 2 years of Post-Basic Education (Grades 11 and 12). The Basic Education has two cycles which are Cycle 1, consisting of grades 1- 4, and Cycle 2, containing grades from 5 to 10 (Al-Jardani, 2014). The current study was conducted in one of the male schools in Cycle 2 (Al-Arqam Ibn-Abil-Arqam School) and specifically in grade 7 in the science subject. The science book consisted of five units and this study utilized unit 4 as it is the most suitable unit to perform the experiment and it is convenient to employ the Concept Mapping format for the assessment. The unit is entitled "Changes in the Earth Crust" and it contained five lessons. The teacher taught this unit for two weeks.

Study Design And Instrumentation

The study took place in semester two of the academic year 2017-2018. Before conducting the study, the researchers chose one class randomly and they divided the class into two groups randomly; the control group and the experimental group consisted of 16 students each. To check the homogeneity of the two groups, the researchers looked at the scores of the students in four tests taken previously. Table 1 and Table 2 show the students' scores in these tests.

Table 1 Shows the Students' Scores in These Tests

Group	Quiz1	Quiz2	Quiz3	Mean	Group	Quiz1	Quiz2	Quiz3	Mean
Control	8	4	5	13.7	experimental	4.5	8	7.5	15.0
Control	2	7	7	11.3	experimental	4	5	6	11.0
Control	6.5	4	7	12.8	experimental	3.5	10	8	16.2
Control	7	8	7	17.3	experimental	5	6	8	13.7
Control	3.5	5	6	10.5	experimental	7	10	7.5	19.5
Control	6.5	6	6	14.5	experimental	9	5	9	17.0
Control	9	10	10	22.3	experimental	10	9	10	22.3
Control	9	7	8.5	18.8	experimental	5.5	4	6.5	11.7
Control	2	5	7.5	9.5	experimental	7	8	8	17.7
Control	4	2	5	7.7	experimental	6	9	7	17.3
Control	10	8	7.5	20.5	experimental	10	10	8	22.7
Control	8	7	9.5	18.2	experimental	6	6	4.5	13.5
Control	8	6	5.5	15.8	experimental	8	9	5	18.7
Control	5.5	3	7.5	11.0	experimental	10	8	8	20.7
Control	5.5	6	6	13.5	experimental	8	9	10	20.3
Control	7	5	6	14.0	experimental	3	1	10	7.3

Table 2 Summarizes the Result

Group	Mean	N	Std. Deviation
Control	6.344	16	2.4408
Experiential	6.656	16	2.3503

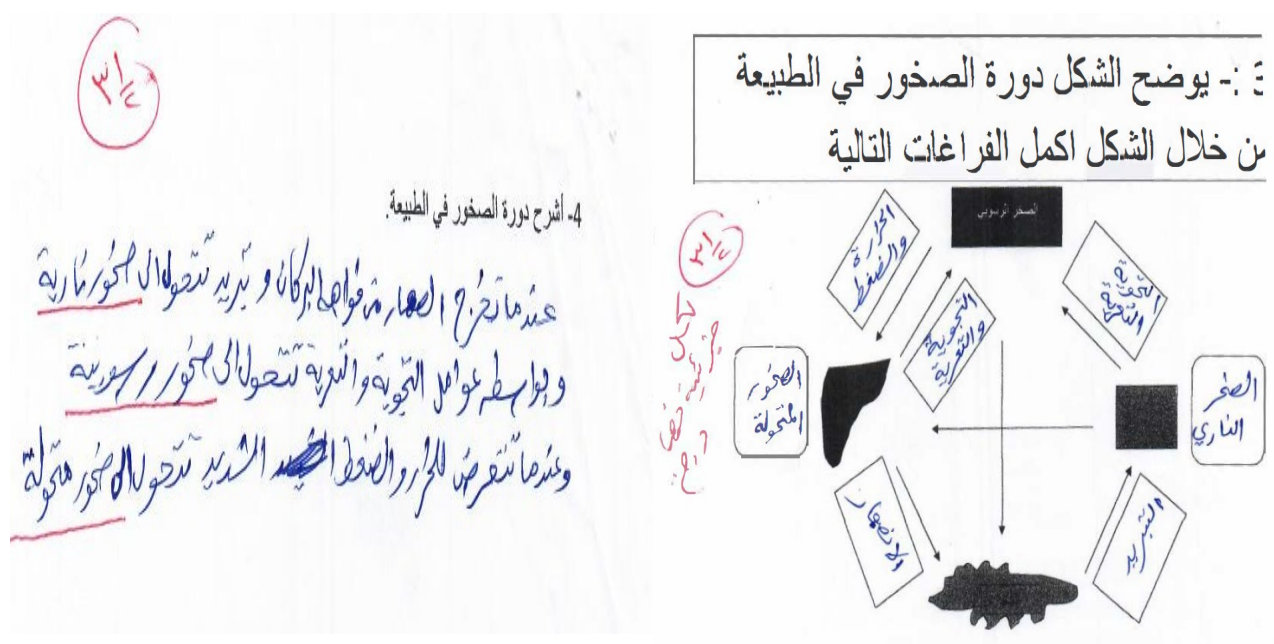
Table 3 shows the results of the tests indicating that there is no statistical difference between the two groups, thus, the two groups are homogeneous and equivalent for the purpose of conducting the study.

Table 3 Means and Stander Deviation for Groups Homogeneous Exam Results

	Groups	N	Mean	Std. Deviation	T	Sig
Quiz One	Control	16	6.344	2.4408	-.369	
	Experimental	16	6.656	2.3503	-.369	0.959
Quiz Two	Control	16	5.813	2.0402	-1.826	
	Experimental	16	7.313	2.5747	-1.826	0.263
Quiz Three	Control	16	6.938	1.4705	-1.361	0.787
	Experimental	16	7.688	1.6419	-1.361	

Measure

The teacher designed two tests that measured the knowledge which students learned in unit four. The two tests consisted of five questions, however, the first test assessed the conceptual knowledge in that unit in a normal way (as tables and points) for the control group and the second test assessed the same information using concept mapping format for the experimental group. After finishing teaching unit four, the researchers administered the two tests for the experimental group and the control group. Figure 1 shows an example of question 3 for the control group and Figure (1) illustrates an example of the same question for the experimental group.

**Figure 1.** Sample of Question (4) for the Control Group and Question (2) for Concept Map Exam.

Results

Table 4 shows that the experimental group outperformed the control group in all five questions of the test. Furthermore, the overall scores of the experimental group are higher than the control group indicating that the Concept-Mapping format has a positive effect on students' performance in the test.

Table 4 *Descriptive Statistics for Students' Exam Performance*

	Group	N	Mean	Std. Deviation
Q1	Control	16	2.625	2.1794
	Experimental	16	2.156	1.9555
Q2	Control	16	.000	.0000
	Experimental	16	3.063	2.6700
Q3	Control	16	.625	1.2450
	Experimental	16	1.969	1.4079
Q4	Control	16	.250	.5774
	Experimental	16	1.125	.8466
Q5	Control	16	.813	1.7970
	Experimental	16	.938	2.0484
Overall	Control	16	.8625	.72560
	Experimental	16	1.8500	1.37695

Moreover, Table 5 indicates that there is a significant difference between the control group and the experimental group in favour of the experimental group in the overall score.

Table 5 *Intendent T-Test for the Control Group and the Experimental Group*

	Group	N	Mean	Std. Deviation	F	Sig.
Overall	Control	16	.8625	.8625		
	Experimental	16	1.850	1.8500	7.066	.017

However, looking at each question separately, it is noticeable that questions 2, 3, and 4 obtained a statistical difference, though there was no statistical difference in questions 1 and 5.

Table 6 *The Independent T-Test for the Two Groups in Exam 5 Questions*

	T	df	Sig.	Mean Difference
Question#1	.640	30	.527	.4688
Question#2	-4.588	30	.000	-3.0625
Question#3	-2.860	30	.008	-1.3438
Question#4	-3.416	30	.002	-.8750
Question#5	-.183	30	.856	-.1250

The researchers contributed the result of no significant difference for question one and question five to the visual clues given in the two questions; the two questions in a traditional format contain tables which might help the students to recall the required information to answer the questions as shown in the figures below.

1- عدد طبقات التركيب الكيميائي للأرض.

أ- القشرة الأرضية
ب- الوشاح
ج- اللب

2- قارن في جدول بين طبقات التركيب الكيميائي للأرض :
من حيث (المفهوم - أمثلة - نسبته من الكرة الأرضية - السمك أو نصف القطر).

نوع الطبقة	مفهومها	أمثلة عليها	نسبتها من الكرة الأرضية	السمك أو نصف القطر
القشرة الأرضية	هي الطبقة التي تغطيها الحياة التي تقع فوق قشرة الوشاح	الأكسجين السيليكا الألمنيوم	0.5 %	بين 5 Km و 80 Km
الوشاح	هي الطبقة الواقعة بين القشرة واللب	المغنيسيوم الأكسجين السيليكا	66.5 %	2900 Km
اللب	هو الطبقة التي توجد من أسفل الوشاح وصولاً إلى مركز الأرض	الحديد - النيكل	33 %	3430 Km

6- المقصود بكلا من هذه الأنواع من أنواع التجوية:
ب- التجوية الميكانيكية: هي السابجة عن القوة المباشرة للصخور
ج- التجوية الكيميائية: هي السابجة عن تفاعل الصخور مع المواد الكيميائية في البيئة
د- التجوية الحيوية: هي عبارة عن التغير الفيزيائي أو الكيميائي للصخور التي تسبب فيه بعض الكائنات الحية.

7- أذكر أمثلة على أنواع التجوية في الجدول التالي:

حيوية	كيميائية	ميكانيكية
نمو جذور النباتات في الصخور	الحجر الجيري وحمول الجير والبيات	سقوط الصخور من الجرف الصخري

Figure 2. Question #1 and Question #2 in the traditional format

Furthermore, it is interesting to notice that the scores of the students higher for the information which is presented in maps concept (in the Ninth science book). For examples, the concept map in question two is similar to the concept map and the concept map in question three is similar to the concept map in the student's textbook: mean=3.063 and mean=1.85; see Figure (3) and Figure (4).

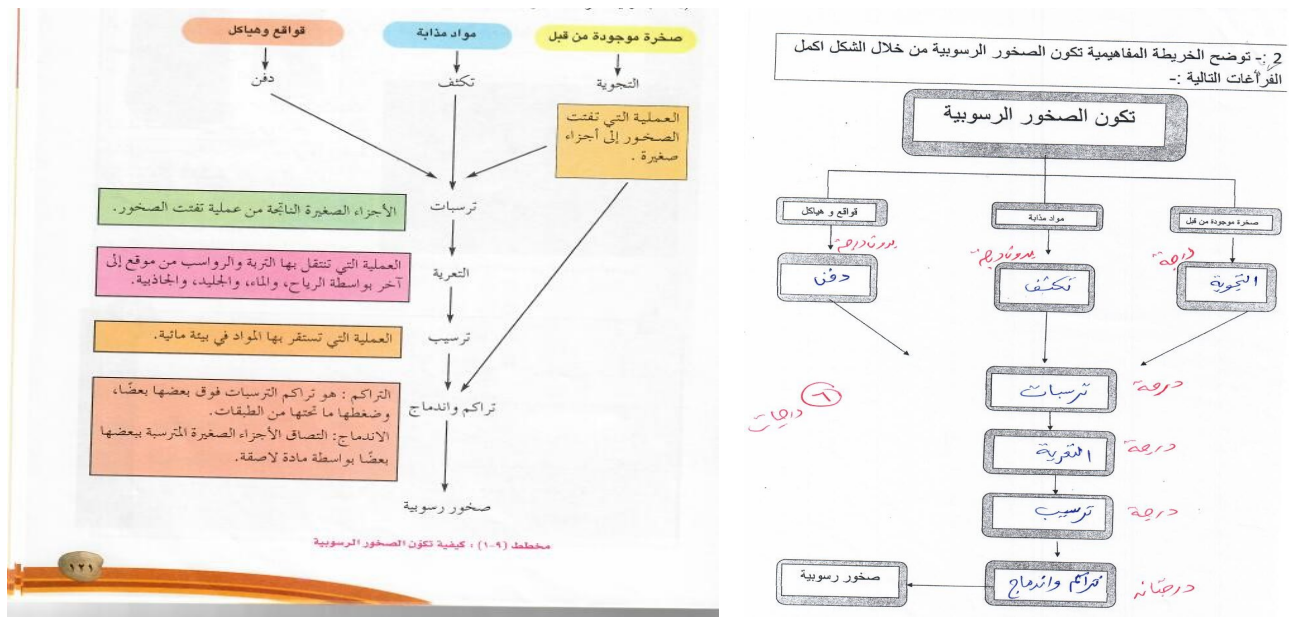


Figure 3. Page (121) from Student's Textbook and Question (2) from Concept Map Exam

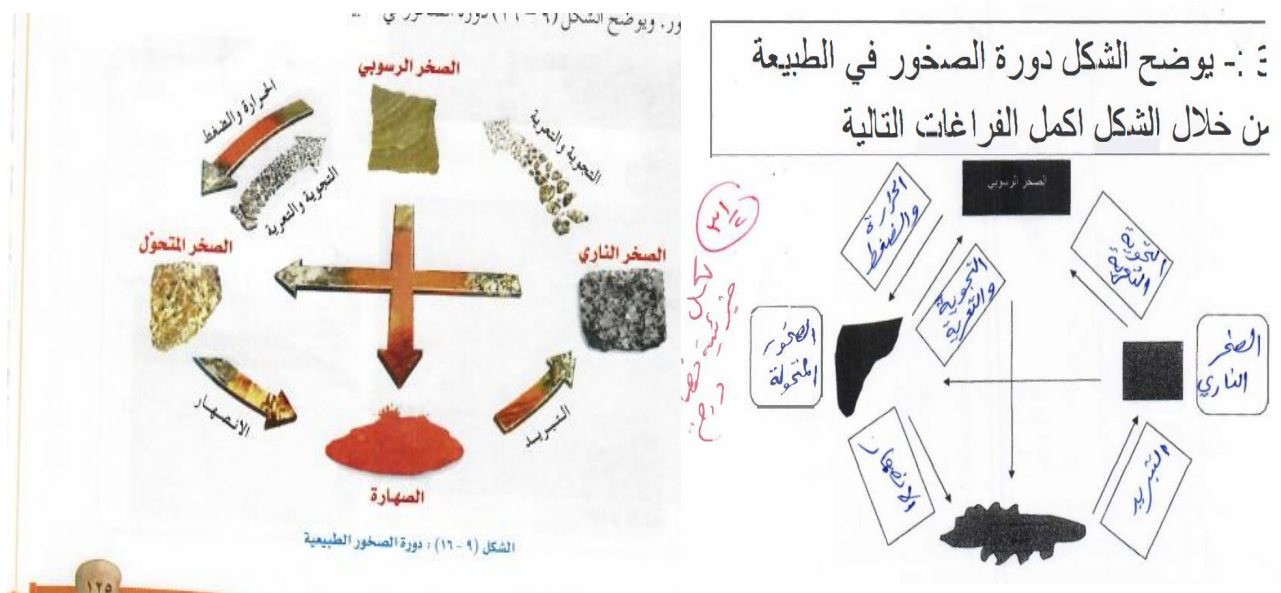


Figure 4. Page (125) from Student's Textbook and Question (3) from Concept Map Exam

Conclusion

Generally speaking, the study reveals the importance of Concept Maps in drawing a conclusion about how students learn, store and retrieve information. The study shows a positive impact of using Concept Maps in exams; the students who took the exam which contained Concept Maps scored higher than their counterparts; Also, the researchers found out the scores of the students higher for the information which is presented in Maps Concept (in the Ninth science book). Therefore, it is safe to say, that teachers can incorporate Concepts Maps in their exams to help their students retrieve the learned information effectively.

References

- Al-Issa, A. S., & Al-Bulushi, A. H. (2012). English language teaching reform in Sultanate of Oman: The case of theory and practice disparity. *Educational research for policy and practice*, 11(2), 141-176.
- Al-Jardani, K. S. (2014). The need for a study into stakeholders needs and expectations of schools graduates English language level and skills for entry into the tertiary education level in the Sultanate of Oman. *International Journal of English Language and Literature Studies*, 3(4), 350-355.
- Anderson, R. C. (1984). Some reflections on the acquisition of knowledge. *Educational Researcher*, 13(10), 510.
- Dye, G. (2002). Graphic Organizers to the rescue! Helping students link and remember information. *Teaching Exceptional Children*, 32, 72-76.
- Fry, H., Ketteridge, S., & Marshall, S. (2009). *A Handbook for Learning and Teaching in Higher Education: Enhancing Academic Practice* (3rd ed.). London: Routledge
- Morton K., (2018). Concept Mapping Tools. Centre for Teaching Excellence, University of Waterloo. Retrieved on August 1st, 2018 from: <https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/educational-technologies/all/concept-mapping-tools>.
- Omaggio, A. (1993). *Teaching language in context*. Boston: Heinle & Heinle.
- Ruiz-Primo, M. A. (2004) Examining Concept Maps as an assessment Tool. In A. J. Cañas, J. D. Novak & F. M. González (Eds.), *Concept Maps: Theory, Methodology, Technology. Proceedings of the First International Conference on Concept Mapping*. (Vol. I). Pamplona, Spain: Universidad Pública de Navarra.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12, 257-285.

The Influence Of Rhyme Teaching To Articulation Skills Of Students At Anatolian High Schools, Learning German As A Second Foreign Language

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Abstract

The aim of this study is to provide phonological awareness for students of Anatolian high schools, learning German as a second foreign language, by using rhymes during the lessons and to demonstrate the positive effect of this method to their articulation skills. Based on the opinion, that exercises offered in school books are not sufficient for students to pronounce words correctly in the targeted language and the fact that in lessons, there is not enough time spent for pronunciation exercises, researches, entreated the effect of rhymes to pronunciation and language learning, were examined, and the idea appeared, that learning rhymes could help students correcting their pronunciation mistakes devoted the targeted language. In the study, single group pre-test and final test model was applied to Anatolian high school students learning German as a second foreign language. for voices which are present in German but are written different from Turkish. In the pre-test, four voices present in German and different written in Turkish were determined and a paragraph was read by students, correct reading frequencies were noted down, and rhyme exercises were put into practice for six weeks(20 minutes per week).At the end of the period students were made to read sentences at the final test, containing the same voices but in words they never came across before and correct reading frequencies were noted down. Acquired results that for every voice, there was an increase in the right reading frequencies. Finally, a questionnaire consisting of completely structured questions was applied to the students. Also, the results of the questionnaire verify that rhyme exercises have a positive influence on students, providing phonological awareness and correcting pronunciation mistakes.

Key Words: *German as a second foreign language, articulation, pronunciation, rhyme, phonologic awareness*

The Landscape Of Blended Learning Practices: The Need For Better Understanding Of The Interventions And Implementations

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Abstract

With the aim to examine the efficacy of technological uses and outcome of the measured dependent variables in blended learning studies, meta-analysis was applied. The effect sizes (ESs) yielded from the 96 included samples were acquired from the application of Cohen's d formula (1988; 1992), where the estimation was done using the standardized mean difference score, divided by the standard deviation pooled across the treatment and control group. Subsequently, the combined ES was probed to grasp the overall effectiveness. The 96 included samples with similar types of interventions and dependent variables had their individual ESs averaged to obtain the combined effect size (ES). The coalesced ES was interpreted using Cohen's (1988) Benchmark to yield a strength of either small, medium or large. The findings denote that all three categories of intervention implemented in blended learning are effective in improving learners' performance specifically in the context of language teaching and learning. Instances of small and negative ESs were also obtained suggesting adverse repercussions; however, should not be associated solely to an absolute poor execution yet the disparity of the ESs yielded implies that effectiveness is contingent and circumstantial to the context and how technology is applied, involving factors and debilities; an impediment which should not be resolved by one single average value when assembling a conclusion.

The Leadership Styles and Supervisory Competence of Master Teachers in Selected Schools in the National Capital Region as Base Reference for Competency Upgrading

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Introduction

Leadership indulged through leaders fractioned the influence of people's morale towards the organizations and its constituents. Accomplishing school endeavours was in great need of head teachers that were holistic in all aspect of leading his subordinates and his organization.

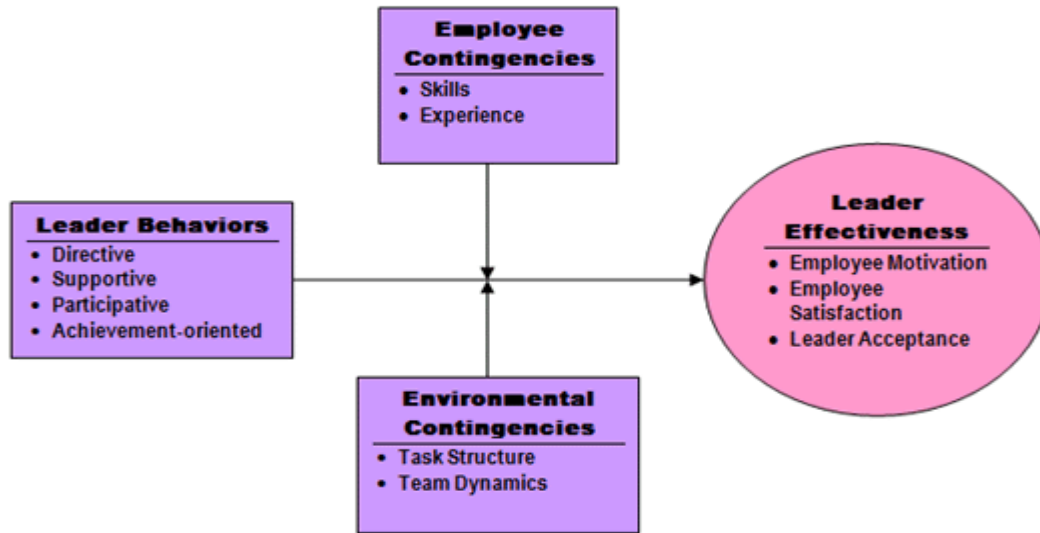
However, leader in today's environment of management who is not in an advocating change has many external environmental forces, such as economics, technology and even governmental regulations are affected in profound impact on such environment. With few resources, workers have realized that they must do more with less; they understand that jobs need to be restructured and new management systems need to be developed. They also know that if an organization is going to be efficient and effective, the work force must maximize to the fullest. Moreover, leaders' motivation towards school environment is one of the elemental notions that could largely influence their sentiments towards the institution. It's unimaginable to lead people and if teachers if teachers do not even have basic competence and feel threatened because of their lack of preparation for it.

One of the priorities of heads of school is to monitor the teaching learning process in their schools. Monitoring involves actions envisaged by the head to ensure that things are going according to the objectives set at different levels and at different points in time and also to see to it that things are revolving according to plan and in line with the target set. The purpose of monitoring is, as such, to increase efficiency and improve effectiveness of the system in place. Since teachers and heads are input variables in a school, the head, as an instructional leader must support and facilitate any initiative conceived by teachers.

Theoretical Framework

This presents related theories and concepts that will help the researcher create a clearer a picture to the research.

The path-goal theory of leadership, this theory states leader's behavior is important for good performance as a function of its impact on subordinates' perceptions of paths to goals and the attractiveness of the goals. When leader behavior clarifies these goals or makes them more attractive the satisfaction, performance, and the leader acceptance is expected to increase. The specific relationship between leader behavior and these criteria will depend upon the personality of the subordinate and the existing task environment.

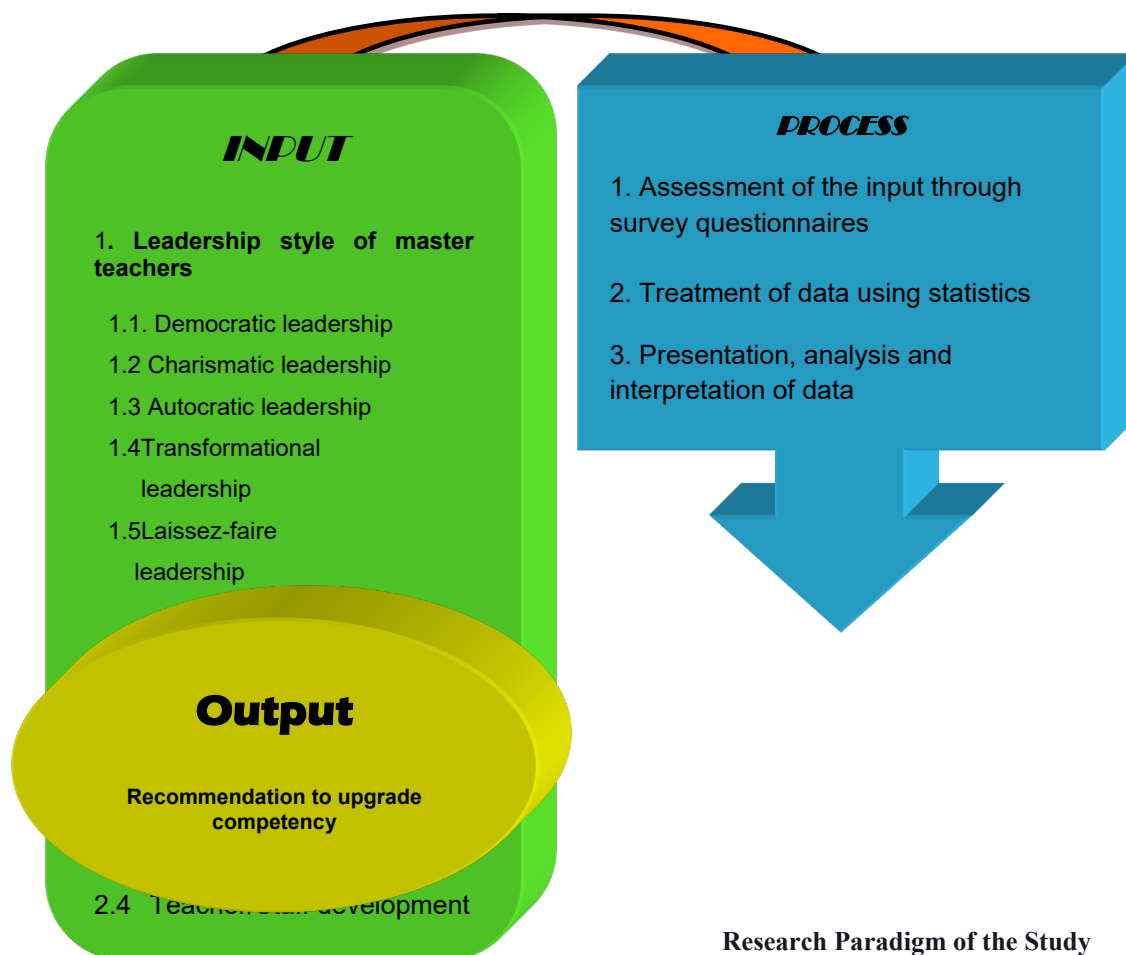


Path-goal Paradigm theory

Figure 2

Conceptual Framework

The research is guided by Path Goal Theory and researcher conceptualized an Input-Process-Output system which served as the direction of the research and it is represented in figure 2.



Research Paradigm of the Study

Figure 6

Figure 5 shows the relationship among the I- P- O system of the research study. The system starts with the INPUT which contains the data obtained from the Leadership style of master teachers; democratic leadership, charismatic leadership, autocratic leadership, transformational leadership, laissez-faire Leadership; And Supervisory function of head teachers, instructional supervision, school improvement, pupil's development; and teacher/Staff development. The PROCESS shows how the input will be processed through survey questionnaires. The data that will be gathered will be treated using statistics for presentation, analysis and interpretation of data.

Lastly, the OUTPUT shows the end result of the study which are the interventions to upgrade the teacher's level of competence.

Statement of the Problem

This study aimed to determine the leadership styles and supervisory competence of master Teachers in National Capital Region as Base Reference for Competency Upgrading.

Specifically, it sought to answer the following questions.

1. What leadership styles are embraced by the master teachers?
 - 1.1 Democratic leadership;
 - 1.2 Charismatic leadership;
 - 1.3 Autocratic leadership;
 - 1.4 Transformational leadership; and
 - 1.5 Laissez-faire leadership
2. What is the level of competence of the respondents in the performance of their supervisory functions in the area of:
 - 2.1 Instructional supervision
 - 2.2 School improvement
 - 2.3 Pupils development; and
 - 2.4 Teacher/Staff development
3. Do the leadership styles of the master teachers significantly affect their level of competence in performing their supervisory functions?
4. Based on the findings of the study, what could be recommended to upgrade the competency of teachers?

Hypothesis

The leadership styles of the head teachers do not significantly affect their level of competence in performing supervisory competence.

Significance of the Study

The study aimed to contribute empirical data on the issues of Leadership styles and supervisory competence of master Teachers in Division of Taguig City and Pateros: Base reference competency upgrading.

The result of this study would be beneficial to the following:

Department of Education (DepEd). It helps particularly the secondary education would be provided with the prevailing leadership styles or practices which could serve as basis understanding the dynamics or performance. Likewise it would improve the scope of in-service preparations programmes for head teachers to enhance efficient and effective leadership style.

Principals. It helps them to pre-examine and appraise their own leadership and make adjustments where necessary. They may also realize their leadership styles may vary depending on who they are dealing with and the situation they are in.

Head Teachers. It helps in formulating techniques and styles of leading the group and manage his/her works in the field of his/her skills and potentials on leadership and management to enhance the effectiveness and efficiency of his or her teachers.

Teachers. It may utilize the results of this study to participate actively in the decision making process in term of curriculum, planning, improvement of subject instructional materials and enhance their teaching performance.

Students. They will receive quality education will greatly benefit from the study and may lead other people in the most and better way styles and able learn the good value of without looking for any return.

Future Researchers. They will use to guide for them who may be interested to conduct other related studies about head teachers leadership styles.

Scope and Limitation of the Study

The study is concentrated in public secondary school master teachers from 14 schools in National Capital Region . The study primarily focused on determining the leadership styles such as democratic leadership, laissez-faire leadership, autocratic leadership, transformational leadership, charismatic leadership. And focuses also on level of competence of master teachers in their supervisory functions in terms of; instructional supervision, school improvement, pupils development; and teacher/staff development.

Findings

Organized according to the specific questions in the statement of the problem, the following were the findings of the study.

1. Leadership styles are embraced by the master teachers.

The respondents' Leadership styles embraced by the head teachers. Data shows that head teachers have transformational leadership got the highest frequency of 32 or 32.99 percent. In charismatic leadership got the frequency of 29 or 29.90 percent, while democratic leadership has a frequency of 23 or 23.71 percent. And, the laissez-faire leadership has a frequency of 11 or 11.34 percent. However, out of 5 leadership styles autocratic leadership has a frequency of 2 or 2.06 percent.

2. The Level of competence of the respondents in the performance of their supervisory functions.

2.1 Respondents have average level of Instructional Supervision with an (over-all weighted mean = 3.04) with a verbal interpretation of competent.

2.2. Respondents have average level for school improvement function with an over-all ($X = 2.73$) with a verbal interpretation of competent.

2.3 Respondents have average level for pupil development function with an over-all ($X = 3.16$) with a verbal interpretation of competent.

2.4 Respondents have average level for teacher and staff development with an over-all ($X = 2.81$) with a verbal interpretation of competent.

3. The leadership styles of master teachers significantly affect their level of

Competence in performing supervisory functions.

3.1 Respondents have average level for competence of head teachers in performing their supervisory function when grouped according to their embraced leadership styles with an overall ($X^2 = 2.94$) with a verbal interpretation of competent.

3.2 The respondents revealed the significant relationship between the leadership styles and the level of competence of master teachers in performing supervisory function in the area of instruction, the null hypothesis was majority rejected and the rest are accepted. In democratic leadership with a ($X^2 = 51.004$) its probability value of .045 the null hypothesis is rejected. In charismatic leadership with a ($X^2 = 42.385$) its probability value of .002 the null hypothesis is rejected. And also like with the transformational leadership with a ($X^2 = 36.516$) and has a probability value of .002 the null hypothesis. While, the laissez-faire leadership the ($X^2 = 32.511$) its probability value of .093 the null hypothesis is accepted. And the autocratic leadership too, with a ($X^2 = 27.308$) its probability value of .079 the null hypothesis is accepted.

3.3 The respondents for democratic leadership with has a (chi-square value of 56.113) its probability value of .089, charismatic leadership that a ($X^2 = 38.576$) and has its probability value of .05 and laissez-faire leadership with a ($X^2 = 30.431$) its probability value of .077 thus the null hypothesis is accepted, which has no significant relationship between the leadership styles and the level of competence of master teachers in performing supervisory function in the area of school improvement. While the autocratic leadership the ($X^2 = 24.224$) its probability value of .001 while transformational leadership with a ($X^2 = 38.197$) its probability value of .077) and the null hypothesis is rejected.

3.4 The respondents for charismatic leadership with a ($X^2 = 32.442$) and has a (probability value of .000) while, transformational leadership with a ($X^2 = 37.776$) and has a probability value of .000 are significant thus, the null hypothesis is rejected. While, democratic leadership the ($X^2 = 49.152$) its probability value of .078), autocratic leadership with a ($X^2 = 19.791$) its probability value of .203, laissez-faire leadership with the ($X^2 = 26.564$) its probability of .061 thus the null hypothesis is accepted.

3.4 In democratic leadership has a ($X^2 = 32.160$) its probability value of .003, charismatic leadership with the ($X^2 = 44.251$) its probability value of .000, transformational leadership the ($X^2 = 41.384$) its probability value of .024 while, laissez-faire leadership the ($X^2 = 29.662$) its probability value of .048) this means that are significant to the research therefore the null hypothesis is rejected, and the autocratic leadership with a ($X^2 = 20.677$) its probability

value of .083 It means it is accepted and it has no significant relationship between the leadership styles and the level of competence of head teachers in performing supervisory function in the area of teacher and staff development.

4. Base reference for competency upgrading for Head Teachers level of competence in terms of leadership styles that they may be seen for improvement.

Conclusions

Based on the findings of this study, the following conclusions were formulated:

- Respondents have average level of leadership styles embraced by the master teachers and the level of competence in performing their supervisory function, they also vary on their embraced or used to apply or implement that they may part of their ideals.
- Level of competence in performing their supervisory function in instructional supervision, school improvement, pupil development, and teacher and staff development they had different ways of performing function that caters for their specific jobs and tasks.
- The leadership styles of the master teachers do not significantly affect their level of competence in performing supervisory functions.
- The base reference that may recommend is through improvement of in-service trainings and some various seminars, workshops and innovative team building as well, that the head teachers could utilize it in their leadership and supervisory functions and its personal enhancement as a middle manager.

Recommendations

In view of the aforementioned conclusions, the following recommendations are hereby offered:

1. The school heads should implement programs of mass awareness for leadership styles of teachers and its supervisory functions. Teachers should be given an extensive, long- term and continuous professional development plan through seminars/ trainings to improve level of competence in performing supervisory function. These trainings/ seminars should be properly evaluated. The head teacher must have a closer supervision in crafting instructional objectives.
2. The master teachers and teachers should have a shared vision so they will collaboratively relate to each other. The master teachers must provide good models for faculty members are suggested. Since, the school is an organization the head teachers must show a good model of professionalisms.
3. It is highly suggested that the master teachers must have a thorough planning in scheduling activities and the other works in achieving a common goals. The master teachers must include the teachers in identifying strategies for improving student's achievement. It is suggested that the head teachers as one of the leaders in school must assist the teachers to work towards a common goal.
4. Encourage school managers to be acquainted with the art and science of leadership and its competence to supervisory functions in order to support their teachers in schools, and recommends similar study to the future researcher to be undertaken in a broader area to include principal as respondents, other form of principal/head teachers leadership styles and performance in their supervisory functions and the other scale of teacher morale

References

A. Books

- Bago, Adelaida L. (2005) Supervision of Instruction: The Philippine Perspective Manila Philippines, De La Salle University Press.
- Bass B.M. (1990) From Transactional to Transformational Leadership Learning to Share Dynamics the Vision Organizational Winner.
- Castillo, Emman S. (2005) Leadership and Management: Twin Towers in Education, Philippine Educational Manila Philippines, De La Salle University Press.
- Cashin, Roxel A. (2001) Essentials of Organizational Behavior 1st Edition. Manila Philippines. Educational Publishing House.
- Daft, Bell J. (2000) High-performing, high poverty schools leadership Oaks C.A. A. SAGE Company.

B. Journals

- Barnett, Mc Cormick (2003) Transformational Leadership in School Panacea, Placebor or Problem
- Cherry, Kendra (2015) Leadership that Matters Educational Leadership Journals
- Costales, H. A. (2003) Management and Development through Education, p. 5

- Dela Cruz, Teresita M., (2002) The Philippine Journal of Education. pp. 8-10
- Gremley, C. H. (2012). Expert Noticing and Principals of High-Performing Urban Schools
- Felton, H. D. (2004) Leading for learning Sourcebook: Concepts and Examples.
- Hackman and Johnson (2009) Leadership Modern and Development
- Leithwood K. (2005) Understanding Successful School Leadership: Progress on a Booker Front Journal of Education Administration.

C. Theses/ Dissertations

- Arcadio, J C (2001) "A Study of the effects of Leadership Styles on Performance in University of Nairobi"
- Andres, L. H. A. (2004) "Variable influencing leadership style and leadership performance of public secondary school in administration in Cotabato Province" University of Southern Mindanao, Philippines
- Bailey, Murphy A. (2004) "Assessing the Instructional Management Behavior of Principals", New York, New York
- Batol, L. A. (2000) "Management practices of Public secondary school administrator in relation to the job performance" University of Southern Mindanao, Philippines
- Castillo, R.D. (2005) "Instructional Leadership Styles of Elementary School Principals in the Division of City Schools, Caloocan City"

The Massive Flipped Classroom: Implementing And Conducting Compulsory Freshmen Modules

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Absrtact

Flipped classrooms are normally conducted on a small scale, where the teacher can be an effective facilitator in class. This model is stretched when the class is big. This posed a conundrum when the National University of Singapore embarked on two massive flipped classroom modules: GER1000 Quantitative Reasoning and GEQ1000 Asking Questions. Each now caters to about 3000 students every academic year. This paper seeks to explore (1) the design of the modules, particularly with regard to technology use (2) how they were implemented and (3) future directions for each.

The Meaning of Mathematics for Vocational School Students

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Abstract

The aim of the paper is to classify subjects connected to math education confronted by participant as coming from social science department participant of a vocational school and as given to math lectures, and to classify efficient teaching models seeming not achievable to be applied by the math teachers for vocational school participant. The study used a quantitative study method with a descriptive survey method. The study was directed using of likert-type questionnaires for the social science department participant from a vocational school in turkey. 196 participants were the answered to the study. Findings presented which there was a requirement for a explicit program for participant focusing on basic knowledge and skills and simplifying the content of the math tailored towards participant. Problems met by many of the participant when learning math are in memorizing math content, thinks math is not easy, having trouble in understanding and applying math formulae. If tracing starts in the early scores, participant do not accept the educational structure slabs they want for more progressive education later.

Keywords: vocational school, math, difficulty, academic achievement, learning environment

Introduction

A necessary emphasis transfer from the directorial subjects to the teaching important subjects, the quick answer of instructive organizations to the altering requirements of people is detected in the actions of the managing constructions at all levels of teaching (Kamariah at all., 2010). The development of the educational procedure administration is accepted as one of the main ways of efficient using of lecture material, procedures and human resources. The most efficient is the advance of new procedures of organization and administration built in the world. Math and mathematical sciences are serious and vital to the social, economy and, so progress of recent life a country (of at all, 2017; tola at all, 2017). The instruction of math wants wide-ranging preparation to confirm value teaching structure for the people. Though determined exertions would be had to teach all people, we could not lose vision of the attention of the vocational participant (Seita, 2004); Kılıçaslan at all, 2018). Education math for vocational participant is a miracle for some viewpoints and does not frequently happen with simplicity and easily.

The important way of the context of the vocational education, meant at the calibration of curricula and educational programs. The summary of the organization of educational credit system has big compensations, as long as the school flexibility of the participant (of at all, 2018; Kahraman at all, 2018; Zhamuldinow, 2013). Changed issues may cause to education problems in math for these participants. The issues are: the math language, symbols, problems in procedure of math, some pictorial mix-ups connected to math education, retention and classification problems, and remarkably much anxiety in connecting with math. Instruction of math for educators and learning math for vocational participant are starting to obtain consideration and educators have planned learning environments that are much inspiring when the process of analyzing of the difficulties are at a increasing phase. Moreover, there are singular requirements, and they would be taken an important consideration by math teachers (Koparan at all, 2018; Kamariah, A.B. At all., 2010).

Educational analyses studies for vocational school education lessons display which some problems in teaching models for learning math are happening in the mat laboratories (Wehlage & Rutter, 1989). The problems are, inadequate pledge which participant have related previous elementary information for learning the lesson and fast degree for presenting lots of the notions. Also, weak of rational consistency in the exhibition of math figures in the lectures and low communication and a lack of group study in many instructional actions. Moreover, inadequate practical exercise of instructors to help the participant transfer from the primary education phase to self-regulating learning and inadequate assessments to confirm which participant recall that they have got at the classrooms (Battal at all., 2017; Bostan, & Durmuş, 2016; Bostan & Durmuş, 2017; Durmuş, 2016; Seita, 2004). The objectives of the study are to determine and analyse;

- *Difficulties connected to math learning met by participant*
- *Difficulties connected to the teaching and learning of math*
- *Education environments for participant in learning math*
- *Effective teaching models commonly applied by math*
- *Effective teaching models which are apparent not possible to be used by math teachers in teaching math.*

Method

The study engaged a “quantitative, descriptive survey” study strategy, including social science departments (accounting, business, marketing) participant in a vocational school in turkey. Vocational school participant usually refers to participant with future academic planning problems and problematic academic accomplishment. 196 participants from social science from 1st year and 2nd year class level was applied for the study. The participant responded “separate 5-point likert measure questionnaires” “representing the level of arrangement to quantified objects in the survey for education math (Kamariah, A.B. at all., 2010). The data were examined with the light of the statistical values.

Findings

Constructed on the founded data composed by the questionnaire, it was expressed which common of the participant were male students about 66% and the other group were female students 34%. The proportion of participant who had accomplish math examinations were not much (21.73%). Additionally, the number of which approved the examinations were fairly little, most participant supposed which math lectures were entertaining and interesting to study. Outcomes exhibited which only about 16.1% of participant respondents don't liked math (table 1).

Table 1: participant view on math

View Category	math	
	frequency	percentage
Enjoy	109	55.6%
Moderate	59	30.1%
Dislike	28	14.3%
Total	196	100%

Participant answers for view of the difficulties at the time learning math specially which the topics were being trained theoretical rather than computational. For understanding of math, two basic problems were emphasized by common in the answers, orderly, on the ‘difficulty to remember formulae’ understood (70.0%) and ‘difficulty to remember math content’ (72.1%). And for the back of the problems connected to the learning of math this showed in table 2, moreover, many of the participant, replayed to test, showed which they met the problems, but a minor percentage had emphasized which they were getting the problems because of common of them did not highpoint the registered problems as they encountered at the time learning math. The outcome on stating the participant ‘do not like for math’, a minor proportion specified which they do not like math (16.4%) (table 2).

Table 2: form of participant’ opinions on problems in learning math

Types of problems	Math	
	Yes	No
Do not remember the formulae	70.0%	30,0%
Difficult to remember the math content	72.1%	27,9%
Do not understand the formulas	63.6%	36.4%
The concepts are difficult	58.5%	41.5%
Do not know how to apply the formulae	50.3%	49.7%
Do not understand what teachers are teaching	44.8%	55.2%
Teachers change to new topics very fast	20.5%	79.5%
Dislike math	16.4%	83.6%
Teachers did not give enough examples to answer the questions	11.4%	88.6%
Teachers did not repeat the subject	12.4%	87.6%
Teachers did not explain clearly	10.3%	79.7%
Teachers only asked to do the exercises on the white board	14.6%	85.4%
Teachers make us copy notes	12.7%	87.3%
We were given many problems as homework	16.3%	83.7%

Result

The construction and development of the teaching value calculation is specific application for the social, technical and vocational education system in turkey. The results connected to participant' opinion of their learning environment display which usually participants are progressive way to their learning environment. Moreover, at the time data connected to persons who decided to the bad thoughts were examined it was registered which meaningfully low capability participant approved to the undesirable thoughts associated with the maximum skill of accounting department participant.

References

- Adieva, A.B., (2016). Current Problems In The Technical And Vocational Education Management System In Kazakhstan. *Journal Of Internet Banking And Commerce*, Vol.21, 75-94.
- Bakar, Kamariah Abu, Rohani Ahmad Tarmizi, Sharifah Md Nor, Wan Zah Wan Ali, Ramlah Hamzah, Arshad Abdul Samad, And Abdul Rashid Jamian (2010). "Teachers And Learner's Perspectives On Learning Math For At-Risks Participants", *Procedia - Social And Behavioral Sciences*.
- Battal, F. Durmuş, İ. Ve Çınar, İ. (2017). The Effects Organizational Citizenship Behaviours And Decision-Making Styles On Transformational Leadership Behavior. *International Periodical For The Languages, Literature And History Of Turkish Or Turkic*, 12 (31), Pp. 1-28.
- Biglin, T. And Görentaş, N. (2008). A Note On Characterization Of $N_u(D_n)$. *International Electronic Journal Of Algebra*, 3, 135-140.
- Biglin, T., Görentaş, N. And Kelebek, I.G. (2010). Characterization Of Torsion Units Of Z_{24} . *Journal Of Korean Mathematical Society*, 6, 1239-1252.
- Bostan, S. Ve Durmuş, İ. (2016). Yöneticilerin Karar Sürecinde Zamanı Kullanması Üzerine Bir Araştırma. *Journal Of Administrative Sciences*, 14 (27), Pp. 277-307.
- Bostan, S. Ve Durmuş, İ. (2017), "An Attemp To Develop A Scale On The Decision Procedure: The Manager Decision Time Scale", *Hacettepe Sağlık İdaresi Dergisi*, 20 (2), Pp. 125-141.
- Durmuş, İ. (2016). Tv Reklamlarının Tüketicilerin Tutum Ve Motivasyonları Üzerindeki Sosyo-Ekonomik Etkileri: Üniversite Öğrencileri Üzerine Bir Uygulama. *The Journal Of International Scientific Studies*, 1 (1), Pp. 28-40.
- Kahraman, K., Of, M. And Tola, Y. (2018). Accounting And Task Application Participant' Learning Styles In Distance Education. *The Online Learning Of Distance Education And E-Learning*, 6(2), 16-20.
- Kamariah, A.B., Rohani A.T., Sharifah M.N., Wan Zah Wan A., Ramlah H., Arshad A. And, Abdul Rashid, J., (2010). Teachers And Learners' Perspectives On Learning Math For At-Risks Participant. *Procedia Social And Behavioral Sciences*, 8(C), 393-402.
- Kılıçaslan, I., Aydın, S., Türkeri, K. And Soydaş, H. (2018). Attitudes Towards Online Web Assisted Learning: Accounting And Tax Participant. *The Online Learning Of Distance Education And E-Learning*, 6(2), 27-33.
- Koparan, B., Akça, Ü., Köş Aydın, F. And Aydın, S. (2018). On The Attitudes Of Construction Technology Participant Towards Information And Communication Technology. *The Online Learning Of Distance Education And E-Learning*, 6(2), 67-73.
- Seita, J. (2004), Strength-Based Approaches Expand Into Leadership, *Reclaiming Children And Youth*, Vol. 13 No.1, 22-5.
- şenelTola Y., Aydın S., Şeneldir O., Mutlu C., Koparan B., Of M. (2017). Meslek Yüksekokulu Öğrencilerinin Memnuniyet Düzeyleri Üzerine Bir Araştırma. *Turkish Online Journal Of Educational Technology*, Si, 607-610.
- Valencia, R., Black, M (2002). "Mexican Americans Don't Value Education! The Basis Of The Myth, Mythmaking, And Debunking", *Journal Of Latinos And Education*, Vol. 1 No.2, Pp.81-103.
- Wehlage, G.G & Rutter, R.A (1986). Dropping Out: How Much Do School Contribute To The Problem? *Teachers College Record*. 87(3), Available At [Http://Www.Tcrecord.Org/Pdf/660.Pdf](http://www.tcrecord.org/Pdf/660.Pdf)
- Yıldız, M. And Görentaş, M. (1996). On Homogenous Maps. *Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 1(2), 14-149.
- Zhamuldinov V.N (2013). Some Words About The Correctional Education Problems Of Prisoners. *Middle-East Journal Of Scientific Study* 13: 616-620.

The Mediator Role Of Family Support In Relation Between Continuous Anxiety And Mental Toughness In Athletes

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Abstract

The objective of this study is to examine the mediator role of family support in the relation between continuous anxiety and mental toughness in athletes. The research group was composed of 236 athletes (Age_{Mean} : 20,83 + 2,787) in total, 120 of whom were females (Age_{Mean} : 20,32 + 1,515) and 116 of whom were males (Age_{Mean} : 21,38 + 3,591), who were actively dealing with sports. The participant athletes initially filled the voluntary participation forms, which were prepared by the researchers, and then they filled the data collection tools determined within the framework of the study. In order for the collection of data, Multi-Dimensional Social Support Scale, Mental Toughness Scale, and continuous anxiety sub-scale of State-Trait Anxiety Inventory were used. In the preparation process of the data collected, it was observed that 14 participant athletes filled the scales erroneously, and the analyses were evaluated based on 236-athlete sample. In the analysis of the data, in order to determine the relations among the variables, firstly, Pearson correlation analysis was conducted, as per determining the mediator role of the family support between continuous anxiety and mental toughness, PROCESS macro regression analysis was conducted. For testing whether the mediator role was significant, Sobel z test was used. The analyses were conducted in 95% confidence interval. For the analyses of the research, SPSS 22.00 package program was used. When the findings of the research are examined, it is observed that the continuous anxiety levels of the athletes have a negative linear relation with both the family support and mental toughness. Moreover, as the main hypothesis of the research, according to the findings regarding mediator role of the family support in relation between continuous anxiety and mental toughness, it was determined that the negative effect of continuous anxiety on mental toughness was decreased with family support and its negative effect was decreased. As the conclusion, it can be stated that mental toughness levels of the athletes have a negative relation with their continuous anxiety levels, and that family support can be benefited in decreasing the role of the continuous anxiety concerning the mental toughness performance.

Keywords: *Anxiety, Family Support, Mental Toughness, Athlete.*

Introduction

The concept of mental toughness has attracted much attention by sports psychology researchers, who have been trying to understand how psychological factors can support the success in sports (Bull, Shambrook, James and Brooks, 2005; Gucciardi, Gordon and Dimmock, 2008; Jones, Hanton and Connaughton, 2007). In developing literature, mental toughness is thought to be multidimensional and important psychological factor (including cognitive, affective and behavioral components) and associated with successful sports performance (Bull et al., 2005 ; Clough, Earle and Sewell, 2002 ; Connaughton, Wadey, Hanton and Jones, 2008; Kabuk & Clough, 2005; Jones et al., 2007). Unfortunately, there are different perspectives on this construct. For instance, while some researchers suggest that mental toughness can explain how physically skilled athletes become elite athletes (Gucciardi et al., 2008), some assert that the athletes having a proper mixture of physiological, anatomical and psychological features are more likely to display a successful sports performance (Crust, 2008).

When the evidence collected from two different qualitative studies conducted with elite athlete samples are examined (Bull et al., 2005; Connaughton et al., 2008), it is shown that the environmental factors such as motivational environment, family influence, the exposure to the environment in which one has grown up and challenging context (competitive) have critical role in the development of mental toughness. In this direction, the importance of family support, which is one of the cornerstones of social support, in the development of mental toughness is seen.

On the other hand, anxiety is the uneasiness, a type of fear feeling, against the events that the individuals do not know the source, however, accept that they are dangerous and threatening (Özgül, 2003). When viewed from this aspect, trait anxiety is the perception of the stressor conditions being dangerous and threatening, and increment of emotional reaction frequency and intensity, and gaining continuity (Öner, 1994). Konter (1996) defined trait anxiety as “the tendency to perceive certain situations as dangerous and threatening, and an athlete’s personality

tendency.”

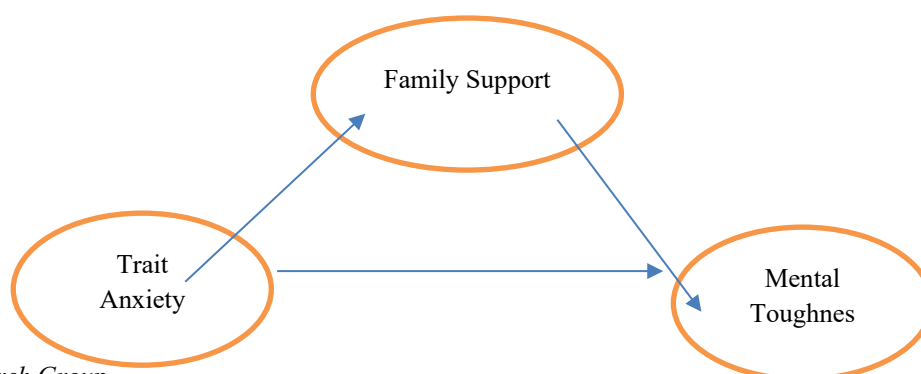
In this context, this study aims to determine the role of family support in the relationship between trait anxiety and mental toughness of athletes.

Method

Research Model

This study is a relational screening model study designed to examine the role of family support in the relationship between trait anxiety and mental toughness. Karasar (2009) defined the relational screening models as the research models aiming at finding out the existence and degree of covariances between two or more variables. In line with this model, the role of self-esteem in the relationship between passion and psychological resilience levels of athletes. In this model, the role of self-esteem in the relationship between passion and psychological resilience levels of athletes will be examined. The hypothesized model is displayed below.

Figure 1: Research Model



Research Group

120 females ($Age_{mean}: 20,32 + 1,515$) and 116 males ($Age_{mean}: 21,38 + 3,591$), totally 236 athletes ($Age_{mean}: 20,83 + 2,787$), constituted the research sample. The athletes participated in the study filled the volunteer participation form first, then they completed the data collection tools. The sports experience mean score of the athletes was $Year_{mean}: 9.21 + 3.86$.

Data Collection

For the data collection, Multi-Dimensional Social Support Scale, Mental Toughness Scale, and Trait anxiety sub-scale of State-Trait Anxiety Inventory were used. In the preparation process for the analysis, it was observed that 14 participant athletes filled the scales erroneously, and the analysis was done based on a 236-athlete sample.

Multi-Dimensional Perceived Social Support Scale:

Zimmet and Dahlem (1988) developed the Multi-Dimensional Perceived Social Support Scale. Eker and Arkan (1995) adapted the scale to Turkish society. The scale includes twelve items that can be understood by the people at any educational level. The higher the scores, the higher the perceived support and the lower the scores, the lower or lack of the perceived support (Eker and Arkan, 1995).

State-Trait Anxiety Scale:

State-Trait Anxiety Scale was developed by Speilberger et al. (1970) and adapted to Turkish society by Öner and Le Compte (1985). The scale is a Likert type scale and includes 40 items assessing state and trait anxiety separately. The higher the scores, the higher the anxiety level and the lower the scores, the lower the anxiety level. The scale, translated into Turkish and tested the validity and reliability in 1975, has the sub-scales of 20-item state and 20-item trait anxiety. The total score of the whole scale ranges between 20 and 80. The higher the scores, the higher the anxiety level and the lower the scores, the lower the anxiety level (38). The items are rated between 1 and 4 including “never” and “completely” (39). The validity and reliability studies of the inventory in Turkey were conducted by N.Öner in 1977 (39). There are two different statements in the State-Trait Anxiety Inventory. The direct statements indicate the negative emotions; reverse items indicate positive emotions. The reverse items in state anxiety inventory are 1,2,5,8,10,11,15,16,19 and 20. The reverse items in trait anxiety are 21,26,27,30,33,36, 39 and 13. The mean score of the reversed items is subtracted from the mean score of the direct items after calculating the mean scores of direct and reverse items separately. Predetermined and unchanging value is added to this value. The unchanging value for state anxiety is 50, the one for trait anxiety is 35. The final value is the individual’s anxiety score. State Anxiety Scale (SAS) is a sensitive tool to assess the suddenly changing emotive reactions. The Trait Anxiety Scale (TAS) including 20 items in the second part of the scale assess the continuity of the anxiety that the individual generally tends to experience. Scores are between 20 (low anxiety) and 80 (high

anxiety).

Data Analysis

First, Pearson Correlation analysis was used to determine the relationships between variables; PROCESS macro regression analysis was used to find out the role of family support in the relationship between trait anxiety and mental toughness. The analysis was done at a 95% confidence interval. Sobel z test was used to determine whether the mediation was significant. SPSS 22.00 program was used for the analysis.

Findings

Table 1: The relationship between trait anxiety, mental toughness, and family support

		Mental Toughness	Trait Anxiety	Family Support
Mental Toughness	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	236		
Trait Anxiety	Pearson Correlation	-,173**	1	
	Sig. (2-tailed)	,008		
	N	236	236	
Family Support	Pearson Correlation	,425**	-,258**	1
	Sig. (2-tailed)	,000	,000	
	N	236	236	236

** . Correlation is significant at the 0.01 level (2-tailed).

When table 1 was examined, it was found that the relationships between trait anxiety and mental toughness ($r = -.173$), family support and mental toughness ($r = .425$), trait anxiety and family support ($r = -.258$) were significant ($p < 0.05$).

Research Model

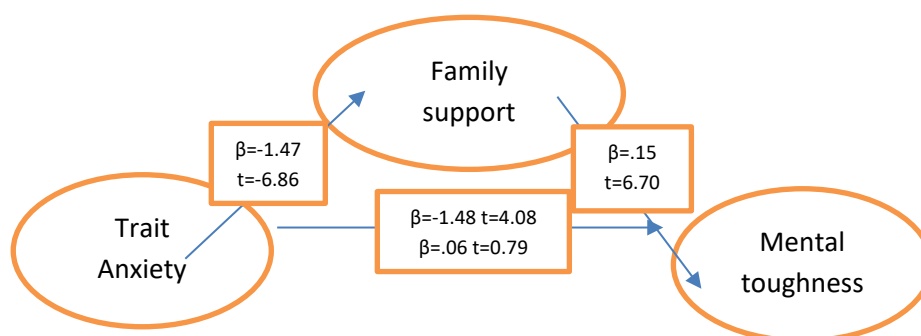


Figure 2: The role family support in the relationship between trait anxiety and mental toughness

The determination that there is a negative and significant relationship between trait anxiety and mental toughness allows testing the hypothesized mediation relation. PROCESS macro regression analysis was used to find out whether family support played a mediation role in the relationship between trait anxiety and mental toughness. In the first step of PROCESS macro regression analysis, the predictive effect of trait anxiety level on family support was examined and it was observed that trait anxiety ($\beta = 1.47$, $t = 6.86$, $p < .05$) explained the 18% of the total variances associated with family support ($R = .42$, $R^2 = .18$, $F = 47.13$, $p < .05$).

In the second step of the PROCESS macro regression analysis to determine whether family support played a mediation role in the relationship between trait anxiety and mental toughness, the predictive effect of trait anxiety level on mental toughness was examined. When the results were examined, it was observed that trait anxiety ($\beta = -.134$, $t = -2.02$, $p < .05$) explained the 2% of mental toughness level ($R = .134$, $R^2 = .02$, $F = 4.08$, $p < .05$).

In the third step of PROCESS macro regression analysis to determine whether family support played a role in the relationship between trait anxiety and mental toughness, family support was included in the PROCESS macro regression analysis and found that it was seen that family support contributed to the prediction of mental toughness at the level of 1%. Accordingly, it was found 14% of the total variances was explained via family support in the prediction of mental toughness by trait anxiety ($R = .47$, $R^2 = .14$, $F = 27.54$, $p < .05$). In the third step of the analysis, it was observed that the effect of trait anxiety on mental toughness decreased ($\beta = .07$, $t = 1.92$, $p > .05$). Thus, it can be said that family support has a full mediation role in this relationship ($\beta = .22$, $t = -6.73$, $p < .05$).

Table 3: The results related to the direct and indirect effects of trait anxiety on mental toughness

Direct Effect			Effect	S.E	LLCI	ULCI	t	p
Trait Anxiety	Mental toughness		-.0891	.0286	-.1540	-.0399	2.6852	.0078
Indirect Effect			Effect	S.E	LLCI	ULCI	t	p
Trait Anxiety	Family Support	Mental toughness	-.0576	.0419	-.1599	-.0447	-2.1091	.0085
Total Effect			-.1467	.0546	-.2543	-.0391		
Normal Theory Test for indirect effect								
Effect: -.0892		s.e: .0258		z: -3.4496		p: .0006		

In table 3, it was found that total effect (direct + indirect) of trait anxiety on mental toughness was negative (β : $0,089 + 0,071=0,434$) and statistically significant ($p=0,000$). Because the Z score (-3,450) of this model was bigger than 1,96 and significant, the existence of a mediator effect can be said.

Conclusions

This study aims to determine the role of family support in the relationship between trait anxiety and mental toughness of athletes. 120 females (Age_{mean} : $20,32 + 1,515$) and 116 males (Age_{mean} : $21,38 + 3,591$), totally 236 athletes (Age_{mean} : $20,83 + 2,787$), constituted the research sample. The athletes participated in the study filled the volunteer participation form first, then they completed the data collection tools. When the results were examined, it was found that total effect (direct + indirect) of trait anxiety on mental toughness was negative (β : $0,089 + 0,071=0,434$) and statistically significant ($p=0,000$). Because the Z score of this model was bigger than 1,96 and significant, the existence of mediator effect can be said.

When the results are examined, trait anxiety levels of the athletes negatively and linearly correlated with both family support and mental toughness. Moreover, according to the fundamental hypothesis of the study that family support had a mediation role in the relationship between trait anxiety and mental toughness, it was found that the negative influence of trait anxiety on mental toughness via family support. When related literature is examined, it is stated that mentally tough individuals tend to be social and extrovert. Because they stay calm and comfortable and have lower levels of anxiety than others, it was suggested that these individuals relatively stay unaffected from competitive and stressful conditions with the self-belief and the steady belief about controlling their destiny (Clough et al., 2002).

Considered from this perspective, negative relationship between mental toughness and trait anxiety coincide with related literature. For social support, in the study by Petrie, Deiters & Harmison (2014), in which the mediation roles of athlete's identity, social support and mental toughness in stress levels were examined, the positive contribution of mental toughness and social support was explained. Hence, it can be said that family support, which is an element of social support has a mediation role in the relationship between mental toughness and trait anxiety.

Consequently, it can be said that the mental toughness of the athletes has a negative relationship between trait anxiety levels, family support can be utilized to reduce the role of trait anxiety regarding mental toughness performance.

Author Note

This study is an improved version of the oral presentation presented in the International Conference on New Horizons in Education held between 18-20 July.

References

- Bull, S. J., Shambrook, C. J., James, W., & Brooks, J. E. (2005). Towards an understanding of mental toughness in elite English cricketers. *Journal of applied sport psychology*, 17(3), 209-227.
- Cebeci, S. A., Aydemir, Ç., & Göka, E. (2002). Puerperal dönemde depresyon semptom prevalansı: obstetrik risk faktörleri, kaygı düzeyi ve sosyal destek ile ilişkisi. *Kriz Dergisi*, 10(1), 11-18.
- Clough, P. J., Earle, K., & Sewell, D. (2002). Mental toughness: The concept and its measurement. In I. Cockerill (Ed.), *Solutions in sport psychology* (pp. 3243). London: Thomson
- Connaughton, D., Wadey, R., Hanton, S., & Jones, G. (2008). The development and maintenance of mental toughness: Perceptions of elite performers. *Journal of Sports Sciences*, 26, 8395.
- Crust, L. (2008). A review and conceptual re-examination of mental toughness: Implications for future researchers. *Personality and Individual Differences*, 45, 576583.

- Crust, L., & Clough, P. J. (2005). Relationship between mental toughness and physical endurance. *Perceptual and Motor Skills*, 100, 192194.
- Eker D. & Arkan, H. (1995). Çok boyutlu algılanan sosyal destek ölçeğinin faktör yapısı geçerlik ve güvenilirliği. *Türk Psikoloji Dergisi* 10 (34): 45-55.
- Engindeniz, A. N., Küey, L., & Kültür, S. (1996). Edinburgh doğum sonrası depresyon ölçeği Türkçe formu geçerlilik ve güvenilirlik çalışması. *Bahar Sempozyumları*, 1, 51-52.
- Gucciardi, D. F., Gordon, S., & Dimmock, J. A. (2008). Towards an understanding of mental toughness in Australian football. *Journal of Applied Sport Psychology*, 20(3), 261-281.
- Jones, G., Hanton, S., & Connaughton, D. (2007). A framework of mental toughness in the world's best performers. *The Sport Psychologist*, 21(2), 243-264.
- Karasar, N. (2009). Bilimsel araştırma yöntemi (19. bs). Ankara: Nobel yayın dağıtım.
- Konter E (1997) Profesyonel Futbolcuların, Profesyonellik Yılı Sürelerinin Durumluk Kaygıları Üzerine Etkisi, 6. Ulusal Spor Hekimliği Kongresi Bildiri Özetleri, İzmir.
- Lecompte, A. & Öner, N. (1975). Durumluk-Sürekli Kaygı Envanterinin Türkçe'ye Adaptasyon ve Standardizasyonu ile İlgili Bir Çalışma. IX. Milli Psikiyatri ve Nörolojik Bilimler Kongresi Çalışmaları, 457-462.
- Öner N. (1994) Türkiye'de Kullanılan Psikolojik Testler, Boğaziçi Yayınları, İstanbul.
- Öner, N. & Le Compte, A, (1983) Durumluk Sürekli Kaygı Envanteri El Kitabı, İstanbul,Boğaziçi Üniversitesi Yayınları.
- Özgül F (2003) Beden Eğitimi ve Spor Yüksek Okulu Öğrencilerinde Durumluk ve Sürekli Kaygı Düzeyleri, Cumhuriyet Üniversitesi Sağlık Bilimleri Enstitüsü Yüksek Lisans Tezi, Sivas.
- Petrie, T. A., Deiters, J., & Harmison, R. J. (2014). Mental toughness, social support, and athletic identity: Moderators of the life stress-injury relationship in collegiate football players. *Sport, Exercise, and Performance Psychology*, 3(1), 13.

The Museum-Based Education As A Kind Of Art-Therapy. Considerations

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Abstract

According to Hein the museum-based education is addressed to every individuals and groups. Puttman-Gelles underlines that "the purpose of art museum education is to enhance the visitor's ability to understand and appreciate the original works of art and to transfer (...) experiences into other aspects of visitor's lives". Museum-based education supports participants' reflection, invites them to build personal connections and builds the sense of community. It invites visitors to share their thought and feeling, memories and associations. The museum-based education as a form of art therapy use narrative methods, artwork, discussion as well as object therapy. The therapeutic tools of museum-based education are linked with dialog, interpretation, locality and memory - these aspects of museum-based therapy will be presented in the paper. The museum-based education answers at Maslows needs and can be compared with social work. It approves the goals of every education process are to educate and shape of pupils. The beneficial result of the education is wellbeing.

Introduction

Both educational and therapeutic practice of museum-based education consists in creating the physical and mental space of participants' development, supporting and facilitating the process of their creative and personal experience. Both activities use their resources to support pro-health activities, understand students' needs and enable them to prepare themselves for working in the everyday world. Both are finally entangled in the processes of interpretation and evaluation of human experience (Silverman 1989) and apply art as a communication tool or even support interaction with art. Art in both cases can be, as Mark O'Neil (2010) points out, prescribed. The very idea of the art of prescription is based on the belief that creative action, building a safe environment conducive to creativity has both educational and therapeutic dimensions. It is also a space that allows sharing of experience, building a sense of being accepted and belonging to *communitas*. It is the community of experience, commitment and analysis that has a therapeutic function. As emphasized by Elaine Aegyle and Gillie Bolton (2005): art does not have to be treated as a therapy vehicle, but it should be perceived as a therapeutic one.

Art is based on joint action, exchange of views, empathy and commitment. Such art functions are described, among others, by Swedish researchers as a "determinant of survival" (Konlaan, Bygren, Johansson 2000), because regular participation in the cultural life raises the frame of mind, leads to the perception of being a healthy person, absorbs the tension of the recipient and becomes a pleasure, and thus, reduces the level of stress and even promotes longevity (Johansson 1996). And perhaps all these effects are not so much the result of the action of art itself, but rather of social interaction, cultural involvement or catharsis. Some attempt to explain the phenomenon of therapeutic action of art and find its rational justification, link the activity of visiting a cultural institution with physical activity. They prove that visiting a museum or going to the cinema or theater is associated with moving: walking, strolling - it is this action that is the source of improvement of the physical and mental health of the recipients of art. However, it is indisputable that art affects the well-being, vitality and social functioning of the participants of cultural life. Participation in cultural events is therefore described as a cultural stimulus, and experiencing art as self-regenerating. Art stimulates creative behavior and positive attitude towards people, shows life as more significant and restores its meaning. What's more, scientists prove that art can become a mild addiction (O-Neil 2010), a dependency. And as Mark O-Neil emphasizes: "people must have a place where they can go out with their loved ones, they need their free time, when they do not work, to be meaningful and give meaning to their lives. Participation in culture is an important contribution to their quality of life, which should become an integral part of public health policy" (23).

Museum-Based Education And Therapy

Searching for the correct and effective relationship between education and therapy or building it is an element of museum education, and further a tool for therapy and individual understanding of oneself. Lois H. Silverman (2002) suggests that the museum contributes to the promotion of well-being and mental health in five ways: promotion of spending free time and rest; intervention and stimulation of beneficial changes in psychology and emotions or both; introspection affecting the mental health; supporting pro-health education; strengthening environments and healthcare institutions. Also Simone Alter Muri (1996) described the museum's activities in therapeutic categories,

pointing to its role in strengthening self-esteem, sublimation, socialization skills, introspection and creativity. Positive relation of experience-museum, participant-community is then transposed into the relationship of disease, lifestyle - health. And the main tools of museum-based therapy or gallery-based therapy are: dialogue, the opportunity to tell your story using museum objects and museum space or outside it - in the local space, often used by museum workers, referring to heritage and glacial memory. Dialogue as this element, which, according to Silverman, should be stimulated in the museum, especially discussions on so-called sensitive topics that allow the unconscious to become more aware, has an important therapeutic function. On the one hand, it is a reference to the philosophy of conversation, in the context of which the conversation is accompanied by mutual acceptance and affirmation of the individual. In addition, the very fact that the museum is open, accessible to all recipients, makes them a place for group and individual therapy. What is more, the fact that everyone can use the collection, independently read it and use it in a creative way, results in new recipients for the museum. Many participants of therapeutic activities visit the museum for the first time. Zhvitiashvili (Peacock 2012) calls the therapeutic attitude in the museum a "new dimension" expanding educational activities and inviting new audiences. Studies show that museums that have a special offer for people with dysfunctions are more likely and more often visited by people without any dysfunctions for two reasons. First, the ramps, lifts located in these institutions are used by, for example, parents with small children, which affects the fact that they go to this museum and not another. In addition, in the public opinion, institutions open to contact with people with disabilities are perceived as more hospitable, tolerant, benevolent, liberal, accessible, and building community. The museum thus becomes a safe place, a place of mutual acceptance. A space that allows you to overcome physical, mental and emotional barriers of people with dysfunctions or problems, as well as people who accompany them. Museum therapy has two faces: it is the therapy of disabled people, but also those who are able to learn to be open to otherness. A museum that often explores art as an element of influence during educational events, as Ray William (2010) emphasizes, allows to create an environment to support reflection and a sense of community. The museum is a space of peace and fantasy, a place for individual transformation and the preservation of the group's sense whether in a family, class, among friends or just a community of visitors and participants in a given event.

In this sense, the museum and its educational activities are close to the definition of art therapy created by American Art Therapy Association. She says that art therapy takes place using broadly understood art and media treated as a basic way of communication in a support environment in a creative process, the result of which is exploring feelings, controlling behavior, controlling anger, reducing anxiety, solving emotional conflicts, supporting self-awareness, developing social skills and competences, improving world orientation, raising self-esteem or self-imagination. Therapy leads to development through research and development of storytelling skills, personal extraction, individual narration through discussion and analysis of art, or transposition of emotions and problems into art. Art turns out to be a way to stabilize and express yourself, your defects, humors, problems. Museum-based therapy therefore refers to art therapy: plastic therapy, biblio-therapy, music therapy, teatro-therapy, drama, sometimes choreotherapy, but always with the use of museum exhibits, and successfully used in work with people suffering from cancer, diseases associated with the loss of memory, mental illness, developmental genetic diseases, mood disorders, social isolation, homelessness, traumatic experiences and post-traumatic stress, addictions, etc. Each condition can be treated by means of intellectual action or artistic. For people with memory problems, for example, the use of art materials alone, planning work can be therapeutic activity. Even more effective are the so-called memory walks and workshops of packing the suitcase in the right items before the trip, as well as meetings after the workshops in museum cafes, where informal conversations can take place. Sometimes debates are needed to stimulate the conversation of people with therapists or healthy people about similarities and differences, but also shared values - such meetings allow sharing their own experience, creating *communitas* and showing problems from many perspectives and ways of solving them and difficulties in finding them. Therapeutic functions also have joint activities - for example, work on the preparation of a temporary exhibition.

Therapeutic Methods Of Museum-Based Education

The therapeutic function has an interactive tour or walk. Using the collection to engage visitors, illustrating a certain idea and value, and overcoming social barriers is a very important and vital function of the educational mission of museums. An important role here is again exhibits, objects that stimulate activities, thought processes, stimulate creativity. These are intended to serve visitors, help their development. The task of museum professionals is therefore to show their possibilities, making them available to anyone who wants to see them. They indicate that the museum is important for people, objects and their experience, not just watching. According to Stephen Weil (1999) museum from institution has turned into an institution for someone. In this way, by becoming an institution of social change, it can even be a social space. Sometimes exhibits can be touched, which is not destructive for them. On the occasion of touch, you can also refer to the sense of smell - for example, the smell of sandalwood, from which it is made an

object. In this way, the collage becomes an element of multi-sensory experience (Classen 2007). Sometimes *museum exhibits* are only observed, but they can also be a contribution to social debate, the beginning of conversations, inspiration of artistic works, creation of thematic collections, reminiscences. It shows how surrounding objects affect people lives, how they can stimulate or strengthen well-being. Hence, in the literature on the subject, the term *object therapy* or *object-relations therapy*. It refers to personal or emotional relationships with objects and the object / exhibit itself treats as an aid in understanding how and why people interact with objects, and how objects represent human identity. The exhibits also enable emotional engagement, unblocking emotions and openness to a new perspective about oneself and the environment as well as interpretations of the world. Objective therapy and artefact makes a suggestive laboratory for understanding the relationship between people and things (Silverman 2010). Of course, this relationship will depend on the culture - in different cultures, objects are treated differently and attached to them more or less heavily. Tradition, historical knowledge, approach to the past, own experiences determine the cost of *museum exhibits*. They can be treated superficially as an element of consumption and permanent exchange, an impermanent thing, but you can also see in them an element of perfection, beauty, a sign of durability and continuity. In Japanese culture, for example, damaged ceramic items are restored in such a way that traces of repair are visible. In the place of glue, craftsmen apply gold or silver varnish, in order to give the object an additional value, to mark the trail of time on them, to sacrifice a new life or to show its history.

Museum like *Kintsugi* / *kintsugi* gives new meaning to objects, testify to the history, be part of the heritage, the product of human creativity, culture and become the basis or inspiration for new, individual history attenuated by the participants of education. These exhibits are therefore subject to a specific recycling - it gains the rank of an element of life of visitors, a way to express their emotions, a part of *storytelling*. Their transformation is a prerequisite for transforming storytellers. They allow you to tell a story, become its inspiration. The very fact of expressing yourself or your experience by means of storytelling becomes an essential element of therapy. And it is not the content of the story that is important, but the fact of telling a story, preparing it, presenting it. The storyteller becomes the owner, the subject of a unique, personal story and a new experience of exploring and expressing himself in a safe environment. In a creative way, he absorbs the sense of being and learns the different perspectives of self-assessment, his experience, which leads to empowerment and insight. History becomes a record or a metaphor of emotions, experience and well-being. And the fact of its disclosure leads to social involvement and a sense of communication with the group. And it is the feeling of belonging and being a part of the non-appreciation community that becomes the most important discovery for participants of therapy using the subject and *storytelling*. Not only art or storytelling, therefore, become a tool for therapy but the environment and atmosphere of their creation and sharing.

This form of education refers to the treatment of exhibitions or specific exhibits as enabling individual reflection. The same items can lead to completely different stories. They constitute a certain frame or reference point of the story.

Therefore, object therapy is described as an effective work to improve the well-being and presents for inclusion as part of the museum collection, or even intervention in many assisting institutions (Chatterjee 2008). It leads to life satisfaction, self-appreciation, makes it possible to see the intimate or imagined relationship with the exhibit. Although it might be better at this point to use the term the *extremity* that Slavoj Žižek follows Lacan. This category is a combination of what is external and intimate. Tony Meyers in the introduction in the Guide of Political Critique, devoted to the philosophy of the Slovenian thinker explains *extimacy* appealing to the eye vision. "If it seems to you a bit difficult to imagine - he explains to readers - think about the eyeball. You can see everything except what you can see - your own eyeball. The only way to see her is to look in the mirror, which is something external. The thing is similar with the subject: it is the point of view from which we look at reality, but which cannot be seen directly - it is necessary to use it for that purpose >> the mirror of << reality ' (Myers 2009). This mirror is a museum and its exhibits. It is in the narration of a storyteller narrated by museums that he discovers fragments that reflect his experience. What's more, the story is an intimate confession that also becomes *Extreme*, because it becomes public and can in a performative way influence the observers of the process of storytelling, recipients of history, stimulating them to tell their own story. There is a vanishing of the distinction between what is intimate and public, and the status of an *extreme*. Storytelling used in the museum as an element of education both inscribed in the narrative of the exhibition, the selection of artifacts, and the actions of the participants, thus begins to be a way to construct themselves as a person and a member of a given group. The story inspired by the exhibit is not only related to the remembrance and mimetic reproduction of what was, but also to creative thinking, imagining, creating a colorful story inspired by a story, subject, people, memory. *Storylines* are part of the personal narrative, which, however, are entangled in the social, cultural, political and historical context. Individual story overlaps the story of other group members and uses discourse or cultural model. *Personal story* refers to a unique, individual experience inscribed in the social order, a common story of a given group and a dominant cultural narrative known and reproduced by a social group in a given

place and time. Therefore, personal history seems to be determined and it is impossible for it to be freed from the universal narrative. Of course it can modify existing narrative, deny it, or replace, but will always be set against the dominant cultural narrative - compared to it, recognized it as such. Personal narration will therefore be a sub-narrative. Therefore, each museum story, both presented by museum professionals: curators and educators, as well as the one presented by the recipient whether publicly or intimately participates in the construction of the image, image of the individual and the group, which becomes an element of common, cultural narrative. The artifact is an essential element of this story - it testifies to a certain continuity, attributes specific details to the stories, places it at the time of the exhibit's origin and telling about it, and proves how this story has changed, how the story was different. One can apply the metaphor of the new literary machine used by the German playwright Heiner Müller to this history of the subject, reformulating it into the idea of a new narrative machine. To describe the story, Müller started a *new literary machine*, that is, he undertook a dialogue of the present with the past. This dialogue was to lead to the presentation of objective truth and in a performative way to influence the viewers - to stimulate their reflection. The playwright believed that "confusion (...) matter can create such a relationship between [the past] and the present, which can be called a *fiction of fact*, that is, an expression of what actually happened or edited, in the medium of linguistic fiction" (Walerich-Szymani 2004:77). That fiction actuality called by him *new literature engine* serves the purpose of finding the difference and similarities in the still repeating patterns and its present form. So to describe what is postmodern perception of everyday life as a result of certain events of history or heritage elements, should focus on the space between the two poles of time. Think about what the artifact was, what it proves, why it testifies what it witnessed, what it punishes remember and how it relates to an individual story, where a social story, a cultural code is caught up in a narrative, determines or shapes the history of an individual. Then reflect on what this object is today, what history allows to tell, which, according to museologists, is to tell why it is located in a specific place. These relations between the current meaning of the subject and its useful function in the past and between individual and social history constitute a narrative machine, allow to bend over the meaning of the past, its interpretation and the meaning of the individual past and its consequences. The metaphor of the narrative of the new machine allows you to show the history of (re)conceived of object show stories about *storytelling* as well targeted narrative, which often distorts, blurs or deconstructs the cyclical trend of autocratic history. And only the launch of a *new narrative machine* allows its disclosure and empowerment. Therefore, the concept of using museum objects to reflect on oneself and on general history it corresponds to the postmodern vision of the past based on a grid model, consisting in the reproduction of certain patterns, discourses - their repetition, transformation, exploitation, appealing to them, to say what is *extreme*.

Subject therapy therefore allows you to explore the object first and then the museum message and refer it to your own experience and then to interpret the values promoted by the museum. In this way gives you the opportunity to look from many perspectives on the issue of meters illness, loss, grief, helps in recovering a sense of dignity, respect and a positive sense of defining their identity. The subject as part of this therapy is a source of remembrance and telling the history of life. John Mack (2003) even claims that the object is a reservoir or an absorber of memory, and Allan Paivio (1986) shows that you are connected. This property has not only a long time, but short-term memory, and refer to both visual memory, and verbal and sometimes, as the authors note *Enhancing Cancer patient Well-Being With a Nonpharmacologica, Heritage-Focused Intervention* (Thomson, Ander, Menon, Lanceley, Chatterjee 2012), also refers to sensory memory. As writes Constance Classen (2007), an object in a museum can be a medical tool. By giving meanings, it intervenes in the everyday life and identity of the visitor.

In reference to space or exhibits - people involved in the process choose a *museum* or place to help them express themselves, where they feel safe and tell about their choice. The exhibits are used to express your experience, strengthen positive thinking, but also to be a witness to the development of other participants. Educators and therapists provoke further discussion, ask questions, stimulate conversation and prove that the museum is a safe place where everyone can feel accepted, express themselves and their own opinions. Art in the museum in this way makes people more socially open and the space of the museum is a sphere of engaged dialogue. The very fact of initiating or making a dialogue is its therapeutic function. Dialogue as this element, which, according to Silverman, should be stimulated in the museum, especially discussions on so-called sensitive topics that allow the unconscious to become aware, has an important therapeutic function. On the one hand, there is a reference to the concept of conversation, in which conversation is accompanied by mutual acceptance and affirmation of the individual. The philosophy of a conversation by Martin Buber (1992) says that you can express yourself only through a relationship with another person. Only during contact with another person can you experience a real encounter. And by presenting the interlocutors themselves and their views, gain the subjectivity, because in the eyes of the other person one gains the conviction of his being. Buber therefore preached the dialogic principle understood as co-participation, tolerance and *Einander-Zuwenden*. The philosophy of Józef Tischner's dialogue is also close to this principle. Similar correlations could be

multiplied. Each time, the philosophy of dialogue or conversation will show the exchange of information, meeting with other people as significant in shaping the subjectivity and identity of the individual. And it is the sense of this specificity that has a therapeutic function here. The mere perception of dialogue - which is the equivalent of health - allows internal democracy, because it leads to talk and exchange. In contrast, the monologue is identified with the disease, because it relies only on referring to a given form of the "I.I." Dialogue here is a conversation taking place at the structural, social and cultural levels, based on the exchange of views, seeking and understanding sense. It is kind of allegation (Głowiński 1986), and therefore the element of dialogue is opposed to unanimity and authoritarianism, quotes statements and interpretations of others to justify and make their own. It consists of four components: listening, analyzing, synthesizing and explaining. As Jerome Seymour Bruner (2006:43) remarks, dialogue allows you to discover wise and deep things. It enables sharing emotions and thanks to this a participant in dialogue or polylogue becomes involved. His mature attitude allows for a sense of satisfaction in achieving a certain level of skill and / or knowledge. The monologue is therefore connoted with a totalitarian regime or absolute rule. Meanwhile, dialogue leads to creative development, assimilation and reconciliation of the various faces of the "I". Dialogue is primarily a healing opportunity to speak with your own voice. It allows you to develop skills in building new, interpersonal relationships, building a dialogue attitude, co-creating social knowledge from the perspective of many "me", flexible entering into different relationships with other people and saying silent stories (Siodmiak 2008:176). Dialogue is not only understood here as asking questions and answering, but also replication, or the ability to understand and correctly respond to a conversation participant. What's more, it presupposes the existence of a speaking person and a social audience. It is based on the intersubjective opinions that are expressed both by the creator and the recipient of his work. It enables viewing the situation from many perspectives and it is necessary to refer to the interlocutor's opinion.

Conclusion

Philippa Winn (2001) proves that the museum allows you to look at life in a broader context and becomes a place of inspiration and relief from problems. Telling stories based on exhibits, making them the heroes of a story or telling their stories around objects allows not only for understanding art, combining life with art, but also for solving individual problems. Acts of reminding, for Maurice Halbwachs (2008) can be called the location of memories. The French sociologist, more importantly, also emphasizes that a story that interweaves or uses memories is not just an act of reproduction, but a creative one. And although he was usually critical and he was referring to the theory of another French philosopher, Henri Bergson (2012), in the matter of remembering he was inspired by his idea of remembering as a (re) presentation. He argued that the remembrance is rather an act of evocation, a creative, creative or even performative action. And similarly to those theorists of memory he indicates that the story is ruled by present rules, and this is subordinated to the present quoting past, for the purposes of the present moment the story is constructed.

Activation of these memories, both good and difficult or negative, is often associated with well-being, because it allows for positive reminiscences or purification. David Read Johnson (1987) describing therapy through art, refers primarily to traumatic memories, indicating that their release or disclosure and then sharing them allows one to deal with them. In this way, he proves that every time the memories have the power of *catharsis* (Philips 2008). Art therapy, including painting, sculpture, drawing, but also object therapy, meditation and analysis therapy allows one to get to know oneself in the process of interpretation, creation or narrative about artifact. Communicating your own perception of the world and referring to your own knowledge or experience helps you to better understand yourself and articulate your worldview, introduce yourself. Stimulates personal development as well as self-esteem and self-awareness. In addition, it helps to overcome monotonous and routine. Discussion and an attempt to defend one's own interests reveal what is unconscious, hidden or disregarded. What's more, it allows you to interact and build social relationships.

Bibliography

- Aegyle, E.; Bolton, G. (2005). „Art in the community for potential vulnerable mental health groups”. *Health Education*, 105, 5:340-354.
- Alter Muri, S. (1996). Dali to Beuys: Incorporating art history in art therapy treatment plans”. *Journal of the American Art Therapy Association*, 13,2:102-107.
- Bergson, H. (2012). *Materia i pamięć: o stosunku ciała do ducha*, Kraków: Wydawnictwo vis-à-vis/Etiuda.
- Bruner, J.S. (2006). *Kultura edukacji*, Kraków: Universitas.
- Buber, M. (1992). *Ja i Ty: wybór pism filozoficznych*, Warszawa: Pax.
- Chatterjee, H. (2008). *Touch in Museums. Policy and Practice in Object Handling*, Oxford: Berg Publishers.
- Classen, C. (2007). “Museum Manners: The Sensory Life of the Early Museum”. *The Journal of Social History*, 4 (4): 895–914.

- Głowiński, M. (1986). „O interseksualności”. *Pamiętnik Literacki*, 4: 75-100.
- Halbwachs, M. (2008). *Spoleczne ramy pamięci*, Warszawa: Wydawnictwo Naukowe PWN.
- Johansson, E. (1996). “Attendance at cultural events , reading books or periodicals, and making music or singing in a choir as determinants for survival: Swedish interview Survey of living conditions”. *BMJ Clinical Research*, 313 (7072):1577-1580.
- Johnson, D.R. (1987). “The role of the creative arts therapies in the diagnosis and treatment of psychological trauma”. *The Arts in Psychotherapy*, 14(1): 7-13.
- Konlaan, B.B.; Bygren L.O.; Johansson, S-E. (2000). “Visiting the cinema , concerts , culture or art exhibitions as determinant of survival: a Swedish fourteen-year cohort follow- up”. *Scandinavian Journal of Public Health*, 28 (3):174-178.
- Mack, J. (2003). *The Museum of the Mind: art. An d Memory in World Cultures*, London: The British Museum Press.
- Myers, T. (2009). *Slavoj Žižek*, [in:] *Žižek. Przewodnik Krytyki Politycznej*, ed. Kropiwnicki, M.; Kutyla, J. Warszawa: Wydawnictwo Krytyki Politycznej.
- O'Neil, M. (2010). „Cultural attendance and public mental health - from research to practice”, *Journal of public mental health* , 9, 4:22-29.
- Paivio, A. (1986). *Mental Representations: A Dual-Coding Approach*, New York: Oxford University Press.
- Peacock, K. (2012). “Museum Education and Art Therapy: Exploring an Innovative Partnership”. *Art Therapy. Journal of the American Art Therapy Association*, 29, 3: 133-137.
- Philips, L. (2008) *Reminiscence: Recent Work at the British Museum*. [In:] *Touch in Museums. Policy and Practice in Object Handling*, ed. Chatterjee, H. Oxford: Berg Publishers, 2008.
- Silverman, L.H. (2010). *The Social Work of Museums*, Nowy York: Routledge.
- Silverman, L.H. (2002). *The social work of museums*, London: Routledge.
- Silverman, L.H. (1989). *Johnny Showed Us the Butterflies": The Museum as a Family Therapy Tool*, [in:] *Museum visits and activities for family life enrichment*, ed. Butler, BN and Sussman, MB. New York: Haworth Press.
- Siodmiak, K. (2008). *Perspektywa dialogowego "ja" w arteterapii*. [In:] *Arteterapia w medycynie i edukacji*, ed. Karolak, W.; Kaczorowska, B. Łódź: Wyższa Szkoła Humanistyczno-Ekonomiczna w Łodzi 2008.
- Thomson, L.J; Ander, E.E.; Menon, U.; Lanceley, L.; Chatterjee, H.J. (2012). “Enhancing Cancer Patient Well-Being With a Nonpharmacological, Heritage-Focused Intervention”. *Journal of Pain and Symptom Management*, 44, 5:731-740.
- Walerich-Szymani, E. (2004). *Godzina aktora. Poszukiwanie utopii w dramaturgii Heinera Müllera*, Kraków: Księgarnia Akademicka.
- Weil, S.E. (1999). “From Being about Something to Being for Somebody: The Ongoing Transformation of the American Museum”. *Daedalus*, 128, 3:229-258.
- Williams, R. (2010). “Honoring the personal response: A strategy for serving the public hunger for connection”. *The Journal of Museum Education*, 35 (1):93-102.
- Winn, Ph. (2001). Arts for health: Art. Therapy at the National Gallery of Australia. 6th National Rural Health Conference Canberra, Australian Capital Territory, 4-7 March 2001, http://www.ruralhealth.org.au/papers/6_G_6_2.pdf (access: 10.05.2018).

The Narrative Analysis Of Akira Kurosawa's Film 'Dreams'

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Abstract

It has become inevitable acquaintance with semiotics and cinema due to be one of the leading arts in own age and has a specific language in 1960's. Semiotics that is used in literary analysis previously, has aimed to find out how meanings become in a film, by merging with cinema. Greimas's analysis method which is based on Saussure's semiotics and Propp's narratology, is exemplified to first significant semiotics studies as part of structuralism. In the Greimas's analysis, textual progression from superficial stages of the text to deep meanings processes with codes like actants editing and competence/act. Deep meanings were based on antilogy about world and life. Greimas has constructed square of semiotics by considering these antagonisms like a quadrangle. In study, Akira Kurosawa's *Dreams* film was analyzed with Greimas's actantial model and square of semiotics. Findings of the studies prove also Greimas's rightness that asserts to review non-linguistic signs with semiotics analysis. Applying of this model that was improved by cinematic narrative to films demonstrates that film is a phenomenon which can be discussed at text grade. According to Greimas sections are important in cinematic narrative in point of regulating presentations and explanations of events.

Keywords: Semiotics, Semiotic analysis, Cinema

Introduction

Improvement and the use of semiotics that only used in literary analysis previously in cinema and historically based on old ages, was materialized in 20. Century. Great interests to cinematic semiotics have brought with a lot of studies. Semiotics in cinema has reviewed signs in narration, has explained relationships with each together and had become a method by many people that interested in cinema. Semiotics which is based on structuralist approach has made reinterpretation process with refinding process of producing meaning. Semiotics can apply on many fields like literal texts, theater, cinema, fashion, architecture, photography. Semiotics reviews producing process of meaning, tries to find out deep of meaning. In the study, Akira Kurosawa's film is called *Dreams* will be analyzed by this model that composed method of Greimas's semiotic approach, actantial model and semiotic square explaining.

There are sender, object, subject, opponent, receiver, helper like in the other narration types. People who mentioned in narration have analyzed depending on their actions. Greimas achieves positiveness and negativeness levels of text with explaining as semantic and logical. The semiotic square is become with adding many meanings together; it explains relations contained all conceptual antagonism by using quadrangle. Meaning in deep of the text has been found out at this quadrangle. Words in square have been based on relations that contained antilogy/paradox by scheduling positive and negative systems between sign units. Words in the square have been formed underlying structure.

The film, chose in the study, is important according to cinematic language of Kurosawa who has got Japanese culture roots strongly. Textual structure and patterning way of the film were analyzed in narrative and figurative level; were broke with sections according to actant model by depending with Greimas's model. Events were happened in films were boarded in the context of actant relations. Acts were exposed in the context of actant tables.

1. Greimas and Semiotics

First of all, semiotics is a science that related conceptual meaning and signs. It is concerned with how was organized texts like in film, television and other art products. Semiotics is a science which characterized interdisciplinary; it describes what sign is and how they work (Berger, 1996: 11). Semiotics tries to respond meaning forming and questionings about how it is presented by using linguistic and logical method and it gets source from structuralist approach. Its starting point is reinterpretation request of person their own environment and world where lives (Erkman-Akerson, 2005: 77-78). Many linguists as Lois Hjelslev, Algirdas Julien Greimas, Roman Jakobson, Julia Kristeva have contributed to develop of modern semiotics (Parsa and Parsa, 2012: 4-5). Morphology of the story has affected developing of semiotics with Todorov's and Propp's assistance by considering of universal values. Particularly, semiotics has become an autonomous science at 1950's.

Greimas who has asserted that narrations were formed common patterns, has achieved own analysis method with structuralist approach which was developed by himself while reviewing Propp's tales. Greimas's analysis method that has benefited from Saussure's semiotics and Propp's narratology in the scope of structuralism has precipitated

to make first of significant semiotic studies (Soydan, 2007: 1). Greimas has affected many litterateurs with an approach as structural.

Greimas has said there is a common semantic axis which is found out in the all texts. Parts which formed semantic axis can be put in order like this: Basic Semantic Dimension: is the deepest structure and contains oppositions. Basic Semantic Dimension and Syntactic Narrative Dimension: is deep structure of the text. It handles basic oppositions of life.

Syntactic Narrative Dimension and Surface Dimension: is surface structure of the text and revenge becomes an individual work (Erkman ve Akerson, 2005: 149).

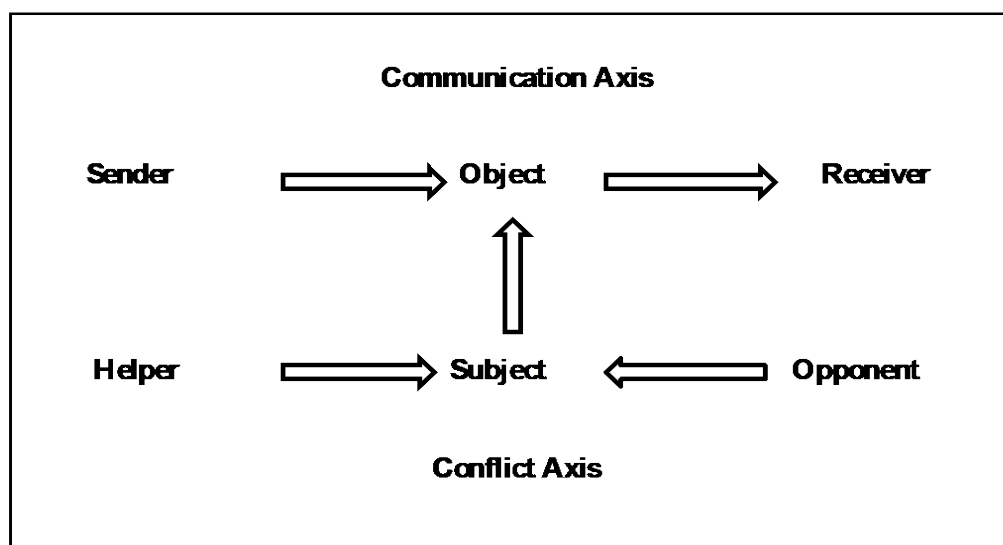
While narrative dimension of the text in surface structure, discursive and thematic parts are reviewed, basic narration grades that have universal qualified and were formed surface structure of the text are determined (Öztoğat, 2004: 152). Greimas's structuralist studies draw sequential analysis which depends on comparison near syntagmatic which depends on combining. Greimas has spread semiotics over a wide area by carrying linguistic further. Greimas's semiotic theory is studied in that difference of narrative/contents (Parsa ve Parsa, 2012: 90).

Greimas has mentioned three essential layers in narration. These are figurative, narrative and thematic grades. People in the narration are exposed with their space and time functions in the figurative grade. Signs in the text are matched together. People in the narration are analyzed in narrative grade. It is faced with Greimas's actant model in this grade. According to Günay, Greimas's actant model is a relation between sender, object and receiver depending on own interaction of actant each together, a relation between object and receiver, an interaction between subject and object, an imperative axis between sender and object, a testing axis between helper, subject and opponent eventual. Subject is interrelated with whole actants (Günay, 2007: 195). Greimas's actant model is sender (determiner of the act), object (topic of the act), receiver (person whom the action was took place for him or her), helper (person who helps to the act), subject (person who is the actioner) and opponent (person who blocks to the act). He thinks, these characteristics formed narration in every text (Parsa ve Parsa, 2012: 90).

Another significant topic is narration grade that converted initial situation to result, is called as narrative curriculum by semiologist. Greimas has classified narrative curriculum in four stages:

1. Manipulation: is first stage. Sender directs the subject to a purpose, a situation, position or an object in this stage.
2. Competence: subject controls whether he/she can or cannot get the action that directed from sender
3. Act: subject starts the action that signified by sender.
4. Sanction: in the result of the action that signified to subject, subject is awarded or punished (Günay, 2007: 199).

Greimas says that narrative, semantic and enunciations structures are not closed in themselves and there are relations among them. These relations happen in significant liberties and limitations; structures are flexible. For instance, it can't be seen manipulation or sanction stage in every text. Semiotics has headed for making signification integrity theory instead of sign theory by transforming rhetoric semiotics gradually (Kıran, 2009: 8). When we reviewed actants as sender affects subject to prompt, narration grade that they directed, is called manipulation. Chain of events start to become at this stage. A subject does the on another subject at this stage in other words it can be said to get action done. Subject controls own abilities if they enough or not for going into the action at competence stage. Sender and helper is two actants that help to subject. The action is seen if it becomes or doesn't in the result of control at stage act. It is the phase in which the subject took place action that subject decides to do in narration. In the result of the action, subject becomes sender or awards or punishes in person at sanction stage that is the last one of four gradual models (Rifat, 2007: 31-33). Greimas has converted the actions to six actants and has demonstrated relations between each together like in table (Gündeş, 2003: 56):

Chart 1: Actantial Model

Subject: Looking for the object

Object: Looked for by the subject

Sender: Of the subject on its quest for the object

Receiver: Of the object to be secured by the Subject

Helper: Of the subject action-helping

Opponent: Of the subject obstructing action (Günedeş, 2003: 57).

The six actants are divided into three oppositions, each of which forms an axis of the description (Kıran ve Kıran, 2000: 216):

1. Axis of desire: Subject and object. The subject is what is directed toward an object. The relationship established between the subject and the object is called a junction, and can be further classified as a conjunction or a disjunction.

2. Axis of power: Helper and opponent. The helper assists in achieving the desired junction between the subject and object; the opponent hinders the same

3. Axis of transmission: Sender and receiver. The sender is the element requesting the establishment of the junction between subject and object. The receiver is the element for which the quest is being undertaken. To simplify, let us interpret the receiver (or positive receiver) as that which benefits from achieving the junction between subject and object.

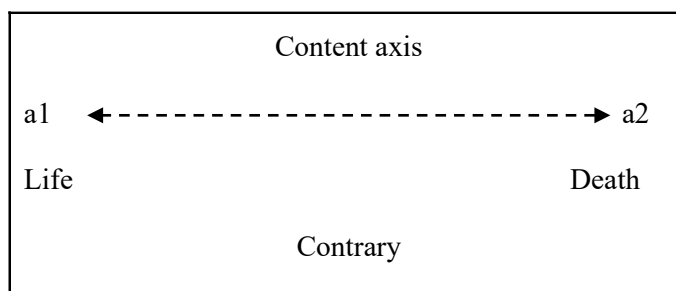
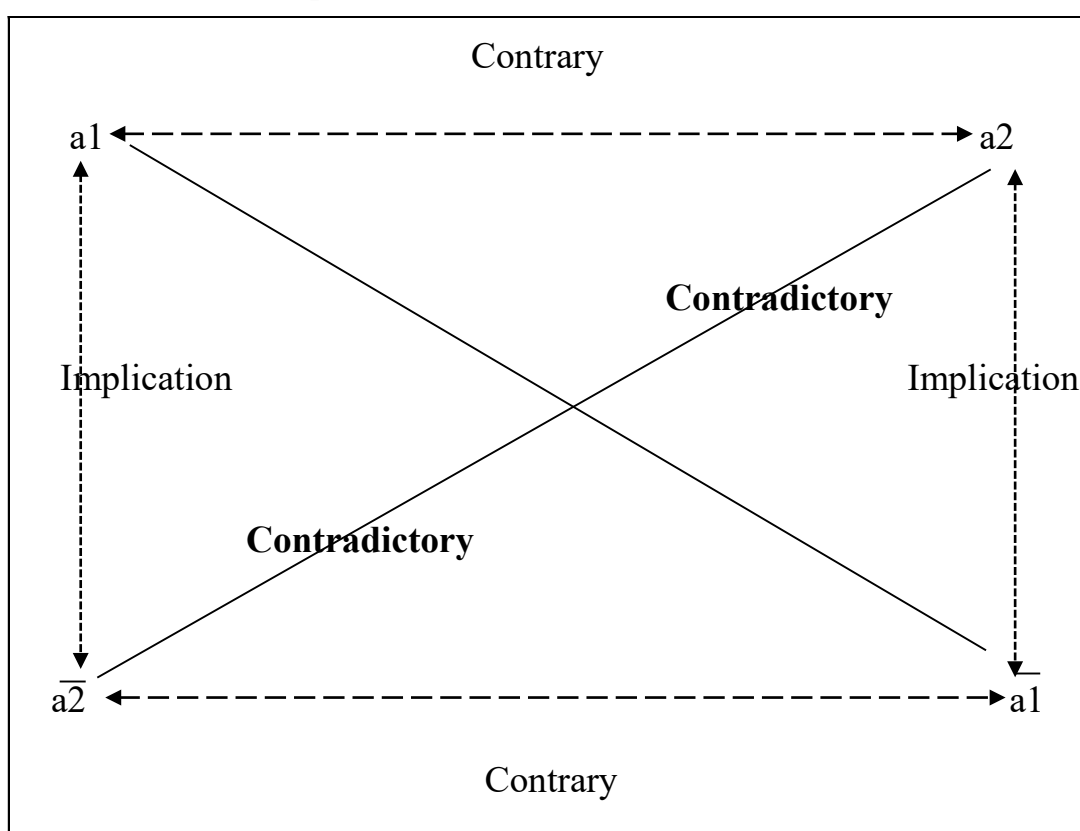
Greimas evaluates actants by correlating own relations in four meaning axis. While relation between sender, object and receiver were forming communication axis, interaction between subject and object forms desire axis, relation between sender and object forms imperative axis. Communication axis demonstrates that sender needs to object or to convey anything to anyone or an object. Desire axis provides to reach of object to receiver with overcoming all obstacle of subject. Act axis means grade which subject is able to form the act that converted to materialize from desire. Helper provides this power to subject. Opponent is in a negative power situation which blocks subject's action. Also, this axis demonstrates relations between actants. Subject almost has got a relation with all actants. Every actant schema forms depending on subject, if we explain this situation clearly. Also changing of subject means that changing of actant schema (Günay, 2007: 195). It can't be together all component of actantial model. There are six actants together in some narrations, a few one can be seen in some (Yücel, 1999: 120-121). Relation between to actants exposes essential enunciation and essential enunciation is divided two parts as situation enunciation and act enunciation.

First of all, deep and intangible logic that regulates relations on rhetoric and narration grade in third layer of analysis which is the most intangible and the deepest grade of grade-meaning universe is searched. Primarily thing to do at this stage is determining relations which provides to materialize essential syntax, then, how happens logical transformation between each other must be searched. Types of relations are determined by logical transformation like completion (containment) and negation (opposition, contradiction, containment or complementation relation).

For this purpose, it is found out both relation types and logical transformation between each one with semiotic square (Rifat, 1996: 34-35).

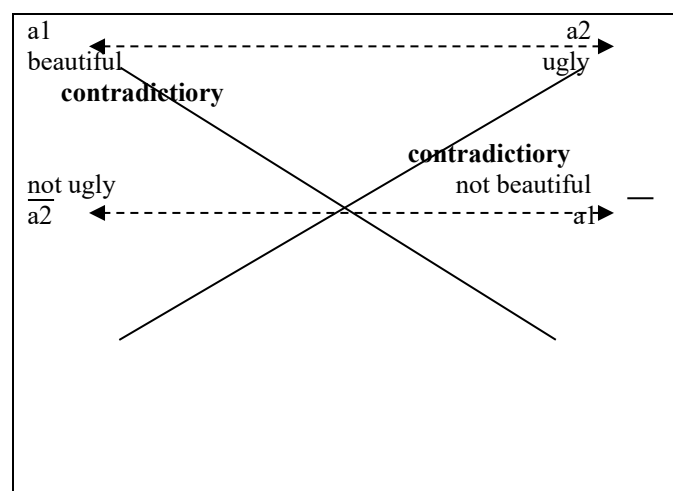
Thematic grade is the deepest grade of narration. The text contacts with systems related with world and life in this grade. Essential semantic dimension, called the third dimension is one of the most important interpretation which Greimas has put on; he has mean deep meaning with this dimension. The text contacts with some systems from out literature in this dimension. This dimension related world and life was based on opposition. Every text reviews changing and transforming of these essential oppositions. Greimas thinks these oppositions like a quadrangle and he called it semiotic square. The semiotic square also goes to Aristoteles's principle of contradiction from structuralist approach (Erkman ve Akerson, 2005: 147).

Semiotic square is representation of relations which entailed all conceptual opposition in visual form. Relations in semiotic square are explained with *opposition/contradiction* and *containment (completion)* relations. If a policeman is a policeman with his visual and uniforms, this evaluation is conceptualized with (A) concept on reality/meaning axis. According to Greimas this reality takes place from two opposite sign units. These two sign units is opposite and complete each other, there is relation among them like and... and. a1 and a2 determine existence of two terms that conflicted themselves in the following two opposite sign units (Kıran and Kıran, 2000: 248-249).

Chart 2:**Chart 3: Semiotic Square**

Semiotic square is loaded up with semantic values while passing through semantic categories from symbolic categories. Firstly, structure of the text is destroyed and then it is rebuilt again by this method. In this way, it is descended through deep structure from surface structure of the text. Semiotic square classifies and exhibits intangible units that formed basic structure of any meaning world and relations between these units. At the same time relations system provides to evaluate basic semantic structure (dualism) that supplied to form a significant part in intangible and logical grade and basic syntactical structure (logical relations, transformations between dual components). Rifat has explained drawing of the semiotic square (with lexical units) and components in drawing as follow (2009: 79):

Chart 4: Semiotic Square



←-----→ Contrariety relation
 ----- Contradiction relation
 ←-----→ Complementarity relation

a1 ve a2 : Contrary
 a1 ve a2 : Contrary
 a1 ve a1 : Positive contradiction
 a2 ve a2 : Negative contradiction
 a1 ve a2 : Positive implication
 a2 ve a1 : Negative implication

When sample that shown in Table 5 was placed on the semiotic square, it will be clarified according to lexical units like 'the ugly one' is opponent component of 'the beautiful one'. 'The non-beautiful one' is contrary component too. At the same time, they contain themselves together mutually like 'the beautiful one' with 'the non-ugly one' and 'the ugly one' with 'the non-beautiful one'. Consequently, it can be achieved to opponent, contrary and components that contained from 'the beautiful one' or 'the ugly one'. Negation, completion and containment are logical operations that provide transformations. These relations become between a2-a1 and a1-a2 (Rifat: 2009: 80). Character can be investigated according to narrator or spatial perspective or a viewpoint which includes all of them together while the semiotic square was forming.

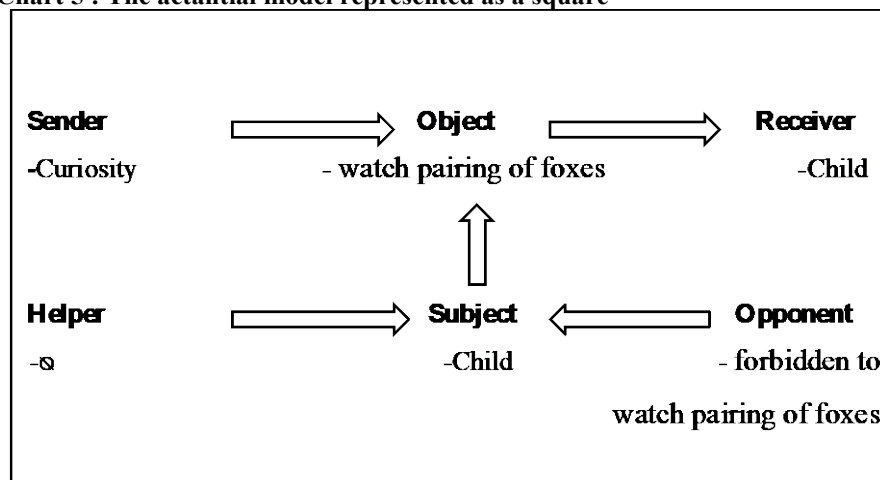
1. Investigation of the Film 'Dreams' by Semiotic Method of Greimas

Akira Kurosawa's film called *Dreams* (1990) becomes from eight short films that are independent from each other. 'Sunshine Through The Rain' narrates life of a child was forbidden to go out by her family in a holy day of society. 'The Peach Orchard' emphasizes results of human intervention through nature. He has narrated in 'The Blizzard' adventure of mountaineers who were stuck in mountain and try to achieve to camp while they were frozen to death, in 'The Tunnel', a commander who met with soldiers that he is in charge of their death. In 'Crows' he has narrated a painting student who has tumbled into picture while walking in Van Gogh's art gallery, and respect to Van Gogh and his art, he has narrated in 'Mount Fuji in Red' the end of world because of fatal gases from nuclear power plant explosion. 'The Weeping Demon' has issued nuclear power plants and demon who has mutated by exposing radiation despite being a human before. Eventually 'Village of the Watermills' ends in a village in peace and joy with hope despite all pessimisms. According to Kurosawa, nature is the biggest creative power. Spending life of creatures is possible only if they give up fighting with nature, respect to creative power of nature and submit to nature (2014: 293-295). Actually, these dreams are topics which Kurosawa wanted to query them his own language. Each of films make interrogate again to nature and life while looking landscape of today. The film 'Dreams' has reflected cultural components, myths and fears that take significant place in Japan life. Although it is shown like there isn't any connection between episodes in film, there is a timewise and holistic meaning connection. In this study, 3 dreams were included to review. These dreams are related subjects like nature, life, environment, nuclear energy, war, heroism, developing technologies, death; actants model and semiotic square have been formed in this subjects' context. Actants model of Greimas sorts text to sections in own while analyzing narration. It makes this in integrity of text. There is connection between sections and they doesn't make a sense by their own, in other words they become more meaningful in integrity. Film has been reviewed within these data by sorting sections and forming actants model in every section own.

2.1 First Section: Sunshine Through The Rain

A child at 8 years old goes out a day which is forbidden to go out according to Japan mythology. It is believed in Japans, foxes have celebration each together in rainy days and no one does not go out in this day which is accepted special. Kid goes to forest and watches pairing of foxes despite his mother's warnings. Actually, thing that shown like fox in film is people who are in human form. When child came back to home his mother said that foxes were very angry for him because of he did that he mustn't do, and they dropped a knife to kill himself for penal but if he apologizes maybe they will forgive him. Mother said to child that if he isn't forgiven, she will not take in home. Child goes through forest to apologize from foxes. It is uncertain that whether he is forgiven or not in the end of dream. Nature is a fact that must be respected in film and kid has interfered this. Nature was reflected blessed and it has been emphasized by mother's words "*go and apologize from foxes, otherwise I don't take you in home*" that intervention is an unforgiveness thing even a child does this. Many components included Japanese culture attract attentions. Traditional dance, special dresses, Japanese architecture are sample for this.

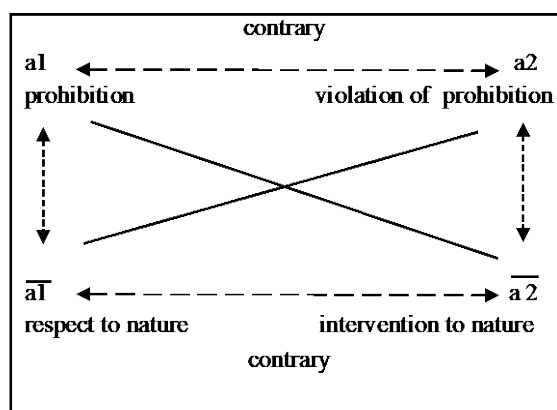
Chart 5 : The actantial model represented as a square



Subject= S_1 ,
 Object= O_1 ,
 Sender= S_2 ,
 Receiver= R_1 ,
 Helper= H_1 ,
 Opponent= O_2 ,
 Narrative Curriculum = NC_1

When we looked at communication axis of table, this is a watching for curiosity of how foxes celebrate their pairing at the same period in every year. The hero of the story and the person who will utilize from action is child. O_2 of sender S_1 has been forbidden to watch pairing of foxes that is society rules of Japanese society. S_1 has gone to forest and watched pairing of foxes to achieve value object despite warning of his mother. Initial situation, S_1 is neither separate nor in conjunctive position. Subject is both together and separate with its object. Subject and its object has switched into conjunct situation by going of the child to forest. $S_1 \wedge O_1$ situation has become. The subject has been warned due to make mistake by his mother and has been gone to forest to apologize in the act axis that includes subject and opponent. It is uncertain that whether the child is forgiven or not in the end of section.

Chart 6: Semiotic square

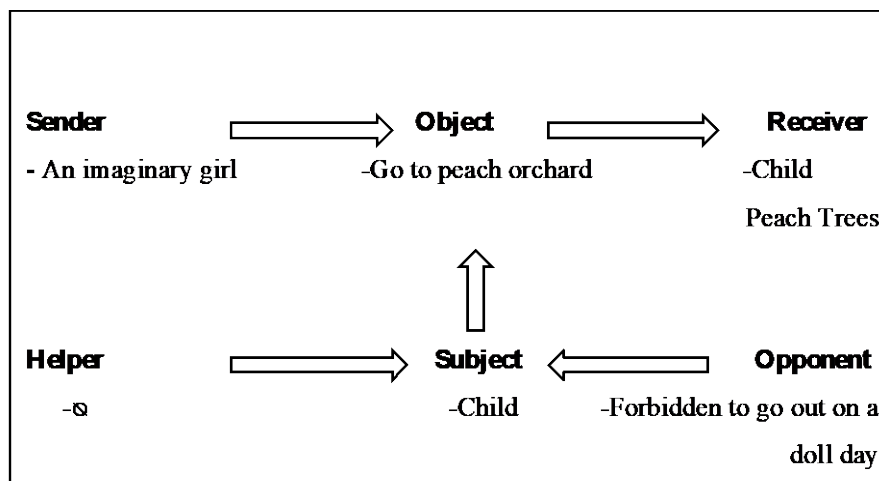


When we looked into deep structure of the dream, prohibition/violation of prohibition, respect to nature/intervention to nature are appeared. Contrary component of 'prohibition' is 'violation of prohibition', contrary component of 'respect'. At the same time they contains each other that 'prohibition' with 'respect to nature' and 'violation of prohibition' with 'intervention to nature'. Consequently, it can be achieved to contrary and containment components from 'prohibition' or 'violation of prohibition'. The child have gone to forest and watched foxes by don't pay attention on prohibition even though it is forbidden that going out and watching pairing of foxes. In the other one of these oppositions that are related Japanese culture one-to-one, holiness of nature opposition was formed. Child has watched pairing of foxes thereby he has interfered to nature and it is necessary that being holy of nature and respect to nature. In here, pairing of foxes is presented as a natural event. This situation has generated *opponent meaning stage*. Child who intervened to nature has endured results that he will pay the penalty. Director worried about future of nature whereat future of humans has mentioned clearly in first dream.

Second Section: The Peach Orchard

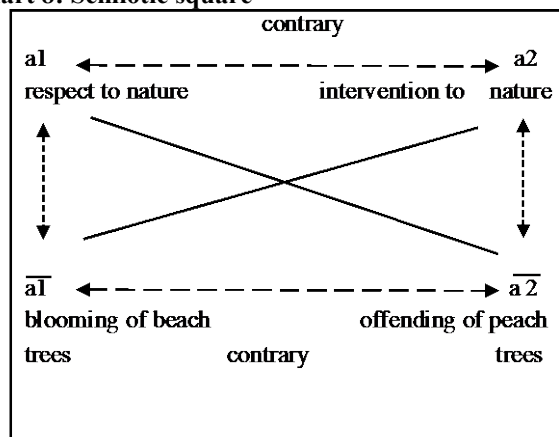
A little kid goes out thereby don't listen her sister's advice in a day called 'doll day' which is a festival of young ladies in Japanese culture. She arrives a peach orchard with following an imaginary girl who she can see only. When she arrived, she meets spirits of peach trees that cut down by her family. 'Baby day' is blooming day of peaches but it isn't celebrated without peaches. People said they are spirits of peach trees charges the child because of cut trees by her family. "What will you celebrate without peach trees?" he asked. The child starts to cry and specifies that how much she loves peach trees like "no, I like blooming of trees, I like that orchard, I can buy a fruit with money but is it possible that buying a peach orchard?". Then, one of the spirits says that child cried while trees were cutting, and she is a good girl. So, child allowed to watch blooming of peach trees once more by spirits. Human-like spirits are in there demonstrates blooming representatively with dance and music. Orchard gets full of trees suddenly and trees disappears frighteningly. Then, a sapling appears, and the child is happy. In this dream, emphasized thing is fruits that is given from trees as well as blooming, to be tree and to be grew in respect to nature. It is explained that it is necessary to not offend nature in dream that is finished with a hope which nature may be forgiver.

Chart 7: The actantial model represented as a square



Sender value object of S_1 on communication axis is curiously desiring to follow the girl who is seen only by her. Sender starts to move in terms of delivering a thing to receiver subject in communication axis on object and receiver axis. Opponent of subject is O_2 . Other children who have been in house where was celebrated doll day have warned S_1 about it is forbidden to go out on doll day. S_1 has followed girl thereby don't pay attention on warnings and she has achieved to peach orchard. Bearing helper actant role to S_1 is her going to peach orchard. Subject has achieved value object $S_1 \wedge O_1$ situation has become.

Chart 8: Semiotic square



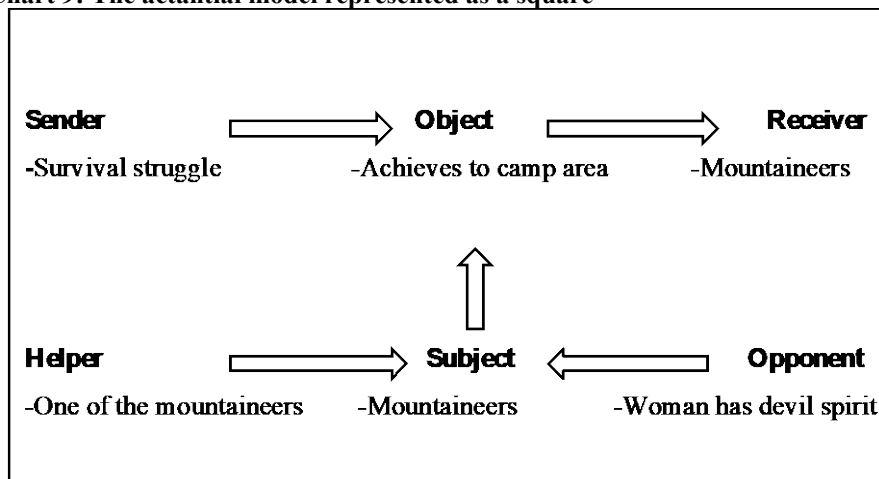
In shown words in semiotic square, 'intervention to nature' is opponent component of 'respect to nature' according to units. Also, contrary component is 'be offended peach trees'. At the same time, they contain each other that 'respect to nature' with 'blooming of peach trees' and 'intervention to nature' with 'offending of peach trees'. There is a *contradiction relation* between 'intervention to nature' and 'blooming of peach trees'. So, it can be achieved components that include opponent, contradictory and containment from 'respect to nature' or 'intervention to nature'. When we looked at deep meaning structure of The Peach Orchard dream, it is occurred like in first dream again that it is a necessary to respect to nature and little child's family had broken this. Re-blooming peach trees forms *opponent meaning stage* after intervention of little child's family to nature without respect and apologizing tearfully of child after peach trees were offended.

Third Section: The Blizzard

The Blizzard narrates survival fight of 4 mountaineer about to be frozen to death and snowstorm which they were caught on about to achieve to camp. Mountaineers who can't resist to snowstorm falls asleep and a woman comes to lay over mountaineer as she wants to their sleeping. One of the mountaineers doesn't want to sleep and woman presses him to snow and says, "snow is warm". Mountaineers resists and stands up suddenly and woman goes to

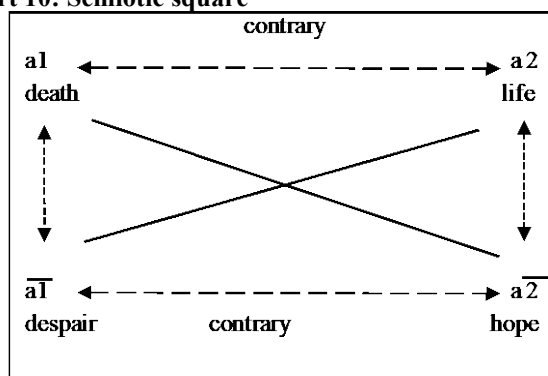
fly. Mountaineers tries to wake up the other friends. In the meantime, snowstorm has finished, and snows has started to melt. It was a hope to mountaineers that camp areas right over there. In here, woman represents evil spirit demon who is shown in Japanese cinema frequently. Mountaineer has rescued own and his friends by correcting the mistake at the last moment while he will be liable for disaster thereby intervention to nature and human fight. This dream has finished with hope like in the other dreams, too.

Chart 9: The actantial model represented as a square



Sender object of S_1 in communication axis is survival thereby rescuing from snowstorm. Person will utilize from act is S_1 . H_1 is helper to S_1 ; H_1 bears helper actant role. O_2 is on opponent situation of object. Although woman has devil spirit in opponent situation tries to persuade mountaineers to sleep in snowstorm, one of them stands up with resist and achieves to camp area thereby waking up the other friends. Shown actants in schema above exposes relations between units of narration in a narrative. Sender starts to move in terms of delivering a thing to receiver subject in communication axis on object and receiver axis. Communication axis of schema above is desire of mountaineers to achieve to camp area. Woman has devil spirit faces with us as opponent in desire axis which is subject object axis. In desire axis that is helper, subject, opponent axis, one of the mountaineers has succeeded to rescue his friends thereby resisting to woman has devil spirit. At the last moment, mountaineers about to death in snowstorm have been rescued. Thus, a change has been occurred between start and end of the action.

Chart 10: Semiotic square



Death/life and despair/hope that laid in deep structure of dream forms *opponent meaning stage*. 'Hope' is contrary component of 'death', 'despair' is contrary component of 'life'. There are *containment* relations between 'death' with 'despair', 'life' with 'hope'. So, it can be achieved to opponent, contrary and containment components from 'death' and 'life'. In one side, while there was no remedy but only death for mountaineers who caught on snowstorm and on top of it, there is a woman has devil spirit wants to kill them, the other side, there are choosing of one of the mountaineers to live with resistance to woman and rescuing the other friends. Storm blows over when mountaineers woke up and camp area is saw. Satan-like woman is like a messenger of death and despair. While losing of hope were taking away to death, hope has risen, and they have hold on to life with waking up one of the mountaineers.

Summary

In this study, Kurosawa's film called *Dreams*, has been analyzed with Greimas's actants model and semiotic square. Narrations in film has been reviewed thereby re-reading of films. It has been descended surface and deep structure of narrations that related each together. Firstly, films have been sorted to sections in study. Narration has been divided units with sections, articulations has been determined thereby detecting difference between sections. It has been demonstrated that story line which is presented syntagmatically, thematic stage and narration stage have formed surface structure of text; there are a sender, a receiver, a subject, an object, and an opponent. It has been discovered that every section has a system own and have an integrity. Logical-semantic stage that is results of transformations and articulations with reviewing deep structure of the text has been exposed. It has been demonstrated that meaning of the text has a deep and multilayered structure with this study. It has got easy how basic semantic structure analysis has been did and how meaning has been formed with Greimas's method. According to oppositions in structure of narration syntagmatic oppositions of film *Dreams* can be sorted like this: death/life, technological opportunities/technology related disasters, humanity/nonhumanity (being devil, being demon etc.), hope/despair, prohibition/ violation of prohibition. Meaning units that mentioned enables to be perceived of film as an integrity. In the light of these analysis, it has been achieved that deep meaning of film and it has been exposed what director wants to explain. Film that bore the stamp on own themes of Kurosawa cinema, included many sub-meanings, occurred from Japanese culture, traditions and problems of society has provided convenience to review with Greimas's semiotic square.

All in all, in Kurosawa's films, it is encountered like that nature-human relation, view of historical events, wars, love-friendship, poverty, history of samurai, nuclear disasters frequently. Kurosawa who based on Japanese culture, also emphasized hope despite all negations and social problems that he tackled, when examined to *Dreams*, it has finished hopeful. In *Dreams*, villagers who live in peace and compatible with nature is utopia of Kurosawa. What he wants to explain in all dreams are compatible with life and integration with nature by avoiding from exorbitances of technology. This is demonstrated with visual feast as well as aural feast in last dream.

References

- Andrew, J. D. (2010). Büyük Sinema Kuramları. Çev: Zahit Atam. Doruk Yayınları: İstanbul.
- Barthes R. (2009). Yazı ve Yorum. Çev: Tahsin Yücel. Metis Yayınları: İstanbul.
- Berger, A.A. (1996) Kitle İletişiminde Çözümleme Yöntemleri. Çev: M. Barkan, U. Demiray, D. Güler, N. Bayram. A. Tunç, N. Ulutak, A.H. Yüksel. Bilimsel Araştırma Çalışmaları Vakfı Yayınları: Eskişehir.
- Berger, A.A. (2012). Kültür Eleştirisi Kültürel Kavramlara Giriş. Çev: Özgür Emir. Pinhan Yayıncılık: İstanbul.
- Çöğür, A. S. (2007). Akira Kurosawa Sinemasında Japon Kültürü ve Batı Kültürünün Sentezlenmesi. Yüksel Lisans Tezi: İstanbul.
- Eagleton, T. (2014). Edebiyat Kuramı. Tuncay Birkan (Çev.). İstanbul: Ayrıntı Yayınları.
- Erkman-Akerson, F. (2005). Göstergebilime Giriş. Multilingual Yayıncılık: İstanbul.
- Günay, D. (2007). Metin Bilgisi. Multilingual Yayıncılık: İstanbul.
- Gündüş, S. (2003). Film Olgusu: Kuram ve Uygulayım Yaklaşımları. İnkilap Yayınları: İstanbul.
- Güngör, N. (2013). İletişim Kuramları ve Yaklaşımlar, Siyasal Kitabevi: Ankara.
- Kıran, A. (2009). Çağdaş Bir Düşünme Biçimi Olarak Göstergebilim. İstanbul Üniversitesi Edebiyat Fakültesi Batı Dilleri ve Edebiyatları Bölümü Fransız Dili ve Edebiyatı Anabilim Dalı Dergisi. Cilt: 2. Sayı: 2.
- Kıran, Z. Ve Kıran (Eziler) A. (2000). Yazınsal Okuma Süreçleri: Dilbilim, Göstergebilim ve Yazınbilim Yöntemleriyle Çözümlemeler. Seçkin Yayınevi: Ankara.
- Kurosawa A. (2006) Kurbağa Yağı Satıcısı. Çev: Deniz Egemen. İstanbul: Agora Kitaplığı.
- Moran, B. (2013). Edebiyat Kuramları ve Eleştiri. İstanbul: İletişim Yayınları.
- Öztokat N. (2004). Göstergebilimsel Bir Okuma Germinal. Hasan Ali Yücel Eğitim Fakültesi Dergisi. Sayı:2. Sf: 151-168.
- Parsa, S. ve Parsa, A. F. (2012). Göstergebilim Çözümlemeleri. Ege Üniversitesi İletişim Fakültesi Yayınları: İzmir.
- Prince S. (2013). Savaşının Kamerası Akira Kurosawa Sineması. Çev: Ahmet Ergenç. İstanbul: Kabalıcı Yayıncılık.
- Rifat, M. (2007). Homo Semioticus ve Genel Göstergebilim Sorunları. YKY: İstanbul.
- Soydan, M. (2007). Yavuz Turgul'un Gönül Yarası Filminin Greimas'ın Eyleyenler Örnekçesine Göre Çözümlemesi. Manas Üniversitesi Sosyal Bilimler Dergisi. Sayı: 42. Sf: 55-75.
- Wollen, P. (2004). Sinemada Göstergeler ve Anlam. Çev: Zafer Aracagök, Bülent Doğan. Metis Yayıncılık: İstanbul.
- Yücel, T. (1999). Yapısalcılık. Yapı Kredi Yayınları: İstanbul.

Düşler Filmin Künyesi

Yönetmen: Akira Kurosawa, Ishiro Honda

Senarist: Akira Kurosawa
Yapımcı: Steven Spielberg, Mike Y. Inoune.
Müzik: Shinichiro Ikebe
Görüntü Yönetmeni: Takao Saito, Masaharu Ueda
Ülke: Amerika, Japonya
Yapım Yılı: 1990
Süre: 119 dakika
Oyuncular: Akira Terao, Mitsuko Baisho, Toshie Negishi, Mieko Harada, Mitsunori Isaki, Toshihiko Nakano, Yoshitaka Zushi, Hisashi Igawa, Chishu Ryu, Martin Scorsese.

The Needs Of Parents With Adhd In Parent Education: A Mixed Model Study

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Abstract

Children with ADHD have special education needs. Participation of parents in the process plays an essential role in the effectiveness of the education. Concerning parent education which is a part of lifelong education, determination of the expectations of parents of children with special needs and preparing curricula accordingly bears considerable importance in terms of the development of the society. In this direction, the objective of this study is to identify the education needs of parents of children with ADHD. In addition, determination of stress and quality of life are sub-objectives of the study. The research employed a mixed model. Through special education teachers 200 parents (110 mothers and 90 fathers) were reached. “Quality of Life Scale”, “Perceived Stress Level Scale” and “Instrument of Determining Parent Needs” were used for quantitative data. According to the obtained results, the stress level of parents is a significant predictor of quality of life ($\beta = -.204$, $t = -2.738$, $p < .01$). Semi-structured interviews were conducted with 15 volunteers among the mentioned parents case study analysis was conducted for qualitative data. The answers given to the questions within the framework of themes created by the researcher were examined. Qualitative data showed that parents suffered from emotional inadequacy, had negative experiences with the community, and had difficulties in solving the school problems of their children. In addition, further investigation of the answers showed that participants frequently needed a practical education which aimed at problem-solving ($f=12$). An examination of the relevant literature shows similar research results indicating the challenges of having a child with ADHD. Devising of education programmes directed towards the needs of parents has been recommended.

The Ordinance Of The Local Government For Multicultural Education In South Korea

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Abstract

This study focuses on multicultural education support policy for migration children in The Republic of South Korea. Migrant children are reluctant to give up their education due to differences in educational opportunities and Korean language skills, and education support is in a state of urgency, and it is necessary to shift to practical support and customized support. This study on the appropriate point suggests the status and improvement direction of the multicultural education in Korea.

Introduction

With steady inflow of foreigners into Korea, foreigners staying in Korea in 2018 account for about 3.9% out of the total population (Monthly statistics of immigration and foreign policy, 2018). Accordingly, in Korea, the interest and policies regarding multicultural society increased. In Korea, laws such as FRAMEWORK ACT ON TREATMENT OF FOREIGNERS RESIDING IN THE REPUBLIC OF KOREA (2007), MULTICULTURAL FAMILIES SUPPORT ACT (2008), ACT ON THE PROTECTION AND PROMOTION OF CULTURAL DIVERSITY (2014), REFUGEE ACT (2016) have been enacted to aid social integration in response to a growing multicultural society. (Korea Ministry of Government Legislation)¹. These laws prescribe policies such as multicultural education that enables migrant children to learn Korean language and to receive support for education, and Korean to understand multicultural society and to accept changes, even though these are not enough. And education related laws such as elementary, middle, and high school laws prescribe institutions for guaranteeing education rights for children of international marriage or migrant children.

In particular, the increase in migrant children affected the interest in multicultural education or mutual cultural education and changes in educational policies. The Korean government came up with various policies of multicultural understanding education and promotion for guaranteeing education rights for children of multicultural families and for ensuring that Koreans understand multicultural society and accept changes.

Through these efforts, Korea has institutional foundation for multicultural education. However, regarding institutionalization of multicultural education, rather than central government but local governments implement policies in earnest. Even though Korea has not developed local autonomous governing system like Europe or the United States, but has strong local autonomous governing principle of education. Accordingly, multicultural education is also being implemented in local governments. To that end, 17 local governments has enacted and implemented ordinances for multicultural education. This study is aimed at analyzing and evaluating these multicultural education ordinances.

Emergence and major contents of ordinances for multicultural education support in Korea

In Korea, with the increase of immigrants, migrant children are also increasing. However, children of marriage migrants outnumber children of migrant workers. Migrant workers have to return to their own countries in principle after three years in accordance with short term circulation system, and they are not allowed to bring their families. On the other hand, as marriage migrants get married with Koreans and give birth to children, the number of migrant children rapidly increased. According to statistics of the year 2017 (National Statistical Office, 2017), the number of multicultural families attending elementary, middle, and high schools² about 110,000, accounting for 1.9% of the entire students. The number does not include children who are born in foreign countries and move to Korea with their parents.

As children of multicultural family have Korean nationality, they are not discriminated legally in terms of education. However, they may be late in learning Korean language and special curriculum is required. Besides, in

¹ www.law.go.kr

² In Korea, when immigrants of marriage marry and make households, they are called multicultural family, and the children born to them have Korean nationality and area called children of multicultural family.

the case of children who come to Korea with their parents such as children of compatriots of foreign nationality, remarriage households of international marriage, and migrant workers, they tend to give up their studies because of differences in educational chances and Korean abilities. Therefore, educational support for these migrant children is desperately needed. Even though the Korean central government comes up with measures, local education offices need to come up with policies for education support for them. In other words, in terms of education for migrant workers, of principled regulations such as discrimination prohibition, but change to practical support and customized support is needed at this time.

In the meantime, Korea's central government emphasizes multicultural education for all students and ordinary citizens. Legal grounds for multicultural education in Korea are prescribed mainly in multicultural family support law, not in laws regarding education. These laws especially prescribe "The State and local governments shall take measures, such as education and advocacy activities for understanding diverse cultures, necessary for preventing social discrimination and prejudice against multicultural families and for encouraging members of society to acknowledge and respect the cultural diversity." And they also prescribe education of understanding multicultural family at school and training for multicultural understanding of teachers. In addition, the Ministry of Education, Science and Technology announced 『Measure to advance education for multicultural students』 in 2012, and the measure emphasizes multicultural preparatory school and establishment of Korean as Second Language course(KSL), expansion of dual language instructor, and fostering global leading schools. However, the multicultural education of the central government focuses educational rights for migrant children and understanding about multicultural family.

Accordingly, local autonomous governments enacted ordinances for supporting multicultural education. The first ordinance for multicultural education was made in 2012, and as of 2018, all of 17 upper (metropolitan) local governments enhanced this ordinance. Educational policies regarding key multicultural prescribed in ordinances supporting multicultural include multicultural preparatory school for all students, Korean language course(KSL), emphasis on multicultural education, multiculture focus school, expansion of dual language instructors, training for multicultural education of teachers, and establishment of multicultural education support center.

Multiculture preparatory school has programs to help students who come to Korea middle way through or children of foreigner households. Centering on schools with certain number of children of migrant background, Korean as Second Language(KSL) classes are operated. In multiculture focus schools, multiculture sensitivity education is conducted for all students. Through training for teachers, teachers' competency in multiculture and expertise are enhanced. In addition, multicultural education center are established in local communities to support migrant children's entering into public education and adaptation. Rather than laws or policies of the central government, ordinances of local governments are thought to expand the multicultural education in line with the essential concept of multicultural education.

Evaluation and improvement direction of multicultural education support ordinance

It is encouraging that local governments expand multiculture education in accordance with multicultural education support ordinance. Multiculture preparatory schools are often favored by migrant children and they enter such schools. However, there are counterarguments about migrant children's going to multiculture preparatory schools. Because some think that the essential concept of multicultural education of integrated education is damaged. And it is pointed that in spite of multiculture education, there are perspective focusing on pure blood. These limitations are analyzed and improvement measures are suggested.

First, there are limitations on subjects of policies. Korea's laws do not use the term of migrant children, but use the term of children of multicultural family which premises the qualification for legal residing. For this reason, Korea's multicultural education tends to be confined to children of multicultural family. There is still perception that at least one of parents needs to be Korean, emphasizing the importance of pure blood. Therefore, there are risks of education's vacuum regarding children of foreign nationality(children who come to Korea middle way through, refugees included) or unregistered children. Admittedly, compared with the past, educational discrimination for children who come to Korea middle way through, migrant children of foreign nationality, and unregistered migrant children is decreasing, but education for them is not institutionally guaranteed. Rather than the concept of children of multicultural family, the concept of migrant children needs to be introduced.

Second, special programs for regions where migrant children are concentrated are needed. In other words, ordinances or multicultural education policies reflecting regional characteristics are needed. As Korea has strong characteristics of centralized authoritarian rule, the authorities of local autonomous governments are weak. For this reason, ordinances supporting multicultural education also fail to reflect regional characteristics and are composed of similar contents. However, there could be differences in the number of migrant children or regional characteristics, contents of ordinances supporting multicultural education need to reflect regional characteristics. For example, in the case of the regions where there are many migrant children, measures could be considered to designate the regions as special district for multiculture international school, or to strengthen dual language education.

Third, preparation measures need to be made for the students who drop out halfway through. In particular, children

who come to Korea midway through go to school with no experience in Korean language and Korean culture, and experience maladjustment, identity crisis, and psychological withering. Admittedly, for resolving these problems, preparatory schools exist to help them adjust to regular schools. However, as preparatory schools are conducted centering on elementary schools, proper preparatory schools need to be made for middle and high schools (Central multicultural education Center Policy School Business Explanation Database, 2017). In addition, for those who drop out midway through occupational education needs to be provided.

Fourth, multicultural education within school and outside of school need to be harmonized. For facilitating multicultural education and practical operation, the network role regional multicultural education center is emphasized. Multicultural education outside of school is expected to conduct multicultural education not only for migrant children, but also for ordinary citizens.

Fifth, strengthening competency of teachers for multicultural education requires training of teachers. Training of teachers is stipulated in some ordinances or included in multicultural education implementation plan. However, even in the case of training of teachers, the focus tends to be on multicultural family phenomenon and multicultural education has strong characteristics of education reform. Therefore, training of teachers needs to emphasize reform related with teaching and learning and teachers' multicultural competency and multicultural sensitivity.

Lastly, in line with the essential meaning of multicultural education, multicultural education for all students needs to be facilitated further. To that end, education to understand various environments and cultural background of minorities need to come first, and multicultural education to respect human rights and cultural characteristics of minorities. In addition, in Korea's current ordinances supporting multicultural education, reasons for prohibiting discrimination and concept of multicultural education need to be actively stipulated and multicultural education contents need to be expanded on educational sites (Sangwoo Chong·Hyunmin Kang, 2015:15). In other words, it should not be confined to 'understanding' education regarding 'multicultural family', but it needs to be changed to multicultural personality education based on prohibiting prejudice and discrimination, and cultural diversity.

Conclusions

Facilitating multicultural education pursues multicultural education for all students rather than being the education for social composition of minorities and emphasizes multicultural human rights education to understand various cultural characteristics. In addition, for functions of operating practical autonomous governance laws, under the policies and institutions of central government, understanding and spreading customized support and multicultural are needed. They need to be regarded as approaches to foster global talents who prosper in the internationalization era, not beneficiaries, and practical efforts based on institutional foundation between central government and local autonomous governments are required.

References

- Banks, J. A., & Banks, C. A. M. (2008). *Multicultural education: Issues and perspectives* (6th edition). John Wiley & Sons.
- Bennett, C. I. (1999). *Comprehensive Multicultural Education: Theory and Practice* (4th edition). Boston, MA: Pearson Education Inc.
- Sangwoo Chong & Hyunmin Kang (2015). *Exploring Concept and Directivity of Human Right and Multicultural Education*. *Journal of Human Rights & Law-related Education*, 8(3), 1~23.
- Salili, F., & Hoosain, R. (2001). *Multicultural Education: Issues, Policies, and Practices*. Greenwich, CT: Information Age Publishing.
- Sleeter, C. E., & Grant, C. A. (1994). *Making Choices for Multicultural Education: Five approaches to Race, Class, and Gender*. New York, NY: Macmillan Press.
- National Center for Multi-cultural Education (2017). 『Multicultural prep school business guide』.
- National Center for Multi-cultural Education (2017). 『Multicultural education policy school project presentation book - Multicultural prep school』.
- Educational Statistics Annual (2018).
- National Statistical Office (2017).
- Korea Immigration Service (2018). 『Monthly statistics of immigration and foreign policy』.
- Ministry of Government Legislation (2018). <http://www.law.go.kr>

The Paradox Of The Hungarian Frame Curricula In Informatics

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Abstract

Analysing the Hungarian frame curricula in Informatics, along with the number of classes and years dedicated to the subject, several contradictions were revealed. Informatics as a school subject is compulsory in grades 6–10, with one class a week. In special programs, classes are available for younger students and/or with a higher number of classes. However, regardless of the number of classes and/or years assigned to the subject, similar knowledge contents are required.

We have found that the paradox of the frame curricula is that it was intended to be tool, interface, and environment independent, but, ultimately, turned out to be over-generated. Furthermore, the curricula do not focus on fundamental, transferable skills, abilities, and knowledge. Instead, we revealed that it contains mostly vague expressions which do not provide enough of a guide for teachers to develop lessons with relevant content. Beyond that, it is not evident how the curriculum supports the development of computational thinking, algorithmic skills and the computer supported problem-solving abilities of students, which should be the primary concern of these documents. Furthermore, huge gaps are detectable between the different areas of Informatics, and between Informatics and other subjects, and there is no clear presentation of how they are connected, and how this knowledge can be transferred to real world problem-solving.

Our preliminary aim was to reveal and describe the paradox within the curricula. We further plan to test the students' knowledge according to the requirements of these documents, and find out how the different communities, schools, age groups, and teachers assign meaning to the over-generated expressions of the frame curricula. For this purpose, we created a test which aims to cover the most important aspects of the Hungarian frame curricula in Informatics, focusing on the students' fundamental ICT skills, including but not limited to file operations, algorithm analyzation and decoding, and text and data handling. In our current work we also present some of the questions and tasks of the test and provide details on how they are connected to the curriculum, to its dedicated areas, and to other school subjects.

Keywords: *Curriculum analysis, Informatics, algorithmic skills, computational thinking, computer problem-solving*

Introduction

Several research projects on the subject have revealed that the extremely high attrition rate in tertiary studies in Informatics is primarily rooted in the students' low level of computation thinking skills, their unawareness of the requirements of these courses, and their attitude to the subject area (Gombos & Csernoch, 2015; HIS, 2007; OECD, 2011; OECD, 2016; Csernoch & Biró, 2017).

Focusing on the students in our close environment – first year students of informatics at the University of Debrecen – the TAaAS project (Testing Algorithmic and Application Skills) revealed that the students' algorithmic, programming, and computer problem-solving skills are much lower than is expected according to university standards (Csernoch et al., 2015) and that the attitudes of students to computer sciences/informatics do not match the real nature of these sciences and the expectations of tertiary studies (Csernoch & Biró, 2017). The authors of the TAaAS projects concluded that that students' difficulties originate in their previous education in primary and high schools.

In addition to analysing the frame curricula, we aim to find out how teachers of Informatics interpret it, what contents and methods they apply in their classes, and how effective these methods are. For this purpose, we are planning to launch a test which aims to cover the most important aspects of the Hungarian Base Curriculum and the frame curricula in Informatics, focusing on the students' fundamental ICT knowledge, including but not limited to file operations, analysing and decoding algorithms, handling text and data, and students' knowledge-transfer and computer problem-solving abilities.

National Core Curriculum

In the 1995 National Core Curriculum a new subject area, “Informatics, computing and library use” (NAT, 1995) was introduced. In the more recent edition of this document released in 2003 (NAT, 2003), digital competence was declared as a key competence, a concept which was reinforced in the 2007 and 2012 National Core Curricula (NAT, 2007; NAT, 2012).

In the National Core Curriculum, digital competence is defined as follows:

“Digital competence embraces the confident and critical use of information society technologies in work, communication, and leisure. It is based on the following skills, [and] activities: recognition, retrieval, evaluation, storage, production, presentation, and exchange of information; as well as communication and networking through the Internet.” (NAT, 2003; NAT, 2007; NAT, 2012).

According to the National Core Curriculum, the use of digital technologies must become more prevalent in primarily and secondary education, which should make learning and teaching more effective; in the meantime, computational thinking should become the fourth basic skill alongside reading, writing, and arithmetic (Wing, 2006). Considering this concept, it is clear that the National Core Curriculum assumes a firm knowledge-transfer between the different subjects within informatics and encourages computer supported real-world problem-solving in other subjects.

However, we must bear in mind that it is a misconception (Kirschner and Bruyckere, 2017) that digital natives, i.e. the Z-generation (Prensky, 2001), do not need to study informatics because their everyday lives are accompanied by digital tools from birth. Indeed, it has been proved that every child needs to develop computer thinking skills, regardless of their year of birth (Kirschner & Bruyckere, 2017; Csernoch et al., 2018).

Implementation – Frame Curricula In Informatics

The official content

In the Hungarian education system children start school at the age of 6-7, and primary education usually lasts 8 years, and is followed by a further 4 years of secondary education. Informatics as a school subject is compulsory in grades 6–10, for one class a week. In special programs, classes are available for younger students and/or with higher number of classes. However, regardless of the number of classes and/or years assigned to the subject, similar knowledge contents are required (Kerettanternv, 2013).

Based on the current frame curricula (Kerettanternv, 2013a; Kerettanternv, 2013b; Kerettanternv, 2013c), digital competence includes the following activities and abilities assigned to primary school students.

Primary school students are supposed to (Kerettanternv, 2013)

- become more motivated to use ICT tools,
- be able to learn text and data management in informatics classes, in other school subjects, and in extracurricular activities,
- use information provided by computers and the Internet, (here, we must mention that we do not agree with the expression “information provided by computers”, since computers are not able to provide anything, and definitely not information),
- be able to create presentations and reports,
- be familiar with the opportunities offered by electronic communication and be aware of their dangers.

High school students, beyond the above requirements, are supposed to (Kerettanternv, 2013):

- be able to create aesthetic documents using word processing, spreadsheet and presentation programs,
- adhere to the ethical principles of communication and use of information,
- know and take into account copyright and legal principles pertaining to users.

The practice

The analysis of the frame curricula revealed that they are too ambitious, given the low number of classes, so it is impossible to teach the required contents to an appropriate depth. This is evidenced by the two information technology frame curricula currently available, which do not differ in their contents but only in the number of classes assigned to the subject (obligatory: Informatika kerettanternv, 2013b; Informatika kerettanternv, 2013d, optional: Informatika kerettanternv, 2013a; Informatika kerettanternv, 2013c; Informatika kerettanternv, 2013e). Consequently, teachers have their own ideas of what the terms of the curricula mean, but there is no consensus. Everyone teaches whatever they think is correct and acceptable: different subjects and different content, using different approaches – and not necessary those that have been proved to be effective and efficient. In general, there is too much freedom for teachers of informatics. On the other hand, it is important to note that, due to the absence

of organized post-graduate teacher education, there is no evidence that teachers are up-to-date, or that they are fully aware of the all required components of TPCK (Koehler & Mishra, 2009; Koehler, 2012) and of the National Core Curriculum and the frame curricula. To find evidence of how teachers implement the current frame curricula in informatics and how they prepare their students in accordance with the required contents, we administered a questionnaire in grades 7–10, accompanied by a questionnaire for the teachers of the students involved.

Examples Of Over-Generalized Expressions

In the following, samples (Tables 1, 2 and 3) are presented from the frame curricula in informatics to demonstrate its over-generalization, its vague and ambiguous expressions, the lack of the skills and competences it is meant to develop, and also of the background knowledge which is required to teach the contents effectively.

Expressions of the frame curricula	Research questions
create short documents	How long are short documents?
create bigger documents	How long are bigger documents?
create smaller documents	What is the difference between smaller and shorter documents?
create webpages	What elements should the webpage contain? What kind of webpage editor should be used? What level of webpage design is required?
basics of web design	What does the word “basics” mean?
different objects inserted into documents	What kind of objects? How many objects?

Table 1: Expressions from the requirements of the frame curriculum in the “Creating digital texts and audio-visual documents” area (left), and our questions, which draw attention to the ambiguous expressions.

Expressions of the frame curricula	Research questions
build algorithms to solve a problem	Which problem? What kinds of problem? What is the complexity of the algorithm?
create simple algorithms	What is a “simple” algorithm?
write simple programs	What does “simple” program mean? Which language(s) and which structures can be used?
implement the algorithm-solution of simple problems	What does a “simple” task look like? What does “algorithm-solution” mean? What kind of implementation is required, and in what programming language(s)?

Table 2: Expressions from the requirements of the frame curriculum in the “Problem solving with informatics tools and methods” area (left), and our questions, which draw attention to the ambiguous expressions.

Expressions of the frame curricula	Research questions
use functions	Which functions? All the 600 functions of MS Excel? All the functions of a programming language? What does “use” mean? Call functions?
edit formulas	Which formulas? What kind of formulas? What kind of operators? Call functions as well?
upload database	Where do we have to upload databases to? How should we upload databases? What kind of databases? Why do we have to upload databases?
compound interest, calculate the area, the surface, the volume of objects, relative frequency, probability, logarithmic function	The logarithm function is taught in class 11 in mathematics, and this expression is in the elementary school curriculum. When are relative frequency and probability taught in maths classes? The area of what? The surface and volume of what objects?

Table 3: Expressions from the requirements of the frame curriculum in the “Data management, data processing, information retrieval” area (left), and our questions, which draw attention to the ambiguous expressions.

We also must draw attention to the language of the frame curricula. We have not edited the expressions presented in Tables 1–3 in such a way as to present them in a bad light: they are given in their original forms. This means that the frame curricula contain ambiguous expressions rather than complete sentences, which makes understanding even more difficult.

Magic Words

There are words in the documents which we call “magic words” due to their high frequency and ambiguity, which also make the curriculum obscure. Some of these terms are included in the following tables (Tables 4 and 5).

basic operators	basic use
basic knowledge	basic relationships
basic mathematical operations	basic concepts
basic treatment	basic utility type
basic functions	basic service
basic instructions	basic elements

Table 4: A selection of expressions containing the magic word “basic”.

simple exercises	simple database development
simple development system	simple application programs
simple activities	simple floor plans
simple processes	simple spreadsheet operations
writing simple algorithms	simple models
simple events	simple user software

Table 5: A selection of expressions containing the magic word “simple”.

We compared the frame curricula of informatics to the frame curricula of the other subjects that students begin to study at a similar age, and also to finish at a similar age, and where, moreover, there is a subject relationship between informatics and these subjects. Based on these criteria the choice fell upon physics and chemistry. Students begin to study physics in class 7 and finish in class 11. Except for eight grade, they have two classes a week every year. Chemistry is started in the seventh grade with one hour per week and is studied for two hours a week over the next three years.

The following tables (Tables 6 and 7) show the frequency of “magic words” in the frame curricula for physics, chemistry, and informatics. The word “basic” occurs 21 times in the primary school curriculum for informatics, while in the secondary school curriculum for the same subject it occurs 13 times (Table 6, **Hiba! A hivatkozási forrás nem található.**).

basic	number of classes	frequency
physics	2+1+2+2+2	9+31
chemistry	1+2+2+2	17+10
informatics	1+1+1+1+1	21+13

Table 6: The frequency of the word “basic” in the frame curricula for physics, chemistry, and informatics subjects.

The word “basic” occurs in physics 40 times, and in chemistry 27 times. The word “basic” occurs 21 times in the primary school curriculum for informatics, while in the secondary school curriculum for the same object it occurs 13 times. (Table 6, Figure 1) The word “basic” occurs 21 times in the primary school curriculum for informatics, while in the secondary school curriculum for the same subject it occurs 13 times (Table 6, **Hiba! A hivatkozási forrás nem található.**).

All in all, these numbers are similar to the number for the informatics curricula (34 terms), but on average (frequency/hours) their relative frequency is highest in informatics (**Hiba! A hivatkozási forrás nem található.**).

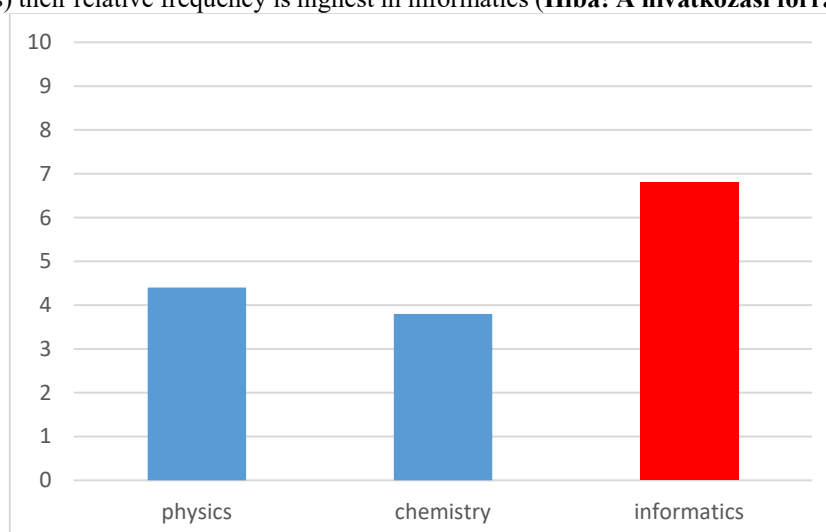


Figure 1: The frequency of the word “basic” in the frame curricula for physics, chemistry, and informatics divided by the number of classes.

The situation is similar with other words. The word “simple” occurs 18 times in the primary and 10 times in the secondary school frame curricula in informatics (Tables 7 and 5, Figure 2). As with the frequency of the word “basic”, the word “simple” occurs more frequently in informatics than in the other subjects (Table 7, Figure 2).

simple	number of classes	frequency
physics	2+1+2+2+2	7+29
chemistry	1+2+2+2	9+8
informatics	1+1+1+1+1	18+10

Table 7: The frequency of the word “simple” in the frame curricula for physics, chemistry, and informatics subjects.

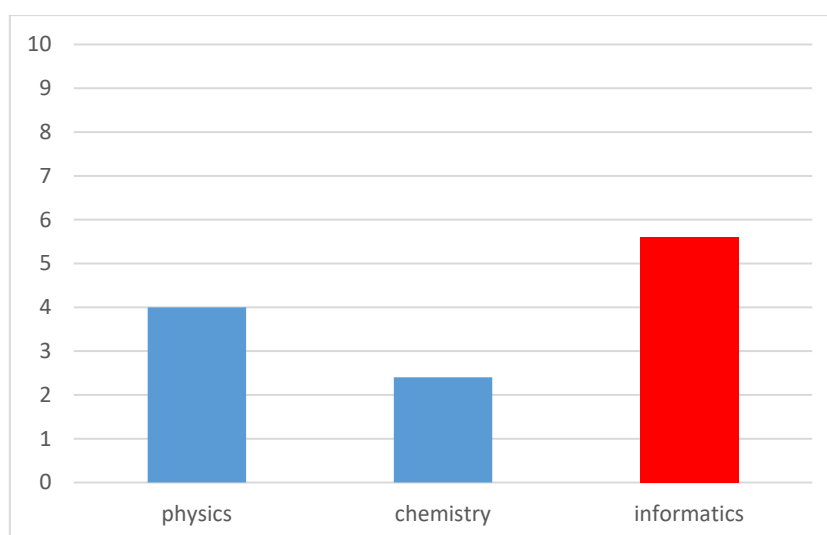


Figure 2: The frequency of the word “simple” in the frame curricula for physics, chemistry, and informatics divided by the number of classes.

Testing Computational Thinking Skills

Our preliminary aim was to reveal and draw attention to the paradox of the Hungarian frame curricula. We further planned to test the students’ knowledge according to the requirements of these documents, and find out how the different communities, schools, age groups, and teachers assign meaning to the over-generated expressions. For this purpose, we completed a test which aims to cover the most important aspects of the Hungarian frame curricula in informatics, focusing on the students’ fundamental ICT skills, which includes but is not limited to file operations, text and data management, and analysing and decoding algorithms. In our current work we also present some of the questions and tasks of the test and provide details on how they are connected to the curriculum, to its dedicated areas, and to other school subjects.

Task A: Data type recognition and knowledge-transfer

The following problems are presented in a Hungarian (European) interface. What data types are in each column starting from row 2? (multiple answers are accepted)

	A	B	C	D
1	Username	Uploads	Subs	Views
2	VamosART	484	1,107,555	226,195,766
3	Videómánia	338	833,23	254,545,702
4	PamKutya	120	809,866	223,441,355
5	LetsGoMartin	176	725,638	162,798,559
6	TheVR	1,062	592,675	213,550,948
7	luckeY	1,183	561,13	150,341,428
8	Peter Gergely	100	548,241	79,713,757
9	Scribble Netty	159	546,049	74,234,471
248	Szilvagliam	87	61,899	3,918,538
249	rance flow	524	61,863	53,275,385
250	KIS GRÓFO (official)	9	61,65	30,712,031
251	KODIAK	736	61,467	14,599,194

	Integer	Real	Text	Logical	Date	None
Column A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Column B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Column C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Column D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 3: The sample table to test how students recognize the different data types in the presented table.

How many rows (records) are in the table?

The largest number in column B is:

The smallest number in column B is:

What does the following formula do? `{=SUM(IF(LEFT(A2:A251)="L",1))}`

Figure 4: Questions connected to the sample table in **Figure 3** to test whether students consciously selected the data types of the columns presented, or only did so by chance.

The problems presented and tested in Figures 3 and 4 are rooted in the different semantics of the comma in the different languages. The table is downloaded from the webpage entitled “Top 250 YouTubers Channels in Hungary” (YouTubers 2018; Figure 5), where the country can be selected, and the content is adjusted to this selection. However, the syntax of the selected language is ignored, and the English thousand separator character, the comma, is in use in the downloaded data table regardless of the language of the selected country. By opening this file in Hungarian spreadsheets – and in most European languages – the comma is translated as the decimal character, and the whole numbers consisting of one comma are converted into real numbers (Figure 3 cells B6 and B7, C3–C251), or in the case of two commas the whole numbers become strings (Figure 3 cells C2 and D2–D251) (Table 8).





Rank	Grade	Username	Uploads	Subs	Video Views
1st	A	 LetsGoMartin - Nursery Rhymes	194	2,050,447	493,359,935
2nd	B+	 REAL TRILL MUSIC	372	328,644	263,907,715
3rd	B+	 KerekMese	143	353,603	662,791,261
4th	B	 #MISSHMUSIC	124	340,360	201,745,398

Figure 5: The Hungarian version of the YouTubers using the comma as the thousand separator character.

In Task A, the focus is on the recognition of data types in spreadsheets and the correct/incorrect use of thousand separator and decimal characters, as well as the way knowledge about different data types can be transferred to further studies in database management and programming. However, we have to be aware of another aspect of knowledge-transfer, where the syntax of numbers – knowledge gained in grammar and/or language classes – is brought into informatics. In this chain of knowledge-transfer, spreadsheets serve as a link between natural and artificial computer related languages.

One further aspect of the table presented in Task A must be mentioned. Spreadsheet management is usually – with only a few exceptions (Gross et al., 2013; Csernoch, 2014) – taught without content, focusing only on the tools of the interface (Csernoch, 2017), although “...authentic tables contain real data whose content can be selected in accordance with the students’ interest, and as such can be highly motivating and easily converted into real world situations. ... Consequently, authentic tables can provide data which motivate students to use spreadsheets (Gross et al., 2013; Csernoch, 2014). Research has clearly proved that one of the reasons for failure when teaching spreadsheets is the decontextualized and technocentric teaching methods.” (Csernoch, 2017; Csernoch and Biró, 2018).

Knowledge-transfer items of Task A

- syntax of natural languages
- semantics of the comma
- data types: programming
- data types: database management
- content

Solution

Data column	Data types
Column A	text: (A2:A9) and (A248:A251)
Column B	integer: (B2:B5), (B8:B9), and (B248:B251) real: (B2:B7)
Column C	real: (C3:C251) text: C2
Column D	text: (D2:D251)

Table 8: The data types of the cells presented in the test (Figure 3).

Table 8 shows the data types of the columns presented in the test. There are hidden rows in the table, so altogether the table holds 251 rows, but the first row is reserved for the field names, so the table has 250 data records. The largest number presented in the sample in Column B is 736, while the smallest number in column B is 1,062 (1.062 in English terminology).

As is mentioned above, in most European languages the decimal character and the thousand separator are different from English language usage. The comma is used as the decimal character in European languages but as the thousand separator character in English. In English the dot is the decimal separator character. In European languages the space is the thousand separator character, while in the digital world the non-breaking space is a

better choice (Bujdosó & Csernoch, 2014; Csernoch, 2017). Awareness of these different usages is important when deciding what data types and values are contained in each column of spreadsheets.

If students know the different data types in spreadsheet management, they can use this knowledge later on in other environments, such as database management and/or programming. The reverse of this statement is also true. We usually teach spreadsheets before other interfaces which handle data, because spreadsheet interfaces are easier to handle and functional languages have been proved to be more effective as the first text-based programming language than database management or programming (Booth, 1992). Furthermore, MS Excel adjusts data according to the recognized data type: strings on the left side of the cell, numbers on the right side, while logical values are centred, so data types are clear in each cell. Even the unintentionally different types in a field are easier to reveal with this visualisation. However, (1) we must be aware of automated data recognition in spreadsheets, because not all the data are recognized in accordance with our original intention (for example see Figure 3) and (2) we have to learn how to read this visualisation. The results of the test can prove whether students of the Z-generation (Prensky, 2001) are born with this knowledge or not, and how these students can read non-text-based data and access information based on visual representation.

The formula in the last question (Figure 4) counts the number of users starting with the letter l or L. The array formula presented in the test is a three-level function, consisting of LEFT(), IF(), and SUM() functions, in the order of execution.

Knowledge-transfer items of the array formula of Task A

- spreadsheet: LEFT(), IF(), and SUM() functions
- mathematics: concept of function
- mathematics: n-ary and multilevel functions (not taught in normal maths classes in Hungary)
- programming: calling functions
- programming: writing functions
- programming: decoding
- programming: string constant
- programming: condition
- spreadsheet: condition
- spreadsheet: evaluating array formulas

We must also mention that the same result can be reached by using the built-in COUNTIF() function. However, this function has serious restrictions, one of which is that the function does not except embedded functions in its condition (Csernoch, 2014). Consequently, to solve this problem with the COUNTIF() function we must apply another concept, namely the use of the * character, which requires further transferable knowledge. The solution to the counting problem of Task A is the following: =COUNTIF(A2:A251,"L*"); however, with this solution we do not have access to the algorithm of the problem.

One further advantage of using multilevel array formulas is that their algorithms are transferable to similar problems (Csernoch, 2014) within the frame of Sprego and/or further studies in programming. Table 9 shows the algorithm of the conditional counting problem which can be coded with a three-level array formula.

1.	<i>Input:</i> string Calculating the first character of the string. <i>Output:</i> the first character the string
2.	<i>Input:</i> the first character the string and l/L Asking a yes/no question: Is the returned character of the previous step equal to l or L? <i>Output:</i> a vector of True and False values
3.	<i>Input:</i> a vector of True False values If yes, the record is marked with 1. If no, the record is ignored. <i>Output:</i> a vector of 1 and False values
4.	<i>Input:</i> a vector of 1 and False values Summing up the number of 1s. <i>Output:</i> a whole number

Table 9: Algorithm of the conditional counting problem solved with the array formula in Task A.

Computational Thinking – Task B

What happens when you double click on a document file (e.g.: zz.jpg, zz.html, zz.ods, zz.xls)?

Figure 6: Task B tests how familiar the students are with the algorithm of opening document files.

The question in Task B is whether the students can explain the algorithm which is executed between a double click and the opening of the selected document file. This is the algorithm which is carried out numerous times every day, but most of the time we do not give any thought to what happens between the two stages.

Knowledge-transfer items of Task B

- data file vs. program file
- data file vs. document file
- double click
- file extension
- associate program
- run a program
- open a data file

Algorithm

In the process of opening a document file with a double click, the recognition of agents plays a crucial role. The double-click is carried out by users, and after this the operating system takes control of all the steps of the algorithm.

We have to note here that the definition of the document file itself ensures that an association is already established between the file extension and a program, which is not obvious for most of the users.

agent	action
user	double click
operating system	checking file extension
	checking associated program
	starting the associated program
	opening the data file (document file)

Table 10: The agents and the steps of the algorithm of Task B.

Computer Problem Solving – School Subjects – Task C

In Task C the problem presented is borrowed from a French maths class. However, this problem is language and country-independent, so we decided to include it in the test. Furthermore, we are convinced that the introduction of pseudo-codes in maths classes greatly supports the development of knowledge-transfer skills between maths and informatics and opens up novel approaches in maths problem-solving (Wolfram, 2010 and 2015).

What does the following algorithm do?

```

A, B, C
If  $A^2=B^2+C^2$  or  $B^2=A^2+C^2$  or  $C^2=A^2+B^2$ 
  then "yes"
  else "no"
End if

```

Figure 7: A maths problem – Pythagoras' theorem – presented in a pseudo-code.

Knowledge-transfer items of Task C

- mathematics: Pythagoras' theorem

- programming: concept of variables
- programming: a conditional statement
- programming and maths: the OR logical operator

Computer Problem Solving – School Subjects – Task D

In Task D language problems were presented in a digital environment. The printed version of a sample text was selected to test the students' knowledge of the position of space characters, and the use of quotation and punctuation marks. Although the language of the sample text is Hungarian, some of the syntactic errors are obvious even to those who are not familiar with this unique language: the different face of characters substituting the quotation marks, the space characters left of the commas, the inner space on the right hand side of the opening parentheses, and the missing full stop at the end of the sentences (at the end of line 2).

Find the spelling errors on the sample. How many errors did you find? Circle the appropriate number.

A gyermekek·kitárt·karral·a repülő·méhecskét·utánozzák·, méhecske·hangját·hangoztatják·:·“z”·szaladgálnak·,·ha·leoltjuk·a·villanyt·,·leszállnak·virágport·gyűjteni·(·leguggolnak)·Felkapcsoljuk·a·villanyt,·s·folytatódik·tovább·a·játék.¶

0 1 2 3 4 5 6 more

Figure 8: Language problems presented in a digital environment.

Knowledge-transfer items of Task C – grammar

- punctuation mark: the comma
- punctuation mark: the full stop
- quotation marks
- parentheses

Summary

Previous research clearly states that one of the reasons for the high attrition rates in tertiary studies in Computer sciences/Informatics is rooted in the insufficient knowledge-base and the inappropriate attitude of students arriving from high schools. Furthermore, the different expectations students have of secondary and tertiary education might also be a source of this discrepancy.

To reveal how students are prepared for tertiary studies in informatics, and what computer related skills, abilities, and competencies are focused on in primary and secondary education in general, we launched a project to analyse the National Core Curriculum and the frame curricula in informatics. The project consists of two major subsections. The first phase is a thorough analysis and comparison of the documents mentioned above, in order to form conclusions regarding their contents. In the second phase, based on the findings of the first, we composed a test for students of grades 7–10 and for their teachers. The aims of the testing are to reveal (1) how the contents of the frame curricula can be implemented in classrooms, (2) the level of the students' computational thinking skills, and their computer problem-solving and knowledge-transfer abilities, (3) and the common misconceptions currently circulating.

Our analyses lead us to the paradox of the frame curricula in informatics. On the one hand, the curricula was intended to be tool, interface, and language independent, a concept which, in general terms, serves the students' interests. On the other hand, we encountered over-generalization in the form of vague expressions, non-specified contents which allowed different interpretations, tool-specific requirements, unconnected subjects within the discipline, and non-specified connections to other school subjects. This latter approach serves neither teachers nor students.

References

- Booth, S. (1992) Learning to program: A phenomenographic perspective. Gothenburg, Sweden: Acta Universitatis Gothoburgensis.
- Bujdosó, Gy. & Csernoch, M. 2014. Digital Literacy, Digital Language. In Hungarian: Digitális írástudás, digitális nyelvhelyesség. Tudományos és Műszaki Tájékoztatás 61:(10), 1–10.
- Csernoch, M. & Biró, P. (2017). First year students' attitude to computer problem solving. In: IEEE 8th International Conference on Cognitive InfoCommunications: CogInfoCom. Debrecen, Piscataway (NJ): IEEE Computer Society, pp. 225-230.

- Csernoch, M. (2014), Programming with Spreadsheet Functions: Sprego, In Hungarian, Programozás táblázatkezelő függvényekkel – Sprego, Műszaki Könyvkiadó, Budapest.
- Csernoch, M. (2017), “Thinking Fast and Slow in Computer Problem Solving”, Journal of Software Engineering and Applications. Vol.10 No.01 (2017), Article ID: 73749, 30 pages 10.4236/jsea.2017.101002
- Csernoch, M. and Biró, P. (2018). Edu-Edition Spreadsheet Competency Framework. Proceedings of the EuSpRIG 2017 Conference “Spreadsheet Risk Management” ISBN : 978-1-905404-54-4 Copyright © 2017, EuSpRIG European Spreadsheet Risks Interest Group (www.eusprig.org) & the Author(s). Retrieved 15. 07. 2018 from <https://arxiv.org/ftp/arxiv/papers/1802/1802.00496.pdf>
- Csernoch, M., Biró, P., Máth, J. & Abari, K. (2015). Testing Algorithmic Skills in Traditional and Non-Traditional Programming Environments. Informatics in Education: an international journal 14: (2) pp. 175–197.
- Gombos, E. & Csernoch, M. (2015). Knowledge and Result. In: Mafalda Carmo (eds.) END 2015: International conference on education and new developments: Proceedings. 2015.06.27-2015.06.29. Lisbon: World Institute for Advanced Research and Science, pp. 44-48.
- Gross, D., Akaiwa, F., and Nordquist, K. (2013) Succeeding in Business with Microsoft Excel 2013: A Problem-Solving Approach (New Perspectives). Cengage Learning.
- HIS (2007). HIS Magazin Studie. Retrieved May 17, 2018 from <http://www.wiwi-treff.de/home/index.php?mainkatid=1&uktid=18&sid=18&artikelid=6509&pagenr=0>
- Informatika kerettanterv (2013a) INFORMATIKA. 1–4. évfolyam. Szabadon választható tantárgyak 1.3.3. Dow Retrieved 10.07.2018, from http://kerettanterv.ofi.hu/01_melleklet_1-4/1.3.3_informat_1-4.doc.
- Informatika kerettanterv (2013b) INFORMATIKA. 5–8. évfolyam. Kötelező tantárgyak 2.2.15 Retrieved 10.07.2018, from http://kerettanterv.ofi.hu/02_melleklet_5-8/2.2.15_informat_5-8.doc.
- Informatika kerettanterv (2013c) INFORMATIKA. 5–8. évfolyam. Emelt óraszámú kerettantervek 2.3.2. Retrieved 10.07.2018, from http://kerettanterv.ofi.hu/02_melleklet_5-8/2.3.2_informat_5-8.doc.
- Informatika kerettanterv (2013d) INFORMATIKA. 9–12. évfolyam. Kötelező tantárgyak 3.2.16. Retrieved 10.07.2018, from http://kerettanterv.ofi.hu/03_melleklet_9-12/3.2.16_informat_9-12.doc.
- Informatika kerettanterv (2013e) INFORMATIKA. 9–12. évfolyam. Emelt óraszámú kerettantervek 3.3.6. Retrieved 10.07.2018, from http://kerettanterv.ofi.hu/03_melleklet_9-12/3.3.6_informat_emelt_9-12_u.docx.
- Kerettantervek (2009) Az oktatási és kulturális miniszter 2/2008. (II. 8.) OKM rendelete a kerettantervek kiadásának és jóváhagyásának rendjéről, valamint egyes oktatási jogszabályok módosításáról szóló 17/2004. (V. 20.) OM rendelet módosításáról. Magyar Közlöny. 20. szám II. kötet. 2008. február 8., Budapest.
- Kerettantervek (2013a) Kerettanterv az általános iskola 1-4. évfolyamára. Retrieved 10.07.2018, from http://kerettanterv.ofi.hu/01_melleklet_1-4/index_alt_isk_also.html.
- Kerettantervek (2013b) Kerettanterv az általános iskola 5-8. évfolyamára. Retrieved 10.07.2018, from http://kerettanterv.ofi.hu/02_melleklet_5-8/index_alt_isk_felso.html.
- Kerettantervek (2013c) Kerettanterv a gimnáziumok 9-12. évfolyama számára. Retrieved 10.07.2018, from http://kerettanterv.ofi.hu/03_melleklet_9-12/index_4_gimn.html.
- Kirschner, P. A. & De Bruyckere, P. (2017) “The myths of the digital native and the multitasker.” Teaching and Teacher Education. 67 (2017), pp. 135–142.
- Koehler, M. & Mishra, P. (2009) What Is Technological Pedagogical Content Knowledge? Contemporary Issues in Technology and Teacher Education, 9(1). Retrieved from <http://www.citejournal.org/volume-9/issue-1-09/general/what-is-technological-pedagogical-content-knowledge>.
- Koehler, M. (2012) TPACK Explained. Published on September 24, 2012 by mkoehler. Retrieved July 12, 2018 from <http://matt-koehler.com/tpack2/tpack-explained/>.
- NAT 1995 (1995) 130/1995. (X. 26.) Korm. rendelet a Nemzeti alaptanterv kiadásáról
- NAT 2003 (2003) 243/2003. (XII. 17.) Korm. rendelet a Nemzeti alaptanterv kiadásáról, bevezetéséről és alkalmazásáról. Retrieved: 2018. 06. 14. http://www.nefmi.gov.hu/letolt/kozokt/nat_070926.pdf
- NAT 2007 (2007) 202/2007 (VII. 31.) Korm. rendelet a Nemzeti alaptanterv kiadásáról, bevezetéséről és alkalmazásáról szóló 243/2003. (XII. 17.) Korm. rendelet módosításáról.
- NAT 2012 (2012) 110/2012. (VI. 4.) Korm. rendelete a Nemzeti alaptanterv kiadásáról, bevezetéséről és alkalmazásáról. http://ofi.hu/sites/default/files/attachments/mk_nat_20121.pdf
- OECD (2011): PISA 2009 Results: Students on Line: Digital Technologies and Performance (Volume VI). <http://browse.oecdbookshop.org/oecd/pdfs/free/9811031e.pdf>. <http://dx.doi.org/10.1787/9789264112995-en>. Retrieved: 2014.02.02
- OECD (2016). Oktatási Körkép 2016, OECD mutatók. Összefoglalás magyarul. Retrieved May 17, 2018 from http://www.keepeek.com/Digital-Asset-Management/oecd/education/education-at-a-glance-2016/summary/hungarian_24bbf13e-hu#page2.
- Prensky, M. (2001). “Digital Natives, Digital Immigrants”, From On the Horizon (MCB University Press, Vol. 9 No. 5, October 2001), Retrieved March 21, 2018 from <http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>.

- Wing, J. M. (2006). Computational thinking. *Communications of the ACM*, 49(3), 33–35. DOI: 10.1145/1118178.1118215
- Wolfram, C. (2010, July 15). Stop Teaching Calculating, Start Teaching Math—Fundamentally Reforming the Math Curriculum. Transcript: Wolfram Technology Conference 2010 Talk. TED Global 2010. Retrieved October 12, 2015, from http://www.computerbasedmath.org/resources/Education_talk_transcript.pdf.
- Wolfram, C. (2015). Evidence: Let's promote not stifle innovation in education. Retrieved October 12, 2015, from <http://www.conradwolfram.com/home/2015/5/21/role-of-evidence-in-education-innovation>.

Sources

- YouTubers (2018) Top 250 YouTubers in Hungary sorted by SB Rank. Retrieved 15. 07. 2018 from <https://socialblade.com/youtube/top/country/hu>.

The Perception Of Students Of Ccee At The University Of Granada (Spain) On Quantitative Techniques

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Abstract

The design and validation of a questionnaire are proposed to collect information about the perception of the Quantitative Techniques 2 subject taught in the second semester of the second year, in the degrees of the Faculty of CCEE at the University of Granada.

The questionnaire has 14 items on a Likert scale 1-5, grouped in three dimensions: perception (motivation and usefulness), self-efficacy (practical theoretical knowledge) and satisfaction with contents, material, methodology and new technologies used in teaching.

The 194 participants belong to the Degrees in ADE, ECO, FICO and MIN with ages between 18 and 37 (mean 21.55 and SD 2.82). 50.6% are women.

The results reveal a high consistency and reliability of the questionnaire with a Cronbach alpha of 0.819. Regarding perception, the results show great homogeneity, which means that it exceeds the 3.5; in particular motivation (items 1 and 2) obtained an average 3.60, SD 1.02, and utility (3, 4, 10) was valued with an average 3.29, SD 1.16. The self-efficacy (theory 6 and 8; practice 7 and 9) has an average of 3.66, SD 1.01 in theoretical knowledge and 3.53, SD 1.09 in practice knowledge. The best punctuated dimension is satisfaction (11, 12, 13 and 14) with an average of 4.19, SD 0.93.

In this work it is also verified if perception changes according to each degree studied or students' sex. The results of this work will be taken into account to improve motivation, given its effects on academic performance. For this, we will prepare specific theoretical and practical materials that better qualify students to face the subject, as well as continue working in this way to maintain / improve the satisfaction declared by students.

The Political And Religious Dimensions Of The Concept Of 'Nation' In Katip Çelebi

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Abstract

Kâtip Çelebi, one of the leading thinkers of the 17th century Ottoman Empire, focuses on social issues. He draws attention with his intellectual long sightedness among the Ottoman thinkers. Katip Çelebi, who is affected by the ideas of İbnü Khaldun, discusses the problems within a broader framework while discussing political and social events. Instead of focusing on the quick practical solutions of political and social issues, Katip Çelebi is based on a perspective that takes in consideration the theoretical bases of problems. It seems that Katip Çelebi, who approaches social problems with an intellectual responsibility, discusses the issues pointed out by the concepts of the state and nation by using mind and common sense. Katip Çelebi writes some books such as *Mizânü'l-hakk fî ihtiyâri'l-ehakk* ((the right measure for choosing the most correct) ve *Düstûru'l-amel li-islâhi'l-halel* (Paths to correct disorders). Katip Çelebi analyzes the concepts such as nation, ummah, state by taking into consideration the social dynamics. Katip Çelebi handles the “community”, one of the element of state, in a different context from modern period political paradigms. He uses “nation” in a different meaning from the meaning pointed out by the nation state model emerged after the French Revolution. In this work, it will be emphasized how Katip Çelebi deals with the concept of “nation” with its political and religious extensions in his works, and a discussion will be made about whether this concept has changed in the historical process.

Key Words: Katip Çelebi, Nation, Religion, State, Civilization, Society,

The Presentation Of Aircraft Accident To The Press: Examples Of Pegasus Zeynep Plane Accident

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Abstract

Rapid changes in technology have affected both the industry and the aviation industry. Airplanes, one of the basic elements of aviation in particular, are among the most influenced by these developments. The rapid development of airplane technology will increase speed and comfort in transportation; thus leading to the preference of aircraft as a means of transportation. However, these technological developments, complicated systems, and their emergence have brought aircraft accidents to the agenda. Aircraft accidents are sometimes caused by technical, sometimes pilotage, and sometimes organizational errors. Whatever the cause of the mistakes, airplane accidents can cause many people to lose their lives and are seen by the media as news-related events. In addition to its many different functions, how the press, which has the function of informing and informing the society at the most, is a matter to be examined. For this purpose, in January of 2018, Pegasus' Ankara-Trabzon campaign 'Zeynep' made by the name of the aircraft is being investigated in the study of how it was presented at the beginning of the accident. The study was carried out by analyzing the content of Hürriyet, Sabah and Sözcü newspapers, which had the highest circulation in the week that they won.

Keywords: Aircraft, Aircraft Accident, Zeynep Aircraft, Press, Aircraft Accident in Press

Introduction

At the beginning of the twentieth century, the adventure of airplanes, which constituted the basic element of passenger transport in the air, began with the invention of a simple, motorized aircraft. This adventure continues with jet engine aircraft, followed by supersonic aircraft which is faster than voice, and finally with modern aircraft equipped with high technology, as a result of technological innovations coming in line. However, these developments did not only affect the aircraft, the capacity of the aircraft, the speed or the equipment of the aircraft, but also the whole aviation system. In other words, air navigation, air traffic control, security, safety and airport systems have become more sophisticated and more secure, which has led people to prefer more air travel each day. Despite all these developments, only unchanging reality in the aviation sector is the continued existence of aircraft accidents.

Even with all the innovations and improvements over the last forty years, the basic question "Why are the planes still crashing?" remains unanswered. It is not easy to answer this question. In the first years of aviation, planes were insecure due to mechanical failures and these failures often led passengers and pilots to lose their lives. However, in the course of time, modern era of aviation has begun with the successive transformation of aviation through technological developments (Shappell and Wiegmann, 2000: 1).

In modern era, thanks to resolution of mechanical faults of aircrafts over time with the developments in the aviation, the accidents caused by these faults have begun to decrease, but the accidents caused by people have begun to increase. Thereupon, attention has focused on the human factor in the event of an accident. These were sometimes accidents caused by pilots, sometimes maintenance officers, sometimes air traffic controllers, and sometimes airport workers.

The causes of aircraft accidents, whether technical, human, or organizational (ICAO, Doc.9859, 2013: 2-2), cause many people to lose their lives and experience financial losses. For this reason, it attracts attention of the press. Because, for the press, such accidents carry news value. For the press, an event or topic needs to bear certain conditions in order to be news. Factors such as concerning society, being interest, sudden development, rare occurrence of the event, and continuity of the news provide its news value. Although these factors vary according to the newspapers and journalists, many are still taken into consideration while news are created.

It is necessary to investigate how plane accidents, which hold an important position in media as soon as they occur, are presented in the written media. The aim of this study is to show how the accident of Zeynep aircraft belonging to Pegasus airline company, on January 13, 2018, was presented in the Turkish press. For this purpose, in Turkey, the highest newspaper circulation; Sabah, Hürriyet and Sözcü newspapers between 14 and 31 January 2018 were analyzed by content analysis. To analyse the data, the following questions have been taken into consideration:

-how is the news of Zeynep Aircraft handled in the manuscripts covering the duration of 18 days after the accident ?

-how is it interpreted?

-which aspect of the accident is more emphasized in newspapers?

The main problem of the study is that " which aspect of plane accidents are emphasized most in printed media ?"

Aircraft Accidents

In aviation, accident; with regard to the activities of an aircraft until the time when any person has boarded and descended;

In aviation, with regard to the activities of an aircraft until the time when any person has boarded and descended; accident is defined as ;

* A person is killed or seriously injured by exposure to one of the following events;

-in-flight or

- by the collision of any part of the aircraft, including in broken parts or

- by exposure to air pressure or,

* Damage or failure of the aircraft due to the structural force of the aircraft, its performance or flight characteristics being adversely affected and the alteration or repair of the affected component to be required,

* The disappearance of the aircraft or the failure to reach the wrecked plane (ICAO, www.emsa.europa.eu).

The International Civil Aviation Organization (ICAO) describes all incidents that occur in aviation as an accident, resulting in death, injury, or damage to the aircraft. Based on this, what Pegasus "Zeynep" plane lived on January 13, 2018, is evaluated as a plane crash.

According to the last decade statistics in ICAO's 2017 Safety Report, the rate of accidents per one million flights in 2006 is 3.1 and it is seen that this rate has decreased to 2.1 in 2016 (ICAO 2017: 13). In the 2017 Safety Performance Report of the International Air Transport Association (IATA), it is observed that there are 375 accidents in the last five years (2012-2017) statistics, 55 of these were fatal accidents and 320 of them were non-fatal accidents and 1634 of them lost their lives . 19 of total of 375 aircraft accidents were smashups, 30 were control losses in flight, 2 were crashes in the air, 82 were crashes in the track or taxiway, 35 were because of weather conditions, 39 crashes occurred on the ground, 12 crashes were in the course of descent , while 48 of them landed on the landing gear, 61 were on the front landing gear malfunctions, 21 were tail part crash on airstrip, 2 were forced landing on the sea and 10 were crash on airstrip (IATA 2017: 39-81).

Aviation agencies describe more than 40 different accident categories. These; according to operation type; passenger, cargo and other, according to the type of aircraft; large, small, medium jet, turboprop and piston, according to flight stages; park, taxi, departure, first climb, climb, flat flight, first descent, approach, landing. However, those causing the highest number of accidents are; get off the track, loss of control at the flight, hard or uneven landing, system / component failure which means failure or malfunction of an aircraft system or component due to design, manufacturing process or maintenance problem (AIRBUS 2017: 3).

The main factors that cause different types of aircraft accidents are classified as follows:

- Human errors, along with other factors,
- Errors that air traffic controllers made,
- Pilot errors,
- Inexperienced flight crew errors,
- Regarding mechanical failures,
- Errors in maintenance workshops and factories where systems are manufactured,
- Due to dangerous weather conditions,
- The result of terrorist acts,
- Mistakes due to military and semi-military operations (Janic 2000: 45-46)

Pilot fault and equipment fault are the two most common accident reasons. In fact, in study of Donmez (2017: 250) 60% of aircraft accidents in our country were found to be caused by insecure behavior of pilots and cockpit crews, 35% of environmental conditions, 25% of technical problems. The most common types of accidents are accidents on the track or taxi road. these sliding off the track kind of accidents named as Runway excursions (RE) occur by passing the edge of a runway or end of a track . These surface phenomena can include many factors, from when an airplane crosses, or when you take off, or from unsteady approaches to runway conditions. The accident of PEGASUS Zeynep plane also came out of the apex when the plane landed at the airport, and it was in the form of a swing towards the sea.

Presentation of Aircraft Accidents in Printed Media

When it comes to written press, newspapers are the first to come to mind. However, it includes not only newspapers but also magazines and other printed / periodicals. The basic function of all of them is to inform the society. The

press is one of the sources from which people can learn, socialize, argue and enjoy what is going on in the world. All of this is done by the press reporting the events and presenting them as news. The news is actually described as the presentation of events that take place in the world, in a way that attracts people's attention. In particular, the printed media deals with news in a more detailed and widespread way, can refer to the same subject over and over again, so it can create agenda and attract attention. The editorials of printed media considers the news values of the events, while deciding on news items to make a current issue and choosing news. When news is selected or rejected, news value is important and there are various criteria. News value criteria according to Galtung and Ruge (1965: 66-68) are; frequency, threshold value, openness, significance, compatibility, extraordinary, continuity, conformity or compilation to composition, being connected with elite nations, being connected with elite people, being related to individuals, negative events.

The value of the news is about journalists' value and the way they present them. News values are divided into three main categories: general values (negativity, closeness, innovation, continuity, simplicity, individuality), content values (disasters, stars, authorities are related) and development values (dramatization, conflict, being related to human and reality). The news media generally values the dramatic effect of bad news. According to them, the bad news is good news. Because an accident or catastrophe with death or a bad fall in the stock exchange has more news value than an accident or disaster where there are no deaths but casualties (Burton 1997: 142-143).

Disasters or accidents that arise suddenly and carry the value of the news (plane crash, earthquake, tsunami, ship accident, etc.) keep their value not only on the day they happen, but also in later days or weeks. When an aircraft accident occurs, both the press, the public and the authorities focus on it. The media / press is constantly speculating on the cause of the accident during the twenty-four hour news broadcast. The government squads are quick to investigate, they promise to find out the reasons, and sometimes the laws are put into practice quickly. Airplane accidents attract common attention; these accidents often reveal facts about aviation or aircraft that are unexplained and with unknown reasons (Cobb and Primo 2003: 2); they also put people at risk in flight areas (Gerede 2016: 9).

Airplane accidents with all necessary elements like death, destruction, mystery, human error and tragedy are important news for journalists. Pilotage errors, errors caused by airline operation, airport errors, mechanical errors in the air, etc. the reasons are important for the continuation of the news and are also attractive to the headlines. The news is shaped by adding slogans, visual images, expert opinions, expressions of the passengers, the description of the pilot, the status of the damage, victims, victims, acquaintances, relatives, eyewitness statements. Thus, airplane accidents, which are already regarded as a major disaster, become an event attracting people's attention with the contribution in the press.

Methodology

This study aims to reveal how aircraft accidents are handled, interpreted, and emphasized in which direction in printed media which plays a very important role in informing society. For this purpose, printed copies of Sabah, Hürriyet and Sözcü broadcasting at the national level with the highest circulation in Turkey were chosen as sample of the study. The survey was limited to the eighteen days between January 14 and January 31, 2018, the day after the day of the Pegasus Zeynep airplane excavation.

The study consists of two main parts, which are literature review and content analysis method that is one of the qualitative research methods. In the first part, aircraft accidents and how these accidents were presented in printed media were given, while in the second part, Zeynep flight accident news with the coding template was subjected to content analysis in the printed versions of the three journalists. The purpose of content analysis is to screen and evaluate information that is important for clearly defined research questions. In short, it is to make inferences that may be about the dimensions of social reality from the contents of texts. In this context, there is always a connection and a connection in content analysis (Gökçe, 1995: 26). Content analysis is a scanning with the aim of quantifying certain characteristics of a text, a book, a document. Perspectives in documents, philosophies, language, expression, etc. the depths of the properties and the solutions to be made according to certain criteria can be understood (Karasar 2010: 184). The answers to the following questions were searched by analyzing the numerical intensity and direction of the aircraft accident news which was prepared for the content analysis section of our research: "Which pages did the news take place on?", "What were the position of news on the pages?", "What was the news kind? what expressions were used ?, 'and' Were photographs used in news? "

Findings

Boeing 737-800 "Zeynep" commercial passenger plane belonging to Pegasus Airlines, which took off from Ankara on January 13, 2018 with 22 passengers, 2 pilots and 4 crew members at 22.26 pm, after landing to Trabzon Airport at 23.30, got off the track suddenly and started to slip towards the sea. There were no deaths in the accident where small-scale exploits occurred, the passengers were evacuated without any problems, and major damage was caused in the plane.

1. Numerical Distribution of Pegasus Aircraft Accident News by Journal:

The total number of news on the accident that the plane named "Zeynep" had, which belongs to the Pegasus company, published in Sabah, Hürriyet and Sözcü between 14 and 31 January 2018 is 28. 53.6% of these reports were published in Sabah, 28.6% in Hürriyet and 17.9% in the Sözcü newspaper (See Table 1).

Table 1: Numerical Distribution of Accident News by Journal

Name of Newspaper	Number	%Percentage	% Valid Percentage
Sabah	15	53,6	53,6
Hürriyet	8	28,6	28,6
Sözcü	5	17,9	17,9
Total	28	100,0	100,0

This table shows that most of the news on the aircraft accident were given in Sabah newspaper. In this context, it can be said that the Sabah newspaper has more coverage of the accident reports and put on the agenda more than the other newspapers do.

2. Historical Distribution of Accident News in Journal

The printed copies of the Sabah, Hürriyet and Sözcü newspapers taken as samples in the scope of the research were examined between 14th and 31st January 2018 and Table 2 shows the dates of the accident reports of the plane named "Zeynep" belonging to Pegasus company in the newspapers. When we look at the historical distribution of newspaper news, we see that 7.1% was on January 14th, 32.1% on January 15th, 17.9% on January 16th, 17.9% of them on January 18th, and 14.3% on January 19th.

Table 2: Historical Distribution of Accident News in Journal

Newspaper Date	Number	%Percentage	%Valid Percentage
14.01.2018	2	7,1	7,1
15.01.2018	9	32,1	32,1
16.01.2018	5	17,9	17,9
17.01.2018	5	17,9	17,9
18.01.2018	3	10,7	10,7
19.01.2018	4	14,3	14,3
Total	28	100,0	100,0

The eighteen-day prints that were published between January 4 and 31, 2018 were scanned and three journalists were found to have received these reports for only six days. On January 15, the number of news items increased and during the following 4 days the number of news decreased. The main reason for the small space occupation in the newspapers is the absence of any death or injury, the removal of aircraft wreckage, and the taking of the incident into the investigation.

3. Distribution of Pegasus Aircraft Accident News by Pages:

The total number of PEGASUS airplane reports published in Sabah, Hürriyet and Sözcü between 14 and 31 January 2018 is 28. It was seen that 28.6% of these reports were on the first page, 3.6% on the second page and 67.9% on the internal pages.

Table 3: Distribution of accident by pages

Pages that accident news take place on	Number	%Percentage	%Valid Percentage
1.page	8	28,6	28,6
2.page	1	3,6	3,6
Inside Pages	19	67,9	67,9
Total	28	100,0	100,0

The display of aircraft accident news on the first page makes its importance in the country's agenda visible. The presentation of the most important news items on the first page is of value in this respect. However, it is seen that the majority of PEGASUS Zeynep air traffic reports (67.9%) were published on the inside pages.

4. Distribution of Accident News Position on Newspaper Pages

Table 4 shows where the accident news are posted on the pages of the newspapers. According to the table, 7.1% of the news reports were in surveillance, 42.9% in the headline, 7.1% in the middle of newspaper, 17.9% in the fold and 25% in the lower part of newspaper.

Table 4: Distribution of Accident News Position on Newspaper Pages

News Position on Newspapers	Number	%Percentage	% Valid Percentage
Subhead	2	7,1	7,1
Head	12	42,9	42,9
Middle Part	2	7,1	7,1
Fold	5	17,9	17,9
Lower Part	7	25,0	25,0
Total	28	100,0	100,0

According to the findings, it is seen that the news is usually given in the headline and lower band. It is known that the subhead and headlines in newspapers are the most important positions in terms of attracting attention. That most of the Pegasus accident reports (42.9%) are cited in the headlines indicate that they care the incidents.

5. Types of Pegasus Aircraft Accident News

17.9% of the Pegasus airplane news reports published in Sabah, Hürriyet and Sözcü between 13-31 January 2018 were opinion column, 17.9% were interview, 3.6% were research reports and 60.7% were made up of event news.

Table 5: Types of Aircraft Accident News Cited in Newspapers

Types of News	Count	Percentage %	Valid Percentage %
Opinion Column	5	17,9	17,9
Interview	5	17,9	17,9
Research News	1	3,6	3,6
Event news	17	60,7	60,7
Total	28	100,0	100,0

The predominant part of the news about Pegasus plane crashes consists of event news with 60,7%. These news reports are about how the incident happened, the content of the incidents and the authorities' statements on them.

6. Photograph Use in Pegasus Aircraft Accident News Cited in Newspapers

Data about the accident related news as well as the photographs related to the accidents in the newspapers are given in Table 6. According to the table, in 24 (85,7%) of them photos were used, but in 4 of them (14,3%) no photos were not used.

Table 6: Distribution of Photographs Used in Aircraft Accident News Cited in Newspapers

Photos in News	Count	Percentage%	Valid Percentage%
Exists	24	85,7	85,7
Non-exists	4	14,3	14,3
Total	28	100,0	100,0

It is seen that the use of photographs aiming to reveal the value of the news, to attract attention and to make it understandable is high (85.7%)

Table 7. Distribution of Photographs used in Plane Accident News by Newspapers

Distribution of Photographs in News by Newspapers	Exists	Non-exists	Total
Hürriyet	8	0	8
Sabah	11	4	15
Sözcü	5	0	5
Total	24	4	28

Considering the distribution of photograph used by newspapers in accident news, 11 news in Sabah Newspaper used photos while 4 news didn't. Photographs were used in all news published in the Hürriyet and Sözcü newspapers (see Table 7).

8. Distribution of the Number of Columns concerning Aircraft Accident News in Newspapers

Column numbers of aircraft accident reports in the newspapers is given in Table 8. According to the table, 32.1% of the reports were given as 1 column, 42.9% as 2 columns, 3.6% as 3 columns, 10.7% as 4 columns and 10.7% as 5 columns.

Table 8: Column numbers of aircraft accident reports in the newspapers

Column Number of the News	count	Percentage%	Valid percentage%
1. column	9	32,1	32,1
2. column	12	42,9	42,9
3. column	1	3,6	3,6
4. column	3	10,7	10,7
5. column	3	10,7	10,7
total	28	100,0	100,0

According to the findings, it is seen that news is mostly (42.9%) given in 2 columns.

9. Expressions used in headlines of aircraft crash news in Newspapers

Given the expressions used in the headlines in the aircraft crash news in the newspapers; it can be seen that the following expressions have been used with following percentages: 14.3% fault, 14.3% rescue, 10.7% calamity, 7.1% right engine fracture, 7.1% miracle, 3.6% panic, 3.6% fear, 3.6% death, 3.6% got off lightly, 3.6% escaped with a whole skin, 3.6% injury, 3.6% had their heart in their mouth, 3.6% emergency code, 3.6% crashed, 3.6% what happened, 3.6% story, 3.6% slipped to the sea, 3.6% Pegasus (see Table 9).

Table 9: Expressions Used in Headlines of Aircraft Crash News in Newspapers

Expressions Used in News Headlines	count	%percentage	%Valid Percentage
fault	4	14,3	14,3
Rescue	4	14,3	14,3
calamity	3	10,7	10,7
Right engine fracture	2	7,1	7,1
miracle	2	7,1	7,1
Panic	1	3,6	3,6
fear	1	3,6	3,6
death	1	3,6	3,6
Got off lightly	1	3,6	3,6
escaped with a whole skin	1	3,6	3,6
injury	1	3,6	3,6
had their heart in their mouth	1	3,6	3,6
emergency code	1	3,6	3,6
crashed	1	3,6	3,6
what happened	1	3,6	3,6
story	1	3,6	3,6
slipped to the sea	1	3,6	3,6

Pegasus	1	3,6	3,6
Total	28	100,0	100,0

Accordingly, the most frequently used expressions in headings of newspapers are "fault" and "recovery". However, when the accident headlines are evaluated in general, it is seen that different and negative expressions are used.

10. Topics Contained in the Content of Aircraft Accident News in Newspapers

Given the topics contained in Pegasus airplane crash news published in Sabah, Hurriyet and Sozcu between 13 and 31 January 2018, it can be observed that 14.3% of them are pilot error, 64.3% of them are narration of the incident, 7,1% are comments, 10,7% are criticisms and 3,6% are stock market related issues (See Table 10).

Table 10: Topics Contained in the Content of Aircraft Accident News in Newspapers

Topics Contained in Content of News	count	%percentages	%valid percentages
Pilot Error	4	14,3	14,3
Narration of incident	18	64,3	64,3
Comments	2	7,1	7,1
Critics	3	10,7	10,7
Stock Market	1	3,6	3,6
Total	28	100,0	100,0

While the predominant part of the topics mentioned in news related to the Pegasus aircraft crashes is 64.3%, at least 3.6% of the news is constituted on news concerning the status of Pegasus in stock market. This demonstrates that newspapers are paying attention to how accidents have taken place rather than who are responsible for the accident or comments on it

11. Whether or not an Expert Opinion is Cited in the Aircraft Accident News

Considering if the expert opinion is included in the airplane news reports in Sabah, Hurriyet and Sozcu newspapers, it can be seen that 17.9% of the news includes it while 82.1% does not include (see Table 11)

Table 11: Whether or not an Expert Opinion is Cited in the Aircraft Accident News

Does the news contains an expert opinion?	Count	Percentage%	Valid Percentage%
Yes	5	17,9	17,9
No	23	82,1	82,1
Total	28	100,0	100,0

The findings show that 82.1% of the aircraft accident reports in the newspapers do not include expert opinions. Journalists often refer to expert opinions for information on matters which they are not experts in. It is seen that expert opinions are not included in the accident reports, only how the event happened is stated.

Conclusion

In the 21st century it is inevitable that accidents occasionally occur in the airway transportation that continuously develops in our country as well as all over the world. It is known that these accidents are considered newsworthy events from the press point of view. To show whether this is really the case, an examination of how the Zeynep plane accident belonging to Pegasus Airlines, which took place in 2018, will give important information about the matter.

For this purpose, this study examining "Zeynep" plane accident belonging to Pegasus Airlines was conducted and it was observed that the news about the accident was included in three newspapers, mostly in the Sabah newspaper; that the press always pay attention to the accident even though there are no death or injury reports, that it can be on subject to news for a certain period of time; in the first days the newspapers published it in the banner and front page, and in the following days mostly in the internal pages; the types of news mainly consist of event news; the use of photos in news was high; usually the news was given in 2 columns; generally negative statements were used in news headlines. It was also found that the contents of the news mostly included the narration of the event and the expert opinion was not included.

As a result, we can say that plane accidents are always newsworthy events attracting the attention of the press.

References

- Airbus (2017), A Statistical Analysis of Commercial Aviation Accidents 1958-2016, Airbus publication
- Burton, Graeme (1997). *More Than Meets the Eye: An Introduction to Media Studies*, Arnold, London
- Cobb, Roger W. and Primo, David M. (2003). *The Plane Truth, Airline Crashes, the Media, and Transportation Policy*, Brookings Institution Press, Washington
- Dönmez, Kadir (2017). "Türk Hava Sahasında Meydana Gelen Ölümcül Uçak Kazalarına İnsan faktörleri Analiz ve Sınıflandırma Sisteminin Uygulanması", *The Journal of Academic Social Science Studies*, Number: 59, p.229-253
- Galtung, Johan and Ruge, Mari H. (1965). "The Structure of Foreign News: The Presentation of the Congo, Cuba and Cyprus Crises in Four Norwegian Newspapers", *Journal of Peace Research*, Vol.2, No.1, pp. 64-91.
- Gerede, Ender (2016). "Havacılık Emniyetine İlişkin Temel Kavramlar", *havacılık Emniyeti* (Ed.Ender GEREDE), Anadolu Üniversitesi Yayınları, Yayın No:3275, Eskişehir
- IATA, (2017). *Safety Report 2016*, Issued April 2017, Edition 53 rd, IATA Publication,
- ICAO, Doc.9859 (2013). *Safety Management Manual (SMM)*, "Chapter 2 Safety Management Fundamentals", ICAO Publication, (2-3)
- ICAO (2017). *Safety Report 2017 Edition*, ICAO Publication,
- Jalic, Milan (2000). "An Assessment of Risk and Safety in Civil Aviation", *Journal of Air Transport Management*, S. 6, ss. 43-50
- Karasar, Niyazi (2010). *Bilimsel Araştırma Yöntemleri*, Nobel Yayınları, Ankara
- Shappell, Scott A. and Wiegmann, Douglas A. (2000). *The Human Factors Analysis and Classification System–HFACS*, U.S. Department of Transportation Federal Aviation Administration, 1-15
- http://www.emsa.europa.eu/retro/Docs/marine_casualties/annex_13.pdf, (Erişim Tarihi: 29.03.2018)
- https://www.mmo.org.tr/sites/default/files/8997733ec258a9f_ek.pdf, (Erişim Tarihi: 27.02.2018)

The Proactive Behavioral Effects Of The Kaizen Strategy And The Parkinson's Law On Organizational Problems

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Abstract

Reactive and extreme bureaucratic organizations are in need of change. The reactive person is the waiter. He waits for things to happen and then reacts to the situation that results. The proactive person is the sharp one who anticipates the events that are about to happen and is ready with both a response and a plan to deal with the outcome. People who are aware of their surroundings and wish to avoid being taken by surprise by such things as odd job interview questions or negative results from medical tests will plan ahead, be wary, and try to forestall the worst of it by being prepared. Kaizen is a Japanese word for 'continuous improvement'. "One small step can change your life" is the gentle but potent way to effect change. "A journey of a thousand miles must begin with a single step. If the steps are small, the stress mechanism is quiet and the brain develops new habits from the repetition of small steps. The term "kaizen", also provides benefits in decision making. If someone has difficulty finding the purpose, the best Kaizen technique is asking a question each day, opening up the heart to hear the answer. Stress is an inevitable fact that's why there is stress management. Kaizen (small steps) and innovation (large steps) are both worthwhile strategies. Using big steps is fine but if the stress is too great or the motivation too little, Kaizen technique is necessary. Parkinson's law is a work that examines the results of rigid bureaucracy and rule in humorous dictionaries, especially in organizations. Parkinson mentioned that it is too long to fill in the time left for any job to be finished at all times. The first sign of organizational malaise is that it manifests itself in the organizational hierarchy of individuals who combine inefficiency and jealousy at a high level. None of these qualities are important on their own, but when they arrive at a certain density they react and bring a new self-name called "injelitance". The Kaizen Strategy and the Parkinson's Law can contribute to the resolution of organizational problems by showing proactive behavioral impact.

Introduction

A vital characteristic requisite for success is an efficient management system. A company must plan, discuss, and assign roles to provide fluid leadership, embodied in the management system, during the course of doing business. The operation and use of the management system also have to be documented and broadcast throughout the company so that all employees know what part they have in its implementation. The management system must provide a clear focus on the competitive landscape, because competition largely drives a company's initial strategy, with the structure and design following the strategy. The competitive environment is critical to a company's survival in any market, so any management system must accommodate the particular nature of each market. Building an effective organizational management system involves consideration for people, automated systems, and the business as a whole. If a business is expected to grow financially and be a contributor to the welfare of the community in which it exists, it must be able to control itself successfully. Vital to that control is a system that integrates all stakeholders, all parts of the organization, and all aspects of the business functions. Company management must realize that a management system encompasses virtually the entire culture of the business and can affect the culture of the surrounding community (Tiller, 2012: pp.20-23). There are many problems in the organizational management systems. Some problems with strategic planning are: Lack of clear focusing for the organization, frequent conflicting suggestions from Board and/or employees, continual shortage of funds across the organization, low attendance and participation from Board and/or employees, poor results from products and services, conflict between Board members and employees. Also some problems with teamwork are: Conflict between team members, inefficiencies in activities, high turnover of members, confusion about decision making and problem solving, poor performance among members, ineffective meetings, low morale. Proactive behavior is first action, initiating behavior. The Kaizen strategy and the Parkinson's law have direct proactive effects on organizational issues. Planning, organizing, directing, coordinating and controlling; known basic management functions. The Kaizen Strategy and the Parkinson's Law are also influential on all management functions.

Proactive Behavior Concept And Definition

Proactive behavior means letting people take initiative and assume personal responsibility for the value added to the customer, the quality of work and the work environment (Gong & Blijleven, 2017: p.534). Organizations need proactive employees who actively seek to "alter and improve their work environment" and seek to capitalize and "make things happen" that will lead to greater organizational outcomes (Parker and Wang, 2015; Ghitulescu, 2018; Wihler, et al., 2017). The most impactful employees are self-starting, forward-thinking, and willing to actively contribute (Schmitt, Den Hartog, & Belschak, 2016). People are not able to simply be passive recipients of

environmental constraints on their behavior and are no longer able to simply abide by job descriptions, policies and procedures, instructions and direction, and rules and routines. Rather, they must be able to intentionally engage and take initiative to directly change their current circumstances for the better (Crant, 2000). Proactive behavior is influenced by one's belief in their ability to overcome constraints by situational forces and the ability to affect positive and beneficial changes in the environment (Bateman & Crant, 1993; Thomas, Whitman, & Viswesvaran, 2010). Proactivity or proactive behavior by individuals refers to anticipatory, change-oriented, and self-initiated behavior in situations. Proactive behavior involves acting in advance of a future situation, rather than just reacting or adapting. It means making things happen rather than just watching things happen or waiting for something to happen. Whereas adaptability is about responding to change, proactivity is about initiating change (Joo and Bennett, 2018: p.2).

Stress has been one of the focuses of studies in psychology because of its negative impact on people and their health. Cartwright and Cooper (1997) underlined the detrimental effects of stress that it can lead to many problems like emotional distress, stomach disorder, headaches, sleeplessness, loss of energy, and so on. Moreover, in the long term, it can be more serious illnesses such as high blood pressure and cardiovascular disease. While traditional stress research tends to emphasize the things that we can do when we get stressed, latest coping research focuses on taking actions that can be taken before stressful events occur. This became materialized especially after the new conceptualization of coping due to the influence of positive psychology movement (Peiro, 2007) and now it involves personal growth and self-regulated goal attainment strategies (Schwarzer & Knoll, 2003). Therefore, a new conceptualization of coping has been proposed by Schwarzer and Taubert (2002) as proactive and preventive coping which focus on a proactive, goal-oriented, and adaptive way of coping, as traditional coping models focuses on the reactive nature of coping only for the past and current stressors. However, proactive and preventive coping deal with anticipated, possible stressful situations which have not occurred yet. Therefore, these are future-oriented motivational higher order concepts. While proactive coping is defined as an individual's efforts to go after achieving new challenges, create new opportunities, and enable promotion toward challenging goals; preventive coping is defined as the process where an individual construct resources and resistance toward the possible occurrence of stress in the distant future. Therefore the main purpose of preventive coping is just to be on the safe side while in proactive coping, is to further the situation to develop opportunities to grow and at the same time to be on the safe side (Ersen & Bilgiç, 2018: p.2).

Proactive Continuous Improvement

An active kaizen environment provides an organisation the means through which to integrate both the mental and physical and the necessary change management to create a dynamic organisation that is proactive and reactive to internal and external environmental changes. Within the organisation, proactive prevention activity and reactive problem-solving activity are possible through visual management tools and techniques. Production operating efficiency, quality and safety are continually improved through active tools, including analysis, feedback and clarification of operating methods. It is these tools that have been embraced by the West. As kaizen integrates the individual with operations and operations with the organisation, it becomes both pervasive and sustainable within that organisation. Workers tend to acknowledge kaizen as being both process-oriented and result-oriented, yet it is predominantly process-oriented. Kaizen serves different purposes for different people, being loose conceptual iterations of proactive change and improvement (Macpherson et al. 2015: pp.6-8).

Continuous improvement concerns the continuous effort of people to shift from reactive firefighting to proactive problem solving, and having the aim of relentlessly improving the execution and efficiency of processes in an ongoing manner. The Kaizen sessions conducted during each bilateral visit provide people with opportunities to discuss and communicate their ideas for improvement in an open and constructive manner. The Kaizen sessions are also the main formal channel for operational people to communicate their ideas across different managerial levels. In a research, those ideas are not only dedicated to the content of the information technology products to be developed, but also to personal efficiency and the processes of development. Those issues and the related actions are logged in a tool, which also contains information about the "action owners" and the feedback provided during a later stage about the results of the actions. During the Kaizen sessions, operational people proactively decide on the priorities of their work, together with their team members. Interviewees indicated that there is a cultural fit between the two factories. This is reflected by the similar proactive behavior of the people working in the factories. Both organizations indicated that all employees involved in information technology outsourcing relationship know what their roles and responsibilities are. At the same time, employees of both organizations also have their own employee performance and satisfaction evaluation processes to proactively help people improve their work. Those instruments are companywide and also used in this information technology outsourcing relationship. This information technology outsourcing relationship has a reward mechanism in place to stimulate proactive behavior. Employees and teams are put in the spotlight in case an improvement is realized. Every year, the best-performing individual and the team within the partnership are rewarded with nonmonetary prizes. The best-performing team

is always a mixed team that consists of people from both sides of the partnership. The purpose of Gemba walks is to proactively identify waste and opportunities for improvement. Knowledge from people involved in the partnership on how to improve the partnership is then extracted through leading with questions. Within the partnership, the daily stand-up sessions that are part of agile development are considered to be a 'light-version' of Gemba walks. During these sessions, the product owner, the scrum master, and the entire development team are present. The interviewees argued that the daily stand-ups boost the morale of the people involved in the partnership. People perform better if managers show genuine interest in the work performed, and when people know that their efforts are noticed and appreciated by their team and their managers. Within the partnership, the stand-ups are performed by the product owner, rather than executive management. While the respect for people and continuous improvement are relevant to knowledge accessing, systems thinking and proactive behavior facilitate knowledge integration and utilization (Gong & Blijleven, 2017: pp.533-539).

The Parkinson's Law Providing Proactivity In Time Management

Parkinson's Law is the phenomenon of expansion of work to fill the time available for its completion. It was coined by Cyril Northcote Parkinson, a British author. It first appeared in an article which appeared in *The Economist* in 1955. Parkinson's Law states "work expands so as to fill the time available for its completion." If something must be done in a year, it'll be done in a year. All projects take time-you certainly can't build a skyscraper in a day, or a factory in a week. The more complex the project, the more time it typically takes-to a point. What would it look like if you finished the project on a very aggressive timescale? If you had to build a skyscraper in a day, how would you go about doing it? Answer the question the way you would a counterfactual, and you'll discover techniques or approaches you can use to get the work done in less time (What is 'Parkinson's Law'? 2018).

Parkinson's Law's aim is to finish your work earlier be proactive. Deadlines are what give instant pressure to motivate us to work faster. Tasks don't get done if there's no deadline. So, once that deadline is set way too far from what the work really requires, you slack. For example, work can be compared to gas. Naturally, gas will take up the whole space. Their molecules will distribute randomly in space. So, if you give it a big or small container, it will take up the whole space of it. Like gas, work also expands and contracts. It depends on the time we allow for it (Parkinson's law to increase productivity, 2018).

The reality of Parkinson's Law is the more time passes before we take action, the more time that activity can spend in our minds haunting us, almost to a paralyzing state. How some people in the world are able to get so much done in a day and others feel completely overwhelmed with a significantly less workload? We all have the same amount of time in the day as Jeff Bezos, Oprah Winfrey, Kanye West or any other inspirational figure taking massive action in their lives. So what's the difference in how they operate? These leaders know what's most important and focus on it. Being able to focus on deep work is one of the most valuable skills a leader can develop. The work we create alone when uninterrupted is extremely important (Parkinson's law, 2018).

Parkinson's Law means that inefficiency has been around for a long time, and procrastination only increases the work effort. If you have a long-term project that you have days, weeks, or months to complete, you should break it down into smaller projects. Each project should have its own specific deadlines. It's crucial that you set specific deadlines for all of your projects, whether they are long-term projects or projects that take just an hour or two to complete. It is important to set deadlines that are shorter than what you would usually give yourself.

Conclusion

In this study, it is examined that relations of The Kaizen Strategy and The Parkinson's Law with proactive behavior. Furthermore, how this kind of relations influences organizational problems are discussed. Continuous Improvement is a process that needs everyone in the organization to support. Continuous Improvement applies not only to top management but also to a person that is least involved in the company. It requires everyone consent and support. Instead of imposing solutions on the people, the company must use their expertise to improve them. If training, education and proper guidance is provided to them they improve at realizing the potential improvement areas where the product/process can be improved. And if proper structure is provided, these improvements can be turned into reality. Once continuous improvement process has been established in an organization it is everybody's responsibility in the organization that it must be maintained. Parkinson's law suggests that people try to maximize performance by taking the full time allotted to them even though doing so will hinder their productivity. Parkinson's Law predicts that more time will be spent on a task when more time is available. Parkinson's Law states that the amount of effort necessary to complete our work adjusts to fit the amount of time we allocate for it. In other words, Parkinson's law suggests that people try to maximize performance by taking the full time allotted to them even though doing so will hinder their productivity. In fact, a Stanford study confirmed that paradoxically, "the more hours you work, the less you get done". The strong form of Parkinson's Law is obviously wrong because as time shrinks to zero the speed of work does not go to infinity. To pick but one example, limiting a novice

pianist's practice time to less than a second does not make the novice learn to play that much faster. However, in its weak form Parkinson's Law predicts that more time will be spent on a task when more time is available.

Briefly, proactive coping provides an increment in work engagement and decreases burnout. Therefore, in terms of practical implications for organizations and managerial perspective, proactive coping can be very important in which the demand for jobs is because of its alleviating effect on the negative impacts of stress and additionally its role in increasing potential for growth and well-being. Therefore, managers should take notice of its positive effects on employees and invest in the promotion of proactive coping strategy in the organizations. As a result, Kaizen Strategy and Parkinson's Law contribute to the reduction of organizational problems by proactively acting.

References

- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14: (pp.103-118).
- Cartwright, S., & Cooper, C. L. (1997). *Managing workplace stress* (Vol. 1). Sage.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26: (pp.435-462).
- Eremenko, K. Parkinson's law to increase productivity. (2018, 11 May). Access Address: <https://www.superdatascience.com/podcast-parkinsons-law-to-increase-productivity/>
- Ersen, Ö. & Bilgiç, R. (2018). The effect of proactive and preventive coping styles on personal and organizational outcomes: Be proactive if you want good outcomes. *Cogent Psychology*, 5: 1492865, <https://doi.org/10.1080/23311908.2018.1492865>
- Farooqui, R.U. & S.M. Ahmed, (2009). Maintaining a Focus on Continuous Improvement. *Seventh LACCEI Latin American and Caribbean Conference for Engineering and Technology*. June 2-5, Venezuela.
- Gong, Y. & Blijleven, V. (2017). The role of Lean principles in supporting knowledge management in IT outsourcing relationships. *Knowledge Management Research & Practice*, 15(4), (pp.533-541). <https://doi.org/10.1057/s41275-017-0072-8>
- Joo B.K. & Bennett. R.H. (2018). The role of proactivity and contextual factors in influencing creative behavior, commitment, and performance: evidence from a korean multinational, *Journal of International & Interdisciplinary Business Research*, 5(Art. 2), (pp.1-20).
- Kaufman, J. (What Is 'Parkinson's Law'?). (2018, 17 August). Access Address: <https://personalmba.com/parkinsons-law/>
- Macpherson, W.G., Lockhart, J.C., Kavan, H. & Iaquinto, A. (2015). Kaizen: a Japanese philosophy and system for business excellence. *Journal of Business Strategy*, 36(5) (pp.3–9). DOI: 10.1108/JBS-07-2014-0083.
- Moore, D. & Tenney, E.R. (2012). Time Pressure, Performance, and Productivity. *Research on Managing Groups and Teams*, 15, (pp.305–326).
- Parker, S. K. & Wang, Y. (2015). Helping people to “make things happen: A framework for proactivity at work. *International Coaching Psychology Review*, 10, (pp.62-75).
- Parkinson, C. (1955, November). Parkinson's law. *The Economist* (19) (pp.635–637).
- Peiro, J. M. (2007). Stress and coping at work: New research trends and their implications for practice. In K. Na Swall, J. Hellgren, & M. Sverke (Eds.), *The individual in the changing working life* (pp. 284– 310). Cambridge, UK: Cambridge University Press
- Pencavel, J. (2015). The Productivity of Working Hours. *The Economic Journal*, 125(589), (pp.2052-2076).
- Schmitt, A., Den Hartog, D. N., & Belschak, F. D. (2016). Transformational leadership and proactive work behavior: A moderated mediation model including work engagement and job strain. *Journal of Occupational and Organizational Psychology*, 89, (pp.588-610).
- Thomas, J. P., Whitman, D. S., & Viswesvaran, C. (2010). Employee proactivity in organizations: A comparative Meta analysis of emergent proactive constructs. *Journal of Occupational and Organizational Psychology*, 83, (pp.275-300).
- Tiller, S.R., (2012). Organizational Structure and Management Systems, *Leadership and Management in Engineering*, 12(1), (pp.20-23).
- Udell, J. Parkinson's law. (2018, 3 January). Access Address: <http://artofamanager.com/2018/01/parkinsons-law/>
- Wihler, A., Blickle, G., Ellen, B. P., Hochwarter, W. A., & Ferris, G. R. (2017). Personal initiative and job performance evaluations: Role of political skill in opportunity recognition and capitalization. *Journal of Management*, 43, (pp.1388-1420).

The Problematics Of Teaching Space Economy

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Absract

This paper deals with some qualitative and quantitative consequences of the influence of cosmic weather and solar wind on the Earth's magnetosphere, ionosphere and atmosphere as well as the Earth economy. It is assumed that cosmic weather is generated by solar flares, coronal plasma ejections, high-speed flows of solar wind, and solar energetic particles. New economic variables are derived, such as price jerk, price jounce, and price crackle. The theory of binary relations is used to formulate the principle of correspondence between a set of quantities of non-relativistic mechanics and a set of new economic quantities. The principle of correspondence is used to introduce a stationary field of retail gravitation with two components, such as the intensity of retail gravitation and induced retail gravitation. The next step is the introduction of a stationary field of cosmic retail gravitation. The possibilities of applying the correspondence principle in the teaching of the space economy are analyzed. The paper is one of the outputs of the preparatory work on the research project of the influence of the Sun - Earth relations on the terrestrial economy.

The Project-Based Learning Approach And Collectivistic Efl Learning: Me Vs We

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Abstract

Learning the English language is a challenging endeavor which requires a collaborative, team-oriented spirit. The belief that learners learn better when they learn together has indeed become a cherished motto of language experts and practitioners. This team-orientedness seems to be a requisite for all English language learners and tutors. In this regard, the project-based learning approach is hailed as a collectivistic, team-specific pedagogical instrument that enhances the “we” rather than the “me” attitude among English learning communities, particularly in the EFL context. Thanks to the implementation of the PBL underlying premises, EFL learners are prone to smoothly develop not only different language skills but also various life skills that can make of them added values to their communities and countries. Within this vein, this paper purports to answer the following set of questions: (1) In what way does PBL favor the “we” learning attitude? (2) Is it true that EFL learners cultivate linguistic and extra linguistic assets through PBL? (3) What constraints impede the adoption of the PBL approach in the EFLT context? The assumption which governs the elaboration of these research questions is that EFL learners are likely to display linguistic shortcomings that could be efficiently fixed up via PBL-bound strategies and techniques.

Key words: *PBL/EFL/teaching/individualistic learning/collectivistic learning/ linguistic skills/ life skills/ linguistic deficiency/ linguistic efficiency/EFLT context.*

Introduction

There seems to be a quasi-universal consensus among language experts and practitioners that teacher-centered learning is doomed to be fruitless and unproductive. Conversely, there apparently is a common scholarly agreement that student-oriented learning/teaching approaches and strategies tend to render the teaching/learning endeavor more meaningful and more purposeful (McKay 2002; Kern 2000; Richards 2006). Accordingly, the use of strategies which foster initiative-taking, responsible peer learning, self-reliance and self-development are hailed as practical pathways for stepping away from the teacher-dominant teaching/learning style. In the English as a Foreign Language Teaching (EFLT) context, there is a persistent need to endorse and apply the tenets of the student-oriented pedagogical methods which stipulate that learners learn better when they are autonomous, self-dependent and stress-free. Instead of focusing on language usage, the emphasis should be put on nurturing language use while putting in place learning environments that favor integrated, collaborative, authentic and life-related pedagogical practices.

Within this scope, project-based learning (PBL) is solicited as a didactic approach which helps learners to cultivate not only language skills but also life skills. Although some might think that it is an approach which is much more suitable and practical in scientific learning domains and environments, it is the purpose of this study to show that PBL is to be used within and across disciplines, namely in EFL learning. Taking the School of Arts and Humanities in Marrakech Morocco as a locus of investigation, this paper shows that the merits of PBL far outweigh its eventual demerits.

Project-Based Learning: Overview

As a theory, project-based learning did not appear from a vacuum. It is indeed a theory that builds on human development theories. Project-based learning finds its roots in the constructivist theory which maintains that every learner enjoys a Zone of Personal Development (ZPD) defined by Vygotsky (1978: 86) as “the distance between the actual developmental level as determined by independent problem solving and the potential of development as determined through problem solving under adult guidance or in collaboration with more capable peers.” A quick scrutiny of Vygotsky’s collectivistic, developmental ZPD notion would be enough to fathom the fact that PBL draws upon previous theories which take personal development as a locus of study.

In the literature, the definitions of project-based learning, regardless of how numerous they are, seem to converge on defining it as a learner-directed course of action that nurtures experiential learning whereby learners take the lead in the learning process (what to do/ why do it/how to do it) by figuring out problems and situations to be analyzed, processed and investigated. From this vantage point, the traditional role of the teacher as the main knowledge-purveyor is rethought. S/he ends up merely a supervisor or monitor of the end product. One very important didactic virtue which is promoted through this pedagogical ethos is that learners turn into active, autonomous asset holders whose learning needs and styles are keenly catered for. Stenberg (1998: 18) buttresses this didactic strand stating that “*instruction should be geared not just toward imparting a knowledge base, but toward developing reflective, analytical, creative, and practical thinking with a knowledge base. Students learn*

better when they think to learn ...They also learn better when teaching takes into account their diverse styles of learning and thinking”.

PBL and Collectivistic Learning

There is a proclaimed consensus among language educators and scholars on the academically rewarding, collectivistic nature of PBL-based teaching/learning (Hedge 1993; Solomon 2003; Stoller 1997). These scholars, among others, emphasize several key features of the team-bound specificity of PBL. First and foremost, PBL requires team involvement and collaboration in working out a complex issue over an extended period of time. The issue under investigation is invariably deeply embedded in society and calls for concentrated, extensive and collectivistic exploration. Second, PBL is a tutor-independent learning process. It is a process wherein the tutor sits back, and the learner takes the lead in terms of project planning, accomplishment and ultimate presentation. Third, the issues that are investigated are decided upon by the learners themselves, which guarantees the probing of topics and themes which truly capture the interests of learners. Fourth, the role of the tutor as the main actor and purveyor of knowledge is de-emphasized. Accordingly, the classroom turns into a teacher-free environment wherein feedback, experiential knowledge and tentative project-bound outlets are shared and worked out by the group of learners who endorse the project. Additionally, PBL-friendly learning provides an impetus for learners to incorporate ICTs in the learning endeavor through handling hands-on, technology-based activities and tasks. The use of technological platforms to manage data is also done on a collaborative basis whereby learners cooperate in terms of partaking, adopting and adapting their technical knowledge to serve in the realization of the end project. This collaborative spirit is what sustains and maintains learners' efforts to get through with the projects regardless of how challenging and demanding they may be. Each and every learner is considered as a real asset in the accomplishment of the whole project. Learners are basically endowed with various skills, be they social, managerial and/or linguistic, which they exploit together to come up with a valuable end product. Finally, the assessment of the project's quality as well as its presentation is the exclusive responsibility of the learners. What surfaces, then, is that PBL favors not only the notion of collective project realization, but also the notion of authenticity as a cornerstone, underpinning trait for its launching.

On The Notion Of Authenticity In PBL Learning

Markham et al. (2003) underline the authentic aspect of PBL. In contrast to traditional teaching content which is utterly life-unlike, PBL draws upon life-like situations and roles. Learners tend to opt for authentic projects that match their daily life circumstances. This option dovetails with the widely held scholarly belief that learners learn better when they do that in natural, life-related atmospheres. This way, learning is geared not just towards getting the learners to do well in final exams, but also, and most importantly, towards cultivating diverse life skills which can render learners engaged, effective and efficient social and societal actors.

PBL And Learners' Engagement

PBL slots in with several learner-bound development theories, namely Vygotsky's (1978) social development theory whereby the traditional conception of learning as being classroom-exclusive is verifiably refuted. The belief that learning can take place in environments other than classrooms is echoed early on in Dewey's (1902) inquiry-based learning approach which underscores the key significance of self-dependent learning (learning by doing). In so many ways, PBL endorses the premises of these, and other learner-specific, theories pertaining to engagement. In tune with this approach, learners are called for to show a multi-layered engagement, behavioral, emotional, intellectual, physical and social (Blumenfeld et al. 1991; Hutchinson, 2001). Learning, thus, turns out to be the corollary of "cognitive" as well as "non-cognitive parameters.

Behavioral engagement, for instance, is in place when learners are dedicated to the project in terms of regular attendance, continuous evaluation, opinion-sharing and other behavioral aspects. Emotional engagement is at stake when learners demonstrate affective, project-specific reactions. This type of engagement is apparent when learners proactively show an inner motivation to make things happen. Emotions of anxiety, interest, enjoyment and/or frustration are cases of emotional engagement in point. Likewise, cognitive engagement captures the learners' willingness to perform mind-challenging requirements in order to get the project accomplished and delivered to a large public. Given the afore-mentioned pros, PBL seems a potentially useful approach in the EFL teaching/learning realm.

PBL And EFL Learning

Throughout history, English language learning and teaching has undergone drastic methodology-bound changes. Brown (2000) elaborates on the myriad of EFL learning/teaching methods and rightfully assumes that there is no single best method for English language learning. A distinguishing characteristic of contemporary EFL learning/teaching theories is that they tend to give the learner a preeminent position in the classroom sphere while disregarding the "project" as a vehicle for skill-development.

Starting from the grammar translation method and the direct method through the audio-lingual method and the total physical response method to the communicative language teaching and the competency-based method, English language learning has not been project-oriented. The innovativeness of PBL is that it incorporates the underlying tenets of communicative language teaching and similar methods, and in parallel it enhances learners immersion by granting them genuine opportunities to handle real-life learning situations which require learners to operate collaboratively and independently from the tutor so as to foster the target language skills in more meaningful and realistic ways (Richards, 2006).

PBL And The EFL Tutor's Role

One of the biggest professional constraints that EFL tutors face and which result from the adoption of conventional, traditional teaching approaches is the burdensome workload. Because the teaching endeavors tend to be tutor-oriented, it follows that tutors are obliged to work extensively both inside and outside the classroom. Tasks like lesson planning, students' monitoring, exam designing and correcting, among several others, are both time and effort-demanding.

Contrastingly, the tutors' workload is relatively light and much more manageable with the application of PBL-based EFL learning. However, this does not in any way mean that tutors are passive actresses and actors, but they may fulfill other pedagogical functions. As a case in point, tutors can enlighten learners and project-holders on some pathways which can help them carry out their projects in effective and efficient ways. Providing feedback for learners at different stages of the project completion is also a way for tutors to be asset-holders in the project at hand. The implementation of PBL in EFL learning is bound to be useful within and across educational contexts.

EFL Learning In The Moroccan Context

For years, particularly since independence in 1956, the improvement of the educational system has been a top priority for decision-makers in Morocco. The recent educational reform outlined in the official Charter for Education and Training showcases the keen interest of the educational actors to put into operation a high-profile educational system. With regard to EFL learning/teaching, the official guidelines (2007 and 2009) provide clear-cut account on the strategies to be put in place so as to define the roles to be played by tutors and learners respectively. Accordingly, tutors are recommended to serve more as learning facilitators while learners are encouraged to be more autonomous and self-dependent learners. This language-bound policy applies to EFL learning both at school and university levels.

In recent years, there has been a remarkable tendency to give English a preeminent position in the Moroccan educational system- a system wherein Arabic and French used to be the key languages of education and employment. The National Charter of Education and Training, which is the legal framework for educational reform, clearly stipulates that Arabic, French and English are to be given due and equal importance. The rationale behind this reinforcement of a multi-lingual educational system emanates from an outspoken conviction of the decision-makers that speaking different languages would definitely boost Moroccan university alumni employability and marketability in the global job market. This official tendency has led to the implementation of up-to-date approaches in EFL learning/teaching.

Approaches To EFL Education In Morocco

As a practitioner in the Moroccan educational system, I give credit to the educational and pedagogical authorities in Morocco for doing their best to keep up-to-date with the latest trends in EFL learning/teaching. Having served as a language tutor for more than twenty years, I have had the sizeable opportunity to be exposed to and apply different EFL methods and approaches ranging from the age-old grammar translation method to the current standard-based approach. The adoption and adaptation of a large variety of methods and approaches has certainly rewarding benefits pertaining to learners and tutors alike.

At the Moroccan university level, English and English-related disciplines and studies are coveted by a large spectrum of baccalaureat-holders. This is presumably due to the fact that graduating from an English studies department has been a strong asset for professional hiring.

In the following section, I spotlight the pedagogical EFL teaching/learning avenue taken by Moroccan EFL tutors, especially in terms of PBL implementation. Data are collected from the Faculty of Letters and Human Sciences Marrakech, Morocco- a workplace where I am currently working as an EFL tutor. This faculty is an open access institute wherein students learn disciplines and subjects relating to social and human sciences.

Methodology

Given its numerous, scholarly acknowledged benefits, it seems worthy of investigation to collect and analyze data in a methodological way to figure out whether or not PBL is endorsed by Moroccan university practitioners.

Research Questions And Hypothesis

Through this paper, I purport to investigate the Moroccan university language tutors' stance towards PBL in terms of affective endorsement and actual implementation. Accordingly, the research questions to be covered are the following:

- 1- Are Moroccan university EFL tutors aware of the significance of PBL in promoting multi-skilled, authentic language learning?
- 2- Does PBL truly enhance collectivistic EFL learning?
- 3- What hindrances, if any, hamper the implementation of PBL EFL learning at the Moroccan university level?

The hypothesis which underpins the above research questions is as follows: PBL maximizes authentic, collectivistic and student-centred EFL learning. To corroborate or refute the merits of PBL, I have opted for an interview-based, qualitative research method.

The interview

The use of the interview is justified by its scholarly recognized usefulness in gathering experiential, factual data to understand specific phenomena (Kvale, 1996). Interviews are handy ways to get the gist behind the participants' experiential endeavors, orientations and practices. The interview at hand is a face-to-face, personal interview whereby the researcher works directly with the respondents- a method, according to Kvale (1996) that eases eliciting impressions and opinions. Specifically, I have opted for a 'General Interview Guide Approach' wherein the same areas of information are collected from each interviewee. It is also a 'standardized, open-ended' interview because the same questions are asked to all interviewees.

Sample

The target respondents in this investigation are people within my circle of influence, namely my colleagues in the department of English Studies, Faculty of Letters and Human Sciences, Cadi Ayyad University, Marrakech, Morocco. The respondents are chosen randomly because every language tutor in the English department constitutes a viable source of data. I choose 15 respondents for the main constraint of availability. That is to say, for personal and professional constraints, I could not reach out to all my colleagues. The gender identity of the respondents was of minor significance because this is a variable that is beyond the scope of this study to examine. After explaining the rationale behind the interview and specifying how long it would be, the interviewees were given the floor to ask for clarifications on and around the interview.

The interview for data collection

This interview is designed to elicit academic/professional stances towards project-based learning as an approach for EFL teaching/ learning at the Moroccan university level. The identity of the respondents will be kept confidential, and the information they provide will be used for purely academic purposes;

Q1: How long have you been teaching English at Cadi Ayyad University?

Q2: Do you have an idea about project-based learning? Specify

Q3: What are the merits, if any, of this approach?

Q4: Do you make use of PBL to teach specific subjects or disciplines?

Q5: In your opinion, what are the obstacles, if any, that hinder the implementation of this approach in the English department?

Q6: What recommendations, if any, would you suggest for adopting the PBL approach in the English department?

Thanks for your kind collaboration

Data Analysis And Findings

The interviewees responses to the first question pertaining to the number of years they have been serving as EFL tutors at Cadi Ayyad University reveal that all of them have considerably long years as practitioners inside the department of English. The years of experience range between ten and thirty, which means that the respondents have got enough experiential knowledge and practice to be valid and viable source of data for an experience-based investigation of the theme at hand. It is particularly important to mention that all the interviewees were willing and enthusiastic about providing data for this study.

In the second question, I tapped into the interviewees' background knowledge about PBL as an approach in the field of EFL teaching and learning. This question is of key significance in this analysis because having topic-specific knowledge would help in coming up with accurate and specific facts for analysis. This is the reason why I asked the interviewees to specify their bulk of knowledge pertaining to PBL. From the feedback to this question, the interviewees expressed their familiarity with PBL. Besides, they provided pertinent and valuable topic-specific information. After tallying the responses, I figured out three features which distinguish PBL in the interviewees' views. First, the interviews specified the collectivistic trait of PBL in contrast to the individualistic approach

wherein no peer collaboration takes place. Second, the interviewees emphasized the possibility to implement PBL within and across disciplines. Third, the respondents recognized that PBL endorsement was challenging but beneficial. These responses are valuable in the context of this investigation because they get the interview rolling smoothly. Otherwise, it would be impractical to interview them about a concept/approach that they were not acquainted with.

After considering the interviewees' acquaintance with and knowledge about some of the specific features that characterize PBL, I proceeded with the third question whereby I illustrated the eventual merits of PBL. The interviewees' experiential knowledge of the actual merits of PBL was quite discernible. The merits that the interviewees pointed were both various and complementary in so many ways. One of the recurrent merits in the interviews was related to learners' autonomy- an idea which stands out in the literature on PBL. In other words, all the tutors were conscious of the need to give learners more space for action in the teaching/learning process. One of the interviewees clearly specified that the learners' potential is to be keenly accounted for, and that the recognition of this potential does not in anyway underestimate or discredit the tutors' factual academic authority. As a researcher, I reckon that this kind of responses reflects high professional maturity by considering learners' as active asset-takers in the teaching/learning process. Another merit the interviewees accentuated is that PBL eases the accomplishment of tasks by learners themselves in a spirit of collaboration and knowledge-sharing, which reinforces the consideration of one's peers as associates rather than competitors. This team spirit indeed helps the learning process to be far-reaching. As the saying goes: "Alone we go fast, together we go far."

A last, but no minor, merit that the interviewees concurred upon is the authenticity of PBL- an idea that is also fore-grounded in the literature pertaining to PBL. In this regard, the interviewees pinpointed the fact PBL is a handy way to bridge the gap between classroom life and real life by granting learners to work on projects they themselves choose, in natural environments they see fit, and in ways they find most fruitful. The responses to this question reveal the interviewees' substantial awareness that the advantages of adopting PBL far outweigh any probable downsides.

In the fourth question, I zoomed upon the interviewees' actual use of PBL in teaching any discipline or subjects. Unexpectedly, there was a quasi-unanimous response among interviewees about stepping away from PBL as an approach. This response seemed quite weird for all the interviewees paid lip service to PBL as an academic approach, but the majority did not make use of it to teach any subject or discipline. This response was an impetus to promptly cover the fifth question relating to the obstacles that were likely to impede the implementation of PBL in the Moroccan EFL university context, namely in the department of English at the School of Arts and Humanities Marrakech.

The interviewees seem to have a tacit consensus on the constraints that prevent the endorsement of PBL in the department of English. First and foremost, the interviewees had real concerns about the heavy workload that they were up to. This workload was the result of the tutor-oriented educational policy in place in Moroccan universities. The tutor is in fact the sole actor in charge of effort and time-consuming tasks, such as teaching, examining, correcting and end-of-study "memoire" supervision. Another concomitant obstacle raised by all interviewees is the class-size which does not favor going PBL. With hundreds of learners to teach and monitor every semester, interviewees revealed, the implementation of PBL-bound English teaching strategies would be fallacious. A final, but no least significant, obstacle that the majority of the interviewees accentuated pertains to presumable flaws in the Moroccan educational system as a whole which does not cultivate a project-bound, collectivist, teacher-free approach to learning. The interviewees provide factual information showing that in Moroccan primary schools, junior high schools and high schools the spirit of autonomous, collaborative, project-based learning is not on the educational agenda. As a follow-up, the interviewees conceded, the implementation of PBL at the university level remains far-fetched.

So as not to remain at the descriptive stage, I asked the interviewees in question six to suggest experience-based recommendations to ease the implementation of PBL in the English department. Basically, the recommendations that the interviewees suggested overlapped in significant ways with the obstacles outlined above. One of the urgent recommendations consisted of reconsidering the burdensome workload assigned to each and every tutor on a semestrial basis. Another telling recommendation pertained to the absolute necessity to reduce class-sizes to facilitate all kinds of student-centred learning approaches, including PBL. One last recommendation drew upon raising learners' awareness on and initiating them to the fact that learning is a joint endeavor wherein the learners and the tutors need to be astutely involved.

Conclusion

This study focused on the implementation of PBL to ease collectivistic EFL learning at the Moroccan university level. The study was tutor-oriented in the sense that it sought to elicit the tutors' experiential consideration of PBL as a means to augment learners' skills and boost their ratio of autonomy and self-confidence.

In the literature review, I gave a general overview of PBL, and I exposed the presumable benefits of PBL in the language education context as a means to step away from a tutor-bound pedagogical process and to foster a student-oriented parameter whereby the learners are not there merely to internalize academic content but rather to nurture

skills that can render them self-dependent, engaging, driven, perceptive, sharp and responsible learners. All these assets, and more, can be cultivated through the involvement of learners in getting projects rolling.

In the practical part, I identified several variables which hamper a full implementation of PBL in the teaching of EFL at the Moroccan university. Using the qualitative interview as a means to elicit data, I interviewed a set of fifteen university professors in the department of English studies at the Faculty of Letters and Human Sciences Marrakech.

The findings account for the conspicuous awareness of Moroccan EFL university tutors of the multiple academic benefits of PBL. Data also reveal lack of tutors' readiness to go PBL, and this is because of a myriad of system-bound constraints. Eventually, the interviewees suggest practical pathways for a beneficial, smooth implementation of PBL in the EFL Moroccan university framework.

Far from overestimating PBL, this study argues for the absolute necessity to embrace this approach not only by Moroccan university EFL tutors, but also by educational decision-makers to hurdle the systemic hindrances that prevent its full implementation. Future studies in this area may involve a larger number of respondents nationwide. University EFL learners in different Moroccan universities may be also a source of valuable data. All things considered, this study puts forth PBL as an alternative, rather than a magic panacea, to ensure high-quality EFL teaching/learning in the Moroccan university.

References

- Blumenfeld, P. C., Soloway, E., Marx, R.W., Krajcik, J., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning. *Educational Psychologist*, 26 (3 & 4), 369-398.
- Brown, H. D. (2000). Principles of Language Learning and Teaching. New YORK: Longman.
- Hedge, T. (1993). Key concepts in ELT. *ELT Journal*, 74 (3), 275-277.
- Hutchinson, T. (2001). Introduction to Project Work. Hong Kong: Oxford University Press.
- Kern, R. (2000). Literacy and Language Teaching. Oxford: Oxford University Press.
- Kvale, S. (1996). Interviews: An Introduction to Qualitative Research Interviewing. New York: Sage Publications.
- Markham, T. Mergendoller, J. Larmer, J. & Ravitz, J. (2003). Project- Based Learning Handbook. Canada: Buck Institute for Education.
- Mc Kay, S. (2002). Teaching English as an International Language: Rethinking Goals and Approaches. Oxford: Oxford University Press.
- Richards, J. C. (2006). 30 Years of TEFL/TESL: A Personal Reflection. Retrieved from <http://www.professorjackrichards.com/pdfs/30-years-of-TEFL.pdf>.
- Solomon, G. (2003). Project-Based Learning: a Primer. *Technology & Learning*, 23, 10-20.
- Stoller, F. (1997). Project Work: A Means to Promote Language Content. *Forum*, 35 (4), 2-20.
- Vygotsky, L. (1978). Mind in Society: The Development of Higher Psychological Process. Cambridge, MA: Harvard University Press.

The Relationship between Ethical Leadership and Vocational Education Schools' Image in Thailand

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Abstract

The purposes of this research were to study the relationship between ethical leadership of school administrators and the vocational education schools image. This research was survey research with the sampling group of 327 persons including 35 administrators, 196 teachers, 40 school committees, and 56 students of association of future Thai professional. The research instrument was the questionnaire with validity ($0.50 \leq \text{IOC} \leq 1.00$) and reliability (0.965). The statistical data was analyzed by statistics computer application to search the correlation coefficient by Pearson's Product Moment Coefficient. Research findings were as follows: The positive relationship between ethical leadership of school administrators in six components are responsibility, respectfulness, reliance, justice, empowerment, and honesty and the vocational education schools' image was found with statistical significance at the .01 level ($0.738 \leq r \leq 0.852$). The highest correlation coefficient of ethical leadership of school administrators through the schools image in descending order were responsibility ($r = 0.852$), reliance ($r = 0.847$), respectfulness ($r = 0.829$), honesty ($r = 0.824$), empowerment ($r = 0.822$), and justice ($r = 0.738$).

Keywords : *Ethical Leadership, Vocational Education, Schools' Image, Relationship*

Background and Significance of Study

Studies show that many institutions and departments have experienced similar problems with a shortage of qualified Thai labor who meet production standards and an absence of effective measures for quality assessment of the labor force. Hence, the great challenge, nowadays, is to provide a qualified workforce with a high capability for competing globally. A review of the data on management of vocational education and overall national education in Thailand shows that the ratio of students in general education to vocational education is 60:40. This ratio could be a result of the popularity of general education among youth; however it is a problematic trend in the context of needing middle-level manpower. Although a plan and preparation for enrolling and supporting more students at vocational and technical certificate levels have been made, the number of students enrolled in these programs has been considerably low relative to the target number. These findings are consistent with studies Kattiya Nutawatr (2009) and Theerawut Boonyasopon (2010), which found that the decreasing number of students in vocational education could be a result of many factors, i.e., values held by parents who want their children to get a certificate in general education so that they can work in other fields, a lack of information on the advantages of studying in vocational education, or the image of vocational institutes, which may appear to be violent due to disputes among certain groups of vocational students. The latter causes fear among parents toward sending their children to a vocational institute.

As mentioned, the number of students in vocational education continues to fail to meet the target as a result of school image and unpopularity among parents and students. Hence, these institutes' administrators need to adjust their management styles, especially in terms of ethical leadership. School administrators' behavior must represent strong ethical leadership in order to promote ethical values in the institute. Furthermore, an ethical leader represents philosophies and mechanisms that strengthen an organization and society. The difference between ethical leadership and other types of leadership is that ethical leaders are the heart of an organization; they are those who drive the organization forward using positive means rather than force. Ethical leaders concentrate on the following aspects of leadership: being a good and ethical role model, having a sincere relationship with subordinates and executives, promoting a pleasant work atmosphere and teamwork, engaging others in decision-making based on good ethics, paying attention to others, and encouraging others to develop and empower themselves

(Boonjan Sisan, et al., 2010). These essential components of leadership are similar to those discussed in Siwalee Sirilai (2007), which states that an institute's leader must be a smart and good person, where a smart person refers to one who has skills, knowledge, creativity, and proficiency, and a good person refers to one who has ethics and morals, devotion, honesty, a sense of justice, and responsibility. If school executives can gain respect and acceptance from students, instructors, parents, and their community by demonstrating ethical and moral behavior, they may possibly have an effect on and promote a positive school image and attitude, which can lead to a higher level of acceptance from society toward vocational education.

The challenges mentioned above drew the researcher to investigate the relationship between ethical leadership of educational institutes' leaders and the school image of institutes that provide vocational education in Roi Et Province. The researcher hoped to gain crucial information that would be useful for educational institutes in developing their school image and promoting characteristics of ethical leadership among school executives so that such institutes could enhance their efficiency in managing vocational education.

Research Objective

To study the relationship between the ethical leadership of leaders in educational institutes and the school image of institutes providing vocational education in Roi Et Province.

Research Methodology

1. Research Methodology: In this study, a descriptive research method was adopted to conduct a correlation study. The study was divided into two phases: Phase 1 consisted of research instrument development through focus group discussion, and Phase 2 involved surveying to collect data from the sample groups in order to investigate the relationship between the ethical leadership of educational institute leaders and the school image of institutes providing vocational education in Roi Et Province.

2. Sample Group: The total population of leaders and students in the study consisted of 35 leaders of educational institutes conducting vocational education in Roi Et Province and 56 students from vocational schools. The number of instructors and committee members of educational institutes was determined using Yamane's formula (Theerawut Akakul, 2000). With 5% allowable error and using a stratified random sampling method with a population divided by the size of the institute, the calculation resulted in an instructor sample of 196 instructors and a committee member sample of 40 committee members. Therefore, the total sample size of this study was 327 people.

3. Research Instrument: The questionnaire used to collect data on the relationship between the ethical leadership of educational institute leaders and the school image of the institutes providing vocational education in Roi Et Province consisted of 3 parts, as follows:

Part 1 consisted of five check-list items aiming to collect general information of the respondents: sex, position, education, experience in current position, and size of the institute.

Part 2 consisted of 26 questionnaire items on the ethical leadership of educational institute leaders in institutes providing vocational education in Roi Et Province.

Part 3 consisted of 27 questionnaire items on the school image of the institutes providing vocational education in Roi Et Province.

4. Data Analysis: The data collected from the questionnaires were analyzed by software to measure the Pearson's Product Moment Correlation Coefficient, which determined the relationship between the ethical leadership of educational institute leaders and the school image of the institutes providing vocational education, and a multiple regression coefficient analysis was conducted between ethical leadership of educational institute leaders and school image.

Results

The researcher investigated the relationship between the ethical leadership of leaders in educational institutes and the school image of institutes providing vocational education in Roi Et by finding the Pearson's Product Moment Coefficient. The results of the study revealed that the correlations among ethical leadership characteristics of educational institute leaders, including justice, honesty, responsibility, respect, trustworthiness, and implementation of school image empowerment, were positive, with correlation coefficients ranging from 0.738 – 0.825 and statistical significance at .01

among all variables for vocational institutes in Roi Et Province. Regarding the correlation of specific variables among the different ethical leadership characteristics, responsibility, trustworthiness, and respect were found to have the strongest positive correlations with school image, with correlation coefficients of 0.852, 0.847, and 0.829, respectively. In contrast, ethical leadership that demonstrated a sense for justice and involved implementation of school image empowerment were the two factors with the lowest positive correlations ($r = 0.738$), with statistical significance at .01, as shown in Table 1 below.

Table 1 Pearson's Product Moment Correlation Coefficients between ethical leadership of educational institute leaders and school image of institutes providing vocational education in Roi Et Province.

Variables	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	Y
X ₁	1						
X ₂	.898**	1					
X ₃	.841**	.931**	1				
X ₄	.848**	.899**	.866**	1			
X ₅	.855**	.935**	.930**	.903**	1		
X ₆	.843**	.932**	.922**	.889**	.936**	1	
Y	.738**	.824**	.852**	.829**	.847**	.822**	1

** Correlation is significant at the 0.01 level (2-tailed)

Discussion

The results of this study investigating the correlation between ethical leadership of educational institute leaders and school image of institutes providing vocational education in Roi Et Province show positive correlations among all facets, with statistical significance at .01. "Very strong" positive correlations were found for all of the facets apart from justice, which had a "strong" positive correlation. The findings conform to the hypothesis of this study, which anticipated that there would be a correlation between ethical leadership of educational institute leaders and school image of institutes providing vocational education in Roi Et Province, with a strong correlation between responsibility and school image at the highest level, and a strong correlation between justice and school image at the lowest level. That the correlation coefficient value of responsibility and school image ranked the highest could be a result of the nature of administrative work, which must drive the institute to achieve its vision, mission, goals, and objectives. In the work process, there should be task delegation and a committee to create more learning opportunities, including opportunities for all parties to participate in investigations. Additionally, school executives should take responsibility as role models for school staff. This can be achieved in a variety of ways, i.e., punctuality and devotion to doing work, with the priority being to show responsibility toward one's work and decisions made, regardless of whether the consequences are positive or negative. As explained in Theerawut Akakul (2000), positive behaviors, actions, and the expression of staff and officers in an institute or a department lead to a positive image. In addition, Boonjan Sisan, et al. (2010) concluded that the direction of an institute depends on the executives, and a good executive must have the knowledge and proficiency to lead. If an institute has such an executive, with good visions, management policy, and honesty, the institute will gain a positive image. This conclusion is consistent with Siwalee Sirilai (2007), which states that an institute's leader must be a smart and good person, where a smart person refers to one who has skills, knowledge, creativity, and proficiency, and a good person refers to one who has ethics and morals, devotion, honesty, a sense of justice, and responsibility. These qualifications explain why being responsible, which is one of the characteristics of ethical leadership that must be demonstrated by educational institute leaders, has a strong relationship with school image. This finding is further supported by Kamolthip Thongkamhaeng (2011), a research study on strategizing for ethical leadership development of public school executives

which found that at the time the study was conducted elements of ethical leadership for a career were rated highly, as well as all characteristics of ethical leadership. The two characteristics that ranked at the top were devoting one's full attention to one's work and working responsibly in a way to continually improve. These rankings also conform to Office of Teacher and Educational Personnel Commission (2005), a study exploring the ethical and moral leadership of school executives as perceived by teachers under the Secondary Education Service Area Office 38 (Sukhothai – Tak), which found that work performance was rated at a high level, and responsibility toward work and making decisions was rated the highest. Moreover, the findings from the present study are also consistent with Vachirawit Yangchai (2011), a study on factors affecting the school image of Suranaree University of Technology, which found a strong positive correlation between factors related to the school executives and school image, with statistical significance at 0.05. Similarly, Rungrawan Senarak (2009) investigated factors affecting school image for the Institute of Physical Education, and found that the executive group was a predictor variable that had a strong correlation with the image of the institute, according to perceptions of all groups, including administrative members, teachers, and students, with statistical significance at 0.01. In conclusion, responsibility as one of the characteristics of ethical leadership in educational institute leaders has a strong relationship with school image of institutes providing vocational education in Roi Et Province, as executives are the main mechanism in the development of education and the institution toward efficiency and effectiveness. Executives play a great role in school image, requiring that an executive have the following attributes: knowledge, management proficiency, characteristics of ethical leadership, good human relations, visions, and ethics and morals, as all of these traits greatly affect image, reputation, and the prestige of an educational institute. Such traits will also ensure learners, parents, the surrounding community, and society that the institute is accountable and effective in providing education, as this is a crucial element in making the decision to enroll in the institute. As a result, it is highly necessary to have executives that can demonstrate ethical leadership, especially in terms of responsibility, to enhance the level of credibility and trustworthiness of the institute. This would also lead to a good relationship between the institute and the surrounding community, as well as cooperation to help the institute become successful

References

- Kamolthip Thongkamhaeng. (2011). **Strategies for the development of moral leadership for private school administrators**. Thesis of Doctoral Degree, Department of Educational Administration, Graduate School, Chulalongkorn University.
- Kattiya Nutawatr. (2009). **The decision process of studying further in the Lower-vocational certificate of private school's students in Bangkok**. Thesis of Master Degree, Department of Educational Administration, Graduate School, Chiang Mai University.
- Theerawut Boonyasopon. (2010). **The development of Thai vocational education and technology for the next decade**. Technical education journal King Mongkut's University of Technology North Bangkok.
- Theerawut Akakul. (2000). **Research methodology in behavioral sciences and social sciences**. Ubon Ratchathani: Ubon Ratchathani Rajabhat University.
- Boonjan Sisan, et al. (2010). **An analysis the factor of servant leaderships for teacher in basic education school**, Ministry of Education. King Mongkut's Institute of Technology Ladkrabang.
- Rungrawan Senarak. (2009). **Factors related to an image of Institutes of Physical Education** Thesis of Master Degree, Department of Educational Administration, Graduate School, Mahasarakham University.
- Vachirawit Yangchai. (2011). **An analysis of the image of vocational education from the perspective of students: Mixed methods research** Thesis of Master Degree, Department of Educational Research Methodology, Graduate School, Chulalongkorn University.
- Siwalee Sirilai. (2007). **Fundamental of thinking reasoning and ethics**. Bangkok: Suan Sunandha Rajabhat University.
- Office of Teacher and Educational Personnel Commission. (2005). **The Rule of Teacher and Educational Personnel Act of B.E. 2547**. Bangkok: Printer of Educational Council.

The Relationship Between Foreign Language Anxiety And Motivation Of Turkish University Students In Learning English As A Second Language

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1.Introduction

Foreign language anxiety and motivation have been long considered vital elements having effects on language learning. Both of these constructs are highly correlated to foreign language achievement. The present study was conducted on university students studying in Turkey where English has become a priority among the subjects taught in curricula. It is the most widely taught foreign language at all stages of the education system. Most Turkish learners begin to learn English at early ages and keep studying English throughout and beyond their academic life although most of them cannot get the desired level of proficiency either in receptive or productive skills, or in both. The reason for being a great challenge for them is the limited contacts with native speakers of English, and lack of opportunities to put their learning into words by practicing in their everyday lives. The data from the studies based on the factors of the problem reveal that learners try to compete with difficulties of anxiety factors in the process. Hence, other studies revealed that anxiety and motivation are among the important predictors showing the relationship in view of their opposing effects in second language learning (Yang, 1998 ; Noels, Clément, & Pelletier, 1999).

1.1.Foreign Language Anxiety

English language plays a vital role in ensuring nation building. For English as foreign language students in Turkey, learning English has always been a great challenge due to limited contact with target-language speakers, and lack of opportunities to practice English in their daily lives. Most students are only exposed to English in classes, which make foreign language learning entirely difficult for them to remain motivated to learn English.

An issue of increasing importance in the study of second language teaching is the role of second language anxiety. Anxiety is one of the most significant and pervasive emotions and has been a main focus of a growing body of research in foreign language education for years. In light of the studies, the presence of anxiety and its extensive effects in language learning and teaching have been confirmed. In terms of definition, several researchers have offered definitions of foreign language anxiety. The phenomenon of anxiety has generally been defined as an emotional reaction to learning, an experience of uneasiness and unpleasant emotions associated with subjective feelings of tension and nervousness. According to Horwitz, foreign language anxiety is "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (1986). Since it is mostly related to feelings of worry and apprehension, some concerns which are the feelings uneasy about potential failure or poor performance impair the performance and effort to employ some cognitive skills through the target activities have a remarkable impact to influence learners' motivation and performance in the process. . Similarly, Clement views foreign language anxiety as a complex construct which shows its impacts on especially learners' psychology in terms of emotional factors and self-confidence (1980).

Anxiety and language learning are two so complicated phenomena that countless studies have been conducted on the mainstream of impacts of anxiety on foreign and second language learning. Hence, foreign language anxiety cannot be studied in isolation because multiple provoking factors such as personal and interpersonal beliefs, personalities, level of achievement, apprehension, self-efficiency and self-concept of learners, limited cognitive skills, and learner and situational variables could play a vital role in the development of a level of anxiety in learners. The effects of variables and factors could result in poor performance or a side effect caused by some language learning difficulties both directly and indirectly. Adverse effects of anxiety could be observed when learners are constantly preoccupied with any negative effects and the threats posed by learning situation. In that case, it is really challenging to concentrate and maintain long-term attention on one's target. Likewise, high-anxious learners who tend to perform much worse than low-anxious learners choose to remain silent in classes and target activities because they are deeply worried about lack of oral proficiency in target language or making stupid mistakes and losing faces before their counterparts.

MacIntyre and Gardner (1991) identified three approaches to the study of anxiety, which are trait anxiety, state anxiety, and situation-specific anxiety. Over years, trait anxiety, state anxiety and situation-specific anxiety have become the mainstream approaches in foreign language teaching and learning since they have remarkably vital roles in enhancing learners' language acquisition and learning in some ways. Trait anxiety occurs in response to a perceived threat. Also, it differs from other types of anxiety in terms of its duration, intensity and the range of situations in which it occurs. It is a kind of stable personality characteristic that people with trait anxiety mostly experience excessive anxiety and worry by anticipating a potential threat of future events in a variety of situations. Hence, it is difficult to get rid of. Unlike trait anxiety, state anxiety can be described as a temporary unpleasant

feeling in a person who makes a mental assessment of a kind of threat. It is more likely to seriously disturb the learners' ability to react positively in a certain environment. However, if the events or objects perceived as a threat go away, the person having state anxiety no longer experiences the side effects of the unpleasant feelings. Situation-specific anxiety is considered as a trait anxiety, which is experienced in a changed or new situation a learner is exposed to. Often, learners become uneasy in crowds or a new atmosphere that makes them uncomfortable. Its occurrence is common in a learning setting.

Considerable attention has been directed to the examination of debilitating and facilitative anxiety. Debilitative anxiety is seen as a threat to learners' consciousness and production of second language while facilitative anxiety entirely encourages them to perform well. Scovel considers that a certain level of anxiety stimulates language learning effectively by promoting learners to overcome the perceived level of difficulty of foreign language (1978). On the other hand, an excessive amount of anxiety would lead to withdrawal, avoidance in a practical activity and an inefficient learning performance. As a result, it makes learners demotivated and unwilling towards target language since the impacts of debilitating anxiety interfere with learning a foreign language in a negative way.

Anxiety can be seen in two forms: harmful or debilitating anxiety and helpful or facilitating anxiety. According to the results of some studies, debilitating anxiety is regarded harmful because it inhibits learners' performance, reduces the creativity of learners in foreign language, and causes unwillingness towards learning in students. Alpert & Haber focus on its debilitating effect that motivates the learner to withdraw from the language task and leads him to adopt avoidance behaviors (1960). Anxious learners suffer from the fear of having inadequacy in acquisition, comprehension and production.

1. Motivation

One of the factors affecting the effectiveness of learning is motivation arising from desire that drives a person to strive and makes him eager to learn a foreign language and gain some skills of that language. It has long been considered to be an important predictor of second language learning and various definitions were made by the scholars (Gardner & Lambert, 1959; MacIntyre et al, 2001; Pintrich & Schunk, 2002). It can be called the desire, need or urge to learn, do, achieve or acquire something. McDonough describes motivation as "a general cover term – a dustbin – to include a number of possibly distinct concepts, each of which may have different origins and different effects and require different classroom treatment." (1981).

On the other hand, the pioneers of motivation research, Gardner & Lambert, conducted a study in 1959 in order to find out the relations between the attitudes of learners toward the community of a second culture and their motivation to learn the language of that culture. In the core of the study, they also focused the distinction of two types of motivation in learners; intrinsic and extrinsic motivation. Intrinsic motivation refers to internal desire to perform an action because it is enjoyable and satisfying while extrinsic motivation is viewed as a behavior that arises from external conditions and aims to gain an external reinforcement.

Two types of motivation are identified:

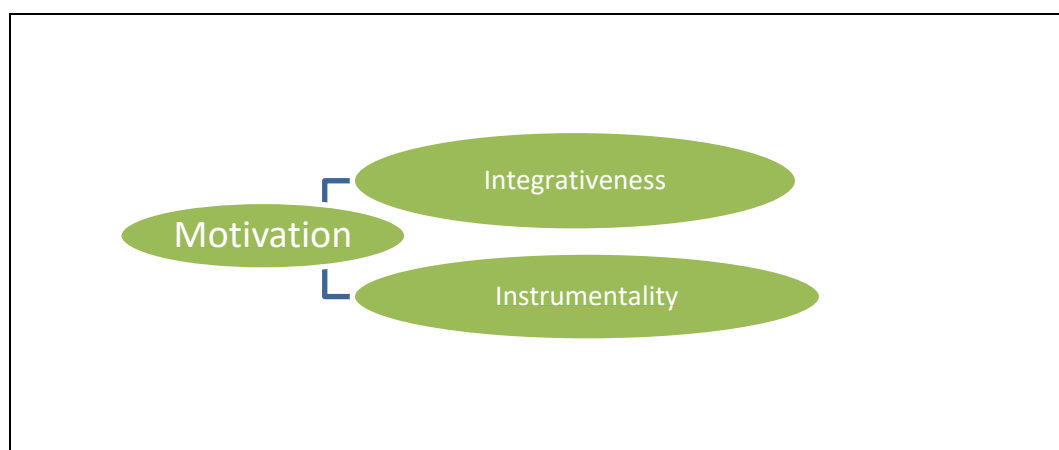


Figure 1. Types of Motivation

Intrinsic motivation is a willingness to communicate with others, having high level of enthusiasm towards learning English, improve oneself in L2 without having any ambitious to receive any instruments or rewards from outside. For instance, a learner who is interested in improving their English to speak well and fluently would be intrinsically motivated to do so without requiring contingent consequences such as praise from the parents or teachers. The effort of the intrinsically motivated learner is focused on the solution to a weakness or problem since the challenge

of overcoming the matter provides a sense of contented feelings. Gardner also claimed that intrinsic motivation has a positive relationship related to achievement in language proficiency.

Extrinsic motivation, however, comes from external factors driving learning for instrumental goals such as making money or being appreciated by others. It is a reward-driven attitude which is a type of conditioning focusing on awards, punishments or actions what individuals will receive as a result. In other words, these individuals are motivated to learn something not because they are willing to learn it, but taking an action to learn something in them is based on obtaining good scores, parental praise, instructor approval, etc. Even though it is stated that intrinsic motivation plays a crucial role in foreign language learning more, some researches showed that the learners who tend to be motivated more instrumentally than intrinsically in terms of gaining and improving the target skills in second language are fully conscious about their actions and can regulate their behavior because their behavior is carried out to achieve the result. A study conducted among Pakistani and Nigerian people shows that large populations and wide salary gaps create a strong motivation for the citizens to learn English to have a better economic condition and gain social prestige by joining the ranks of salaried professionals (December, 2010).

1.3. Foreign Language Anxiety and Motivation

Foreign language anxiety and motivation both are closely related to each other in foreign language learning process. In addition, they can potentially influence various levels of learners' language acquisition and achievement in some ways. Many studies regarding the relationships between language learning anxiety and motivation have drawn attention to the concern of some scholars. For instance, if students feel motivated, they have less anxious feelings and can expend effort to get involved in the learning activities more. And this was supported by the results of questionnaires conducted to find out the correlation between anxiety and motivation, as well. Liu and Huang pointed out that foreign language anxiety was significantly negatively correlated with motivation since the results revealed that low-anxious learners were willing to perform better than high-anxious learners who tended to speak mostly briefly or sometimes remained silent when having to speak target language (2011).

Motivation is one of the factors that influence the rate and success of language learning. Learners with high motivation and a low level of anxiety are thought to be better equipped for success in second language learning. And literature shows that there is a considerable link between anxiety and motivation to learn target language since both anxiety and motivation can significantly predict the English achievement of the language learners within language context. However, language anxiety often works against motivation to learn. According to Clément, Dörnyei and Noels (1994), learners who are more willing to learn a second language are usually less anxious learners who have better self-consciousness, higher achievement, and self-confidence. Another study has similar results to these findings. Sidhub indicated that if students have increasing level of anxiety in language context, it causes negative attitude and perception toward English in them, and also reduces the level of motivation of the students regardless of language proficiency, gender, intelligence, etc. (Jaina and Sidhub, 2012).

1.4 Statement of Problem

Considering the effects of anxiety for the learners who start learning English and carry out gaining and improving the skills throughout their life is a remarkable point that has to be considered by educators. The impacts of anxiety are negatively associated with motivational factors in effective teaching. According to Bailey, Daley and Onwuegbuzie, most learners display high level of anxiety due to poor knowledge, fear of making mistake, losing face, teachers' behaviors, embarrassment, etc. in their learning setting (1999).

1.5. Purpose of the Study

The current study investigates the possible relationship between foreign language anxiety and motivation in English Language teaching setting. In the light of other studies, it tries to find out the negative or positive impacts of anxious feeling in learners. And trying to find answers to the questions whether the anxious feelings play an important role in the learners' performances and how the learners are affected is another objective of the present study.

1.6. Research Questions guided in the study;

- 1- Is there any significant relationship between foreign language anxiety and motivation?
- 2- Do FLL have high level of anxiety in English learning?
- 3- How do the learners experience the effects of anxiety in their learning?

Method

2.1 Participants

The study was conducted at Beykent University in the second term of the Academic Year 2016-2017. All of the participants, 150 in total, were students attending a one-year English Foreign Language instruction at the School of Foreign Languages Preparatory Program. They were A1 level students who were placed according to the placement test results received by them at the beginning of the academic year. Most of them had to enroll in the preparatory school courses because it was a compulsory pre-requisite for their departments. Participants' age ranged was from 17 to 21 years.

The students of Preparatory Program have twenty-seven hours of English classes each week composed of a main course and skills courses that are listening and speaking, reading, and writing. A modular system that comprises of Breakthrough, Waystage, Threshold and Vantage levels is applied. Students are placed in the system according to their levels. And each module lasts for eight weeks. They have quizzes each week for the main course where they are assessed to monitor their progress. At the end of each module, they sit a final exam to pass the compulsory language program.

2.2 Data Collection Tools

By means of utilizing questionnaires used in existing studies in literature, data were gathered from the students. The original Turkish versions of the questionnaires were administered to the participants in case the students may misunderstand or cannot comprehend all of the statements in the questionnaires.

2.2.1 Questionnaire Concerning Anxiety

The questionnaire was originally developed by Kitano (2001), Schmidt et al (1996) and then translated into Turkish and used by Boyno (2011). In the questionnaire, there are 14 items scored on three-point scale with 1 meaning "Disagree", 2 means "Undecided", and 3 means "Agree". The questionnaire does not include any sub-headings yet 14 items investigating the statements of stress in learners and, gather specific information on the sources of foreign language anxiety from participants' perspective.

2.2.2 Questionnaire Concerning Motivation

The other questionnaire is a standard questionnaire developed by Kiss & Nikolov, 2005; Schmidt, Boraie & Kassabgy, 1996; Csizér & Dörnyei, 2005; Yashima, n.d.; Yashima, Zenuk-Nishide & Shimizu, 2004; and R. C. Gardner, 1985), translated into Turkish and used by Boyno (2011). It contains 34 Likert scale items scored on a 3-point scale. And it uses 2 different evaluation types. The items from 1 to 27 are evaluated in accordance with a three-point scale: 1 indicating disagree, 2 indicating undecided, and 3 indicating agree. The items from 28 to 34 were multiple-choice items. The items measured the dimension of motivation in the participant in terms of the instrumental or integrative motivation.

2.3 Data Collection Procedure

The permission from Beykent University and the Head of School of Foreign Languages was taken before the questionnaires were administered to the students. Also, the students were asked for approval to participate in the study and were informed about the nature and aim of the current study in order to create sincere and secure environment for them. Data were gathered at the beginning of the second term. The questionnaires were given to the students under the supervision of their instructors to conduct them in a reliable way.

2. Results

This part presented the analysis of the data obtained from the students who participated in the study. The figure was used to display and analyze the findings. The results were given in Table 1.

Table 1. *Correlation between Foreign Language Anxiety and Learner Motivation*

<i>Correlations</i>					
		Foreign Language Anxiety	Integrative	Instrumental	Motivation
Foreign Language Anxiety	Sig.		0, 004	0, 620	0, 037
	Pearson Correlation	-1	-0,232	-0,041	-0,170
	N	150	150	150	150

As seen in Table 1, the scores considering foreign language anxiety and motivation in learners are high. This can be explained by the fact that anxiety and motivation are significantly and negatively correlated in the findings. It is surprising to find that the only dimension of motivation having correlation with foreign language anxiety is integrative motivation ($r = -0.232$; $p < 0.05$). No statistically significant correlation between foreign language anxiety and instrumental ($r = -0.041$; $p > 0.05$), as well as motivation in general ($r = -0.170$; $p > 0.05$) was found. In addition, all correlations are negative.

Considering the results, it is possible to infer that anxiety hinders the learners from gaining positive perceptions towards learning English, thus the learners become demotivated and reluctant in learning setting. We can say that these findings prove the importance of the level of anxiety for a negative perception of learner autonomy.

3. Conclusion And Discussion

The purpose of this study was to find out the relationship between foreign language anxiety and motivation and to investigate the simultaneous effect of foreign language motivation and anxiety on students' learning. The findings reveal several significant facts about the correlation between foreign language anxiety and motivation in second language learning. The impact of anxiety on second language learning motivation without regarding other majors is undeniable, especially for non-English learners. The findings show that if the learners have some worries and anxious feelings about the target language, motivation is influenced negatively, and anxiety reduces the level of motivation in their learning process. As a result, they will probably gain a negative perception making them reluctant to take an active role in their own learning in the language learning process. It is possible to say that this negative perception hinders the learners to get involved in the classroom activities that are really effective to foster their receptive and productive skills in English. So, they tend to be remain quiet most of time when learning English due to the demotivating impacts of anxiety.

On the other hand, the level of integrative motivation in non-English majoring groups is remarkably high since most of the participants are willing to learn English for their own satisfaction and success. They put effort into gaining the abilities and practicing them properly in target activities. It is indicated that the learners participated in the study who are intrinsically motivated were able to overcome the difficulties of the impacts of anxiety they encountered in the learning process. This idea would be supported with an idea that intrinsically motivated learners have a moderate level of anxious feeling and also experience some problems in their English learning process because of anxiety. However, they have power to turn into the negative potential effects of anxiety into a pleasant and practical condition to be nurtured as intrinsically motivated learners to increase the control the emotions through their learning and performance in some way since they have a desire and ambition to achieve a goal to be successful. Thus, they can take control to reduce and overcome the challenges of anxiety appearing through the classroom activities by considering their wishes and goal. This type of learners is luckier to get rid of any problems about their learning thanks to their positive perception they have gained. In light of the findings, it can be thought

that the source of low language motivation could be a cause of anxiety. Other studies conducted (Clement, Dörnyei and Noels, 1994; Sidhu, 2012) are consistent with the findings of the present study in many ways. These studies also state that the higher the level of anxious feelings the learner has, the less the learner would have motivation for learning a new language.

It is not surprising to find out that the learners could not achieve to reach the desired level they wanted due to negative impacts of anxiety if they are extrinsically motivated to learn and acquire the skills of the target language. The environmental factors encourage them to take part in the learning process to get an award at the end of this process. If no an award or present, there is no need to make an effort to acquire any knowledge in target language.

References

- Alpert, R., & Haber, R. N. (1960). *Anxiety in Academic Achievement Situations*. Journal of Abnormal and Social Psychology, 61, 207-215.
- Onwuegbuzie, A. J., Bailey, P. & Daley, C. E. (1999). *Factors associated with foreign language anxiety*. *Applied Psycholinguistics*, 20 (2), 217 – 239.
- Clément, R. (1980). Ethnicity, contact, and communicative competence in a second language. In H. Giles, W. P. Robinson, & P. M. Smith (Eds.), *Language: Social psychological perspectives*. Oxford, United Kingdom: Pergamon Press. pp. 147-154.
- Clément, R., Dörnyei, Z., & Noels, K. A. (1994). *Motivation, self-confidence and group cohesion in the foreign language classroom*. *Language Learning*, 44, 417-448
- Gardner, R. C., & Lambert, W. E. (1959). *Motivational variables in second-language acquisition*. *Canadian Journal of Psychology*, 13(4), 266–272.
- Jain, Y & Sidhu, G. K. (2012). *Relationship between anxiety, attitude and motivation of tertiary students in learning English as a Second Language*. *Procedia - Social and Behavioral Sciences* 90 (2013) 114 – 123
- MacIntyre, P. D. & Gardner, R. (1991). *Methods and results in the study of anxiety and language learning: A review of literature*. *Language Learning*, 41. 85-117.
- Horwitz, E., Horwitz, M., & Cope, J. (1986). Foreign language classroom anxiety. *Modern Language Journal*, 70, 125-132
- Jaina & K. Sidhu. (2012) ; *Relationship between anxiety, attitude and motivation of tertiary students in learning English as a Second Language* .*Procedia - Social and Behavioral Sciences* 90 (2013) 114 – 123
- MacIntyre, P. D., Baker, S. C., Clément, R., & Conrod, S. (2001). *Willingness to communicate, social support, and language-learning orientations of immersion students*. *Studies on Second Language Acquisition*, 23, 369-388
- McDonough, S. H. (1981) *Psychology in foreign language teaching*. London: Allen and Unwin
- Noels, K.A., Clément, R., & Pelletier, L.G. (1999). Perceptions of teachers' communicative style and students' intrinsic and extrinsic motivation. *The Modern Language Journal*, 83 (1), 23-34.
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications*, 2nd edition. Upper Saddle River, NJ: Merrill Prentice-Hal
- Liu, M. & Huang, W. (2011). An exploration of foreign language anxiety and English learning motivation. *Education Research International*, 1-8. doi:10.1155/2011/493167
- Scovel, T. (1978). The effect of affect on foreign language learning: A review of the anxiety research. *Language Learning*, 28(1), 129-142.

The Relationship Between Instructor's Physical Attractiveness, Teaching Attractiveness And Student Motivation During Live Lectures

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Abstract

Communication behaviors, physical appearance, instructional skills of the instructor during teaching influence students' participation level and willingness of interaction with the instructor. It is claimed that positive evaluation of teaching attractiveness results in higher level of student participation and interaction motivation. Live instruction sessions require physical preparation of the instructor before the lessons. In addition, during live instruction, the instructor has to give great importance to his/her verbal and nonverbal communication behaviors. The aim of this study is to investigate the relationship between live session instructor's physical attractiveness, teaching attractiveness, and student motivation. The sample of this research was designed as relational research design. The sample includes 159 students who registered live broadcast courses at Sakarya University Faculty of Communication during December 2016. The students who participated in the research evaluated the lecturers who gave lectures on the live broadcast for the physical attractiveness and teaching attractiveness dimensions through a questionnaire. Participant students also answered questions about learning motivation through the same questionnaire. In the analysis of the data, correlational (Pearson) analysis and simple linear regression analysis were used to reveal the relationship and to predict a dependent variable based on predictive variables. The results show that there is a significant positive relationship between the instructor's physical attractiveness and student motivation level. Besides, the results revealed that there is a significant positive relation between teaching attractiveness and student motivation level. Moreover, linear regression analysis results illustrate that physical attractiveness predicts %39,7 of the student motivation level, and teaching attractiveness predicts %55,4 of the student motivation level.

Keywords: *Instructor attractiveness, online instruction, physical attractiveness, teaching attractiveness, student motivation.*

Introduction

The communication between the student and the instructor is a mutual interaction process based on verbal and non-verbal messages (Bekiari and Spyropoulou, 2016). Communication behaviors of the instructor during teaching influence students' participation level and willingness of interaction with the instructor. (Claus et al., 2012, 162). Non-verbal communication codes, such as the instructor's tone of voice, pace, eye contact, tense body and gestures and mimics may have an influential role on creating a positive atmosphere in the classroom (Hsu, 2006). Frymier and Houser (2000) have mentioned that the relationship between the instructor and the student can be improved related to the mutual communication skills of both sides. Understanding the communication behaviors of the instructor and the student not only helps the improvement of their mutual relationship but also gives an idea to the instructor about providing a quality learning environment (Weiss and Houser, 2007). Especially, the instructor's closeness, reliability, the ability of a sense of humor and physical attractiveness have a positive influence on students' participation in the class (Claus et al., 2012:162). This also helps students arrange their responsibilities towards the instructor so has a direct influence on the learning process (Westfall, Millar and Walsh, 2016:162). Interpersonal attractiveness is thought to be a distinctive factor for the improvement and the continuity of the relationships in social environments (Bekiari and Spyropoulou, 2016). At this point, interpersonal attractiveness shows the communication quality between the recipient and the sender (Curnalia, 2016). Individuals' sense of resemblance, past experiences, values, and beliefs influence the perception of attractiveness. For example, people may come across people who have similar behaviors with them. That's why they see them as attractive and have positive feelings towards them (Batoll and Malik, 2010). McCroskey and McCain (1974) take the interpersonal attractiveness into consideration in terms of three dimensions as physical, social and duty. Physical attractiveness includes being good-looking, having sexual attraction and being beautiful/handsome. The individual's face, weight, physical characteristics, being athletic should be evaluated in terms of physical attraction dimension (Curnalia, 2016). In his study, Westfall (2015, 9) has investigated the influence of the instructor's physical attractiveness on his/her instructional skills and has determined that students graded the physically attractive instructors as more skillful and more motivating. Similarly, in their research, Bokek-Cohen and Davidowitz (2008)

have determined the important influence of the instructor's physical attractiveness that was graded in the instructors' evaluation questionnaires of the students. Ünal-Çolak and Kobak (2011) have mentioned the positive relation between the instructor's physical attractiveness and student motivation. Myers and Huebner (2011) have determined that interpersonal attractiveness of instructors is a positive motivation for students who want to communicate with them. In addition to this, the instructional attractiveness of the instructor should also be questioned.

The student is getting ready for motivation to communicate with the instructor by testing the variables which are influential on their communication behaviors (Weiss and Houser, 2007:216). The instructor should have alternatives/alterations during the teaching process. The instructor's intelligence, his/her knowledge of the lesson content, his/her pedagogical knowledge, communication competence and general experience are all important during the teaching process. All these factors also influence the verbal and non-verbal communication behaviors of the instructor during the teaching process (McCroskey, Valencic and Richmond, 2004). An effective education requires positive instructional behaviors of the instructor such as closeness, clearness, and temperament and this is more influential on learning (Goodboy and Myers, 2008:154).

Student motivation is about the participation willingness of the student during the learning process. The instructor's advisor role, information source role, teaching role and technical role are among the factors that influence the student motivation (Vatansever Bayraktar, 2015). An instructor should be well-organised for the lesson, should emphasize the importance of the academic success, should be sure that students get what is taught in the lesson, should involve all students into the learning activities, should be knowledgeable about what s/he is teaching, should have presentation skills, should give sufficient feedback to the students in order to understand what they have learnt and what they have not, and should strengthen students' positive behaviours. Moreover, an instructor should choose different methods by considering the learning environment and should realize the education with visual-audial equipment (Vatansever -Bayraktar, 2015 cited from Balci, 1993; Ünal and Ada, 2003).

Sakarya University provides some live instruction sessions within the scope of SaüTv. Different university students have the chance of having these lessons via Massive Open Online Courses (MOOCs) and they can watch videos of these lessons whenever and wherever they want. With the MOOCs Project that has been brought out as a new modal in digital education, students who study at Sakarya University can register at "<http://saux.sakarya.edu.tr>" address, and they can have lessons in different fields. Aiming to realize effective communication, these lessons could also be from different faculties of the university. During the 2016-2017 fall semester, four live instruction sessions were carried out by instructors with different titles within the scope of Sakarya University, Faculty of Communications. One of these lessons was carried on as an object lesson. Live instruction sessions are lessons for which instructors get ready physically beforehand and for which they should be careful about their verbal and non-verbal communication behaviors. At this point, the instructor should have a brief preparation just before the live session. The flow of the course is live on the web and it is given as an in-class lesson. The live course is also supported with extra education materials when needed. What is more, the instructor is ready at the location where the live session takes place. In these lessons, in which synchronous education is adopted, there is also an interaction between the instructor and the student with questions and answers. Demographical characteristics of the instructor are as the following; 1 Male and 3 Females in terms of sex variable, 1 Professor Doctor, 1 Associate Professor and 2 Assistant Professors in terms of title variable.

Objective

The aim of this study is to investigate the relationship between the important role of instructor's physical attractiveness, teaching attractiveness, and student motivation in a live session course environment. For the purposes of the study, following questions are answered.

1. Is there a relationship between the physical attractiveness of the live session instructor and student motivation level?
2. Is there a relationship between the teaching attractiveness of the live session instructor and student motivation level?
3. Is the physical attractiveness of the live session instructor a predictor for the student motivation level?
4. Is the teaching attractiveness of the live session instructor a predictor for the student motivation level?

Problem Statement

Massive Open Online Courses have been increasing day by day. When compared to face to face education, more care and attention should be given for these courses as they are able to be far-reaching and they make it possible for students to access the content of the courses when and where they want. The instructor-student relationship is influenced by different variables in instruction communication. Besides the physical appearance and behaviors of the instructor, his/her verbal and non-verbal behaviors during the session could also be a determinant of this relationship. Live instruction sessions are lessons for which instructors get ready physically beforehand and for which they should be careful about their verbal and non-verbal communication behaviors. This situation may

change the students' perception for the instruction and the lesson. Moreover, it may alter students' interest in the lesson, their desire to learn and motivation. Though the relationship between the interpersonal attractiveness, especially the physical attractiveness, of the instructor and the student motivation was investigated in prior research, there has been no study about the evaluation of the physical and teaching attractiveness in terms of the live session courses and their influence on students' motivation. In addition, live session instructors experience a self-evaluation process. For this reason, different from the traditional lessons, the relationship between how instructors are evaluated by students and how their evaluations influence their learning motivation in live sessions should be questioned. In this study, the physical and teaching attractiveness of the instructor in live broadcasting sessions has been investigated.

Method

This study was designed as a descriptive survey model. Descriptive survey models aim to describe a situation in the past or now as it is (Karasar, 2004, 77). As for the purposes of the study, descriptive survey model was chosen to describe the relationship between the motivation level of the students during the live sessions and physical and teaching attractiveness of the instructor as it is.

Sample

In this study, a random sampling method was used. The study sample consists of 159 students studying at the Communication Faculty of Sakarya University. Students in the study are all obliged to take different lessons from four different instructors. Since there are no instructors who teach lessons in the same class, they have been evaluated by different students in live sessions who have been ready during the shot of the lessons. %78 of these students are female, %78 of them are males and %3 of them did not mention their sex. The age range of the participants is between 17 and 28, but the majority of them is (%76) between 18 and 21.

Data Collection

In the study, a questionnaire form has been used to collect the data. The form has been delivered to the students just before the live session and they have been asked to evaluate the related lesson and the instructor. Questions about the physical attractiveness dimension in the questionnaire form have been taken from the scale that was developed by McCroskey and McCain (1974). On the other hand, questions about the instructional attractiveness and motivation in the questionnaire form have been taken from the scale that was developed by Ellis (2000). Following the experts' approval for the first draft of the questionnaire, the revising process started. Finally, the questionnaire has consisted of 7 questions for physical attractiveness, 13 questions for teaching attractiveness and 8 questions for motivation level. The questionnaire items have been presented to the participants as a 5-point Likert-type scale with intervals of 1 Strongly Disagree to 5 Strongly Agree. Participants have responded to the items face-to-face.

Internal consistency reliability of the new questionnaire form has been determined as high as .956. Cronbach's Alpha values of sub-categories have been calculated as .860 for physical attractiveness, .896 for teaching attractiveness, and .875 for student motivation. These results illustrated that each categories' internal consistency reliability is over .40, hence internal consistency reliability is high.

Data Analysis

Data of the questionnaire of this study have been analyzed with SPSS 15.0 Windows version. First of all, the data set has been examined for possible data errors or data deficient. After being sure about the correct data input, unanswered questions by participants for any reasons have been examined. As a result of this examination, most of the items have been determined to be answered, less than %5 for unanswered ones. The result supports the impression that the participants did not experience any difficulty to comprehend the items.

In the study, correlational (Pearson) analysis and simple linear regression analysis were used to reveal the relationship between variables and to predict dependent variable based on predictive variables.

Findings

Mean Value for the Physical Attractiveness, Teaching attractiveness and Motivation

The mean value of the participants' responses to the questions instructor's physical attractiveness, teaching attractiveness and motivation is seen in Table 1.

Table 1: Mean Value for the Physical Attractiveness, Teaching Attractiveness, and Motivation

	N	Mean
Physical attractiveness		
S/he is very beautiful/handsome	159	3,38
S/he cares her/his personal cleaning	158	4,04

S/he is physically attractive	159	3,26
Her/his tone of voice and stress take my attention	158	3,63
S/he speaks Turkish fluently	158	4,02
Her/his clothes suit her/him well	159	3,84
S/he cares her/his clothing	159	4,04
Teaching attractiveness		
S/he is respectful to class hours	158	3,73
S/he is proficient in her/his subject	159	4,19
S/he is fair when giving word to students	158	4,20
I rely on her/his knowledge about the course	159	4,19
S/he helps me correct my mistakes.	159	3,82
S/he manages time well.	159	3,94
I have freedom of speech during her/his course	158	3,94
S/he keeps eye contact during the lesson	159	4,01
S/he never moves to a new subject before the previous one is comprehended	159	3,69
S/he uses visual materials during the course	159	4,15
Her/his answers to my questions satisfy me	159	3,87
S/he is always well-prepared for the course	159	4,13
I know her/his evaluation criteria	158	3,65
Motivation		
I can transfer theoretical information I get during the course in my daily life	159	3,55
I think this course is important	157	3,75
The course meets my expectations	158	3,55
S/he manages class discussions successfully	159	3,72
The presentation of the course and the content attract my attention	159	3,62
The content of the course meets my expectations and needs	158	3,57
The content of the course encourages me to think in different areas	159	3,61
I am appreciated when I am successful in the course	158	3,39

5 point Likert-type scale items are formulated as 4/5=0.80 and evaluated as between 1 and 1.80 “I strongly do not agree”, between 1.81 and 2.60 “I do not agree”, between 2.61 and 3.40 “I am not sure”, between 3.41 and 4.20 I agree, 4.21 and over is “I strongly agree”. When mean values are analyzed, it is seen that students did not choose the “I do not agree” option for any of the scale items except for the item 1 and 3 in physical attractiveness category (1. S/he is very beautiful/handsome. 3. S/he is physically attractive. On the other hand, it is seen that students did not choose “I strongly agree” option for any of the scale items.

Relationship between Physical Attractiveness and Student Motivation

In the study correlation analysis (Pearson) is used to reveal the strength of relationship between physical attractiveness and motivation.

Table 2. Relationship between Physical Attractiveness and Student Motivation Value

		Physical attractiveness	Motivation	
Physical attractiveness	Pearson Correlation	1	,630**	The
	Sig. (2-tailed)		,000	
	N	159	159	
Motivation	Pearson Correlation	,630**	1	The
	Sig. (2-tailed)	,000		
	N	159	159	

** . Correlation is significant at the 0.01 level (2-tailed).

findings show that there is a significant positive ($r = .630$) relationship between instructor's physical attractiveness and student motivation at the level 0.01. Namely, when the level of physical attractiveness value increases, student motivation level increases, too.

The Relationship between Teaching Attractiveness and Motivation Level

In the study correlation analysis (Pearson) is conducted to reveal the strength of relationship between teaching attractiveness and motivation level.

Table 3. The Relationship between Teaching Attractiveness and Motivation Level

	Teaching attractiveness	Motivation
Teaching attractiveness	Pearson Correlation	1
	Sig. (2-tailed)	,744**
	N	159
Motivation	Pearson Correlation	,744**
	Sig. (2-tailed)	,000
	N	159

** . Correlation is significant at the 0.01 level (2-tailed).

The findings illustrate that there is a significant positive ($r = .744$) relationship between instructor's teaching attractiveness and student motivation at the level 0.01. In other words, when the level of teaching attractiveness increases, student motivation level increases, too.

The Predictability of Student Motivation Based on Instructor's Physical Attractiveness

A simple linear regression analysis is calculated to predict dependent variable based on predictive variable. (Gürbüz and Şahin, 2014, 260). In this study, linear regression analysis was conducted to predict student motivation based on instructor's physical attractiveness.

Table 4. The Predictability of Student Motivation Based on Instructor's Physical Attractiveness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,630a	,397	,393	,66926

a. Predictors: (Constant), physical attractiveness

b. Dependent Variable: motivation

A significant regression equation is found ($F(1,157) = 103,456$, $p < .000$), with an R^2 of .397. Linear regression analysis illustrates that physical attractiveness predicts %39,7 of the student motivation level.

Table 5. ANOVA

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46,338	1	46,338	103,456	,000b
	Residual	70,321	157	,448		
	Total	116,659	158			

a. Dependent Variable: motivation

b. Predictors: (Constant), physical attractiveness

The Predictability of Student Motivation Based on Teaching Attractiveness

In this study, linear regression analysis was conducted to predict student motivation based on teaching attractiveness.

Table 6. The Predictability of Student Motivation Based on Teaching Attractiveness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,744a	,554	,551	,57589

a. Predictors: (Constant), öğretim çekiciliği

b. Dependent Variable: motivasyon

A significant regression equation is found ($F(1,157) = 194,758$, $p < .000$), with an R^2 of .554. Linear regression analysis illustrates that teaching attractiveness predicts %55,4 of the student motivation level.

Table 7. ANOVA

ANOVA						
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Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	64,591	1	64,591	194,758	,000b
Residual	52,068	157	,332		
Total	116,659	158			

a. Dependent Variable: motivation

b. Predictors: (Constant), teaching attractiveness

Results And Discussions

Communication between an instructor and students is an interactive process includes verbal and non-verbal messages. (Bekiari ve Spyropoulou, 2016). The instructor's communication abilities have a direct effect on student enthusiasm for participation and interaction (Claus et al., 2012, 162).

As a part of interpersonal communication, attractiveness is a vital element to sustain relationships (Bekiari and Spyropoulou, 2016). From this perspective, attractiveness increases the effectiveness of communication between the sender and the receiver. (Curnalia, 2016).

According to McCroskey and McCain (1974) attractiveness can be categorized into three as physical, social and professional. Physical attractiveness is related with good looking, being sexy, being beautiful/handsome. Westfall (2015, 9) claims that instructors physical attractiveness change students' perception about their instructor. His study revealed that students perceive their instructor as more talented and encouraging when they find him/her more attractive.

On the other hand, the instructor's intelligence, proficiency, pedagogical knowledge, and experience are also determinant on student motivation level. (McCroskey, Valencic ve Richmond, 2004). Further, effective education requires sincerity, clarity, and humor of the instructor (Goodboy ve Myers, 2008, 154).

Other studies on student motivation highlight that student motivation is closely related with instructors teaching approach and methods, management skills and guidance abilities. (Vatansever Bayraktar, 2015). Organized, success oriented and presentable instructors raise the level of student motivation (cited in Vatansever -Bayraktar, 2015 from Balcı, 1993; Ünal ve Ada, 2003).

Sakarya University provides some live online lessons via SaüTv. These lessons, which are designed as Massive Online Open Courses can be taken by other university students and can be, followed anytime anywhere. In Communication Faculty four different courses are provided online by four different instructors. The flow of the lessons are similar to traditional in-class lessons, and when necessary supplementary materials are used. During these sessions, there is the possibility of instructor-student interaction since these lessons are broadcasted in a real class setting. Live session instruction requires preparation of the instructor both physically and instructional. In relation to this context, the aim of this study is to investigate the relationship between live session instructor's physical attractiveness, instructional attractiveness, and student motivation.

In this study, simple random sampling is used and 159 Communication Faculty students studying at Sakarya University participated in the research. Participants answered a survey investigating instructor physical attractiveness, instructional attractiveness, and student motivation. All surveys were conducted face to face. To reveal the relationship between physical attractiveness and student motivation, instructional attractiveness, and student motivation correlation (Perason) analysis was used. Following, a linear regression analysis was conducted to uncover whether physical attractiveness and instructional attractiveness predicts student motivation.

Results showed that there is a significant positive relationship between the instructor's physical attractiveness and student motivation. Besides, the results revealed that there is a significant positive relation between instructional attractiveness and student motivation. Moreover, linear regression analysis results illustrate that physical attractiveness predicts %39,7 of the student motivation level and instructional motivation predicts %55,4 of the student motivation level.

The results of this study are similar to prior studies that investigate the same questions for traditional teaching. However, there is still a limited research investigating the effect of physical and instructional attractiveness on student motivation during live sessions. Further research may question the factors that affect student motivation not in a classroom setting during a live broadcast, but while watching these lessons outside the classroom.

References

- Balcı, A. (1993). Etkili Okul-Kuram, Uygulama ve Araştırma. Ankara: Ankara Üniversitesi Yayınları. Yavuz Dağıtım.
- Batooll, S.,& Malik, N. I. (2010). Role of Attitude Similarity and Proximity in Interpersonal Attraction among Friends. *International Journal of Innovation, Management and Technology*,1 (2), 142-146.
- Bekiari, A., & Spyropoulou, S. (2016). Exploration of Verbal Aggressiveness and Interpersonal Attraction through Social Network Analysis: Using University Physical Education Class as an Illustration. *Open Journal of Social Sciences*,4, 145-155.

- Bokek-Cohen, Y., & Davidowitz, N. (2008). Beauty and Teaching Evaluation: A comparison between Female and Male College Professors. *Problems of Education in the 21st Century*, 7, 15-30.
- Claus, C.J., Booth-Butterfield, M., & Chory, R.M. (2012). The Relationship Between Instructor Misbehaviors and Student Antisocial Behavioral Alteration Techniques: The Roles of Instructor Attractiveness, Humor, and Relational Closeness. *Communication Education*, 61(2), 161-183.
- Curnalia, R. (2016). *Interpersonal Attraction. Interpersonal Attraction from Insight Innovation: Applying Communication Theory in Our Webs 2.0. Lives*. Kendall Hunt Publishing.
- Ellis, K. (2000). Perceived teacher confirmation. *Human Communication Research*, 26, 264-291.
- Frymier, A. B. and Houser, M. (2000). The teacher-student relationship as an interpersonal relationship. *Communication Education*, 49, 207-219.
- Goodboy, A.K. and Myers, S.A. (2008). The Effect of Teacher Confirmation on Student Communication and Learning Outcomes. *Communication Education*, 57 (2), 153-179.
- Gürbüz, S. and Şahin, F. (2014) *Sosyal Bilimlerde Araştırma Yöntemleri*, Ankara: Seçkin Yayıncılık.
- Hsu, L. (2006). The Impact of Perceived Teachers' Nonverbal Immediacy on Students' Motivation for Learning English. *Asian EFL Journal*, 12 (4).
- Karasar, N. (2004). *Bilimsel araştırma yöntemleri*. Ankara: Nobel Yayıncılık.
- McCroskey, J.C., & McCain, T.A. (1974). The Measurement of Interpersonal Attraction. *Speech Monographs*, 41, 261-266.
- McCroskey, J., Valencic, K.M., Virginia P., & Richmond, V.R. (2004). Toward a General Model of Instructional Communication. *Communication Quarterly*, 52 (3), 197-210.
- Myers, S.A., & Huebner, A.D. (2011). The relationship between students' motives to communicate with their instructors and perceived instructor credibility, attractiveness, and homophily. *College Student Journal*, 45, 84-91.
- Ünal-Colak, F., & Kobak-Uzun, K. (2011). Determining interpersonal attraction in educational environment and the relation with motivation. *International Journal on New Trends in Education and Their Implications*, 2(1), 47-56.
- Ünal, S., & Ada, S. (2003). *Sınıf Yönetimi*. İstanbul: Marmara Üniversitesi Matbaası.
- Vatansever -Bayraktar, H. (2015). Sınıf Yönetiminde Öğrenci Motivasyonu ve Motivasyonu Etkileyen Etmenler. *International Periodical For the Languages, Literature and History of Turkish or Turkic*, 10 (3), 1069-1090.
- Weiss, S.D., & Houser, M.L. (2007). Student Communication Motives and Interpersonal Attraction Toward Instructor. *Communication Research Reports*, 24 (3), 215-224.
- Westfall, R.S. (2015). Effects of Instructor Attractiveness on Classroom Learning. Unpublished Master thesis. University of Nevada, Las Vegas.
- Westfall, R., Millar, M., & Walsh, M. (2016). Effects of Instructor Attractiveness on Learning. *The Journal of General Psychology*, 143 (3), 161- 171.

The Relationship Between The Status Of Psychological Well Being And Psychological Performance Of Handball Players

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Abstract

The purpose of this research, pre-competition handball team in Turkey to investigate the psychological performance status and psychological well being. The researcher's universe consisted of 400 athletes, 168 women and 232 men, aged between 18 and 30, on 22 provinces, including 8 super league, 8 1st place, 3 2nd place, 3 regional league from 6 geographical regions.

As means of data collection in the survey; Psychological well-being scale, psychological performance scale and personal information form were used. Statistical analyzes were performed with the SPSS 20.0 package program on personal information form, psychological well-being scale and psychological performance scale. The personal information and inventory total scores and factor scores for the candidates were determined by determining frequency (f) and percentage (%) values. Pearson Moments Correlation Analysis (r) analysis was applied to reveal the relationship between the scores obtained from the scales. (B)

When the relationships between subscales of psychological well-being and psychological performance sub-dimensions are examined, self-confidence, attention control and attitude control between autonomy and self-confidence and visualization and imagination, between environmental domination and self-confidence, attention control and motivation level, between individual development and self-confidence, visualization and imagination, motivation level, positive energy and attitude control positive relationships between positive self-acceptance and positive energy were found.

As a result; the psychological well-being and psychological well-being of the athletes will be determined, the factors that will affect the performances of the athletes will be removed, and their performance will be influenced to the upper levels in the positive direction.

Keywords: *Psychological good, Psychological performance, Handball, Athlete*

Introduction

It is strengthening the psychological endurance of the individual to exhibit a strong appearance in the face of difficult living conditions and to be able to flip the difficult situations (Kararmak, Siviş Çetinkaya, 2011, pp. 30-43). The need for a detailed investigation of the concept of psychological well-being has emerged as people need to have a strong psychologically strong structure in their struggle against adverse situations (Önder, Gülay, 2008, p.192-197).

Psychological wellness involves the quality of one's relationship with other people. It shows whether the person is conscious of their life purpose and whether they are aware of their potential (Ryff, Keyes, 1995, p.719 - 727). In addition, we see that psychological well-being is defined as a concept that both materially and spiritually means that a person has a comfortable life and has the necessary qualities for it. The concept of psychological well-being reflects the concept of self-positive perception, the establishment of safe and warm relationships with other people around it, independent and autonomous decisions, the shaping of the environment to fulfill personal needs and desires, and the purpose and meaning of the life (Baysoy, 2014).

Ryff and Keyes (2002, p.161-180) are concerned about the psychological well-being, the individual's awareness of the aims of life, the formation of relationships among qualified people, the recognition of positive self, the acceptance of limitations and self- (Keyes, Shmotkin, Ryff, 2002, p.1007-1022), which is characterized by the ability to respond in a manner that is self-sustaining and entrepreneurial, aware of its capabilities and evolving.

In today's sport, excellence in physical fitness is not considered alone enough to bring sporting performance to the top. The athlete also has a psychological capacity and is at least as important as the physical direction. It is for this reason that the athletes experiencing changes in the emotional direction are unable to catch the expected success despite being physically ready (Tavacıoğlu, 1999). Besides the physiological and physiological capacities of many

top athletes; they are also thought to have excellent skills in psychological capacities such as motivation, managing their concerns, concentrating and determining goals (Koç, 2004).

Ramirez; psychological wellbeing, ability to heal quickly from disease, depression, alterations, or worse situations; to be able to recover itself, to be able to easily return to the old one after it has been torn; elasticity. This concept is defined as a talent, a psychological quality and contributes to the continuation of healthy development and also has some features such as being able to cope with such situations when encountering negative situations. (Masten, 1994, p. 3-25).

Individuals with a high level of psychological well-being are more attached to daily activities and jobs, keep their lives under control, and view unexpected changes as opportunities for improvement. Persons can easily determine what they want to do in their lives, believe that they can prevent problems from emerging, and have the power to be better than the past when correcting the present situation (Florian, Mikulincer, Toubman, 1995, p.687-695). In individuals with low levels of resistance, resistance to distance, external control and change is seen (Klag, Bradley, 2004, p.137-161).

When we consider the above information as a whole, it is seen that concepts of psychological well-being and psychological performance can be effective in different dimensions and levels in different areas of life. When the literature is examined, studies on psychological well-being and psychological performance are often integrated separately or in other contexts (Masten, Reed, 2002, p.74-88, Connor, Davidson, 2003, p.76-82, Noorafshan, Jowkarb, Hosseini, 2013, p.900-904, Sagone, Caroli, 2013, p.838-845, Gürkan, 2006, Bahadır, 2009, Güloğlu, Kararmak, 2010, Sezgin, 2012, s.489-502, Kirimoglu, Filazoğlu 2003, pp. 822-848, Falkenström, 2010, p.305-310, Schmutte, Ryff, 1997, pp.115-127, Ozen, 2010, pp. 46-58, Brown, Ryan, p.549-559, Sarıcaoğlu, 2011, Jeweler, 2012, p.1-24, Eksioğlu, 2011). However, no studies have been found on the psychological well-being and psychological performance levels in sports science. From this point; it is thought that this study made possible that this shortcoming in the field of sports science could lead to a different perspective on the field. The general aim of working in this context is to examine the psychological well-being and psychological performance of handball players before competition.

Material And Method

Methods

Studying Group

This research is in the relational screening model. This screening model can be defined as "... research models aimed at determining the presence and / or degree of exchange between two and more variables" (Karasar, 2015, pp.49-53).

Research; the descriptive qualities of handball players are due to the fact that the power to predict the psychological performances of their psychological well being and the demographic characteristics of the candidates are determined in the context of their relationship.

Data Collection Tools

Data collection tools used in research; Psychological well-being scale, psychological performance scale and socio-demographic information form were applied.

Creation of Voluntary Groups

Turkey Handball Federation of study within the Super League, Div 1, 2 League and regional ligte we played handball handball players from the 681 randomly method selected 400 athletes participated.

Table 1. Socio-Demographic Characteristics of the Participants

	Değişkenler	N	%
Gender	Male	235	58,8
	Female	165	41,2
Age	18-21	213	53,3
	22-25	92	23,0
	26-30	67	16,8
	31 and above	28	7,0
Age of Sport	1-5	58	14,5
	6-10	208	52,0
	11 and above	134	33,5
Position	Goalkeeper	55	13,8
	Right Playmarker	52	13,0

	Left Playmarker	62	15,5
	Middle Playmarker	48	12,0
	Right Wings	67	16,8
	Left Wings	51	12,8
	Pivot	65	16,3
League	Super League	139	34,8
	1. League	158	39,5
	2. League	69	17,3
	Regional League	34	8,5

Socio-Demographic Information Form

The socio demographic information form contains 5 questions in order to obtain participants' age, gender, sport age, position and league level information.

Psychological Well-Being Scale

Ryff (1989, pp. 35-55); autonomy, environmental dominance, individual development, positive relationships with others, life goals and self-acceptance. The scale consists of 84 items. Each sub-dimension has 14 items. This is a self-report measure measuring the characteristics of the psychological well-being and giving information about the individual. (1) I do not agree at all, (2) I do not agree a little, (3) I do not agree very little, (4) I do not agree very much, (5) I agree a little and (6) about half of the substances in a subscale are reverse coded. The adaptation of the scale to the Turkish language was done by Cenkseven (Cenkseven, 2004). Reliability studies were conducted on 475 university students. Correlations of 84 items with the total score from the Psychological Well-Being Scale. 25 to 57. When we look at the correlations of the total score of each item with the total score, the values are 42-70 for positive relations with others, .38-.60 for autonomy, .32-.63 for environmental dominance, .38-.61 for individual development, and between .37 and .63 for self-acceptance. Internal consistency coefficients (Cronbach Alpha) of the scale were found to be .83, .73, .76, .76, .76, .76, and .79, respectively. The overall internal consistency coefficient of the Psychological Well-Being Scale was .93. The correlation coefficients for test retest reliability were found to be .74, .77 for autonomy, .77 for environmental dominance, .74 for individual development, .75 for life purpose and .76 for self-acceptance. It was also determined that the test-retest correlation coefficient for the total score was .84.

Psychological Durability Scale

Loehr J.E. Psychological Performance Inventory (PPI), developed by the American Psychological Association, was used (Loehr, 1986) to produce the profile of the athlete's mental skills. 5-Likert-type closed-end scale question type answer inventory options; "Always", "often", "sometimes", "rarely" and "never". (Loehr, 1986). Studies on adaptation of PPE to Turkish have been made. The internal consistency coefficient for the Turkish version of the scale was 0.70, 0.63 for negative, 0.43 for attention control, 0.53 for visualization and imaging control, 0.62 for motivation level, 0.53 for positive control and 0.65 for attitude control ($p < 0,01$) (The Whoqol Group, 1996, pp. 354-356).

Analysis of data

The data obtained from the Personal Information Form, Psychological Resilience and Psychological Well-being scale were coded and entered into the SPSS 20.0 package program and the analyzes were made through this program. The personal information and inventory total scores and factor scores for the candidates were determined by determining frequency (f) and percentage (%) values. Pearson Moments Multiplication Correlation analysis (r) was applied to reveal the relationship between scores obtained from the scales. (B)

Findings

Table 2. Descriptive statistics of the players' responses to the questionnaire

	N	Minimum	Maximum	X \pm SD
Autonomy	400	29.00	65.00	49.98 \pm 5.96
Environmental Dominance	400	36.00	69.00	52.44 \pm 5.89
Individual Development	400	34.00	69.00	48.22 \pm 5.82
Positive Relations with Others	400	35.00	68.00	50.85 \pm 5.92

Life Goals	400	28.00	65.00	47.06±6.52
Self-acceptance	400	32.00	65.00	49.29±6.19
Self-Efficacy	400	10.00	30.00	22.32±4.50
Negative Energy	400	9.00	27.00	18.13±3.51
Attention control	400	8.00	28.00	18.24±3.90
Visualization and Imaging	400	8.00	30.00	21.40±4.64
Motivation Level	400	9.00	30.00	21.40±4.30
Positive Energy	400	9.00	30.00	21.17±3.59
Attitude Control	400	9.00	30.00	21.58±4.35

As seen in Table 2; the averages of the self-efficacy subscale of the athletes were 49,98, the average of the environmental dominance score was 52,44, the average of the individual development score was 48,22, the average of the positive relation scores was 50,85, the mean of the life purpose score was 47 , Mean scores of self-acceptance score of 49,29, mean scores of psychological well-being total score of 297,84, scores of psychological performance subscale scores of self-confidence score 22,32, negative scores of energy score 18,13, 21,40 for the visualization and imaging score, 21,40 for the motivation level score, 21,17 for the positive energy score, 21,58 for the attitude control score, and 144 for the psychological performance total score, 144, 22.

Table 3. Correlation Coefficients between the Players' Psychological Well Being and Psychological Performance (n=400)

	1	2	3	4	5	6	7	8	9	10	11	12	13
Autonomy¹	r p N	1 250											
Environmental Dominance²	r p N	.063 .210 400	1 400										
Individual Development³	r p N	-.211* .000 400	-.189** .000 400	1 400									
Positive Relations with Others⁴	r p N	.090 .072 400	.011 .827 400	-.048 .335 400	1 400								
Life Goals⁵	r p N	-.034 .503 400	-.016 .744 400	-.004 .931 400	-.120* .016 400	1 400							
Self-Acceptance⁶	r p N	-.063 .212 400	-.058 .245 400	.068 .172 400	-.010 .848 400	-.042 .403 400	1 400						
Self-Efficacy⁷	r p N	.116* .020 400	.107* .032 400	-.143** .004 400	.094 .060 400	-.194* .000 400	.078 .118 400	1 400					
Negative Energy⁸	r p N	.035 .486 400	.065 .194 400	-.094 .061 400	.088 .079 400	-.060 .229 400	.039 .432 400	.205** .000 400	1 400				

Attention Control ⁹	r	-.052	.116*	.012	.060	-.106*	.022	.200**	.384**	1				
	p	.298	.020	.806	.228	.035	.661	.000	.000					
	N	400	400	400	400	400	400	400	400	400				
Visualization and Imaging ¹⁰	r	.106*	.043	-.151**	-.079	-.025	.054	.415**	-.177**	-.309**	1			
	p	.035	.393	.002	.114	.625	.284	.000	.000	.000				
	N	400	400	400	400	400	400	400	400	400	400			
Motivation Level ¹¹	r	.067	.109*	-.174**	-.018	-.044	.019	.558**	.012	-.071	.621**	1		
	p	.180	.029	.000	.712	.385	.709	.000	.811	.156	.000			
	N	400	400	400	400	400	400	400	400	400	400	400		
Positive Energy ¹²	r	.068	.065	-.137**	-.065	-.101*	.108*	.540**	-.057	-.108*	.520**	.496**	1	
	p	.172	.197	.006	.194	.051	.030	.000	.259	.031	.000	.000		
	N	400	400	400	400	400	400	400	400	400	400	400	400	
Attitude Control ¹³	r	.099*	.010	-.149**	-.019	-.109*	.077	.656**	.054	.071	.583**	.606**	.567*	1
	p	.051	.844	.003	.708	.029	.125	.000	.281	.158	.000	.000	.000	
	N	400	400	400	400	400	400	400	400	400	400	400	400	400

When Table 3 was examined, it was found that psychological well-being subscales had a low level of positive relationship between self-efficacy and psychological performance subscales ($r = .116$, $p = .020$) and visualization and imagery scores ($r = .106$, $p = .035$).

Self-efficacy scores ($r = .065$, $p = .032$), Attention Control score ($r = .116$, $p = .020$) and Motivation Level score ($r = .109$, $p = .029$), there were significant low levels of positive relationships. Self-efficacy score ($r = .143$, $p = .004$), visualization and imagery score ($r = .151$, $p = .002$) and motivation level score ($r = .174$, $p = .000$), Positive Energy score ($r = .137$, $p = .006$) and Attitude Control score ($r = .149$, $p = .003$) were found to be significantly low on the positive side.

Positive Relationships with Others from Psychological Well-being sub-dimensions and Positive Energy and Attitude Control scores from Psychological performance sub-dimensions did not find any significant relationship with the scores of Self-confidence, Positive Energy, Attention Control, Visualization and Visualization, Motivation Level. Self-efficacy score ($r = .194$, $p = .000$), Attention Control score ($r = .106$, $p = .035$) and Attitude Control score ($r = .149$, $p = .003$) were found to be significantly low on the positive side. Positive energy scores ($r = .108$, $p = .030$) were found to have a significant positive relationship with the psychological well-being subscales of Self-acceptance and psychological performance subscales.

Discussion And Result

The lowest score that can be taken from the psychological wellbeing scale used in this study is 84 and the highest score is 504. The increase in total score shows that psychological well-being increases. (Ryff, 1989, pp. 35-55). When Table 2 was examined, it was determined that the total score of the athletes' psychological well-being scale was moderate according to the scale average scores. On the psychological performance scale, it was found that each area requires special attention between 6-19 points, it needs to be developed between 20-25 points and has a very good skill level between 26-30 points (Loehr, 1986, p.157-160, Sucan 2012). When Table 2 was examined, it was determined that the total scores of the athletes on the psychological performance scale were moderate according to the scale average scores. It is thought that the athletes' psychological well-being and their psychological performance increase before the competition will be more motivated for the competition, they will trust themselves, concentrate more on the competition, determine their goals and objectives, and raise their competition concerns over them.

When the relationships between subscales of psychological well-being scale and psychological performance sub-dimensions are examined in Table 3, self-confidence, attention control and attitude control between self-confidence and self-confidence and visualization and imagination, between environmental domination and self-confidence, attention control and motivation level, between individual development and self-confidence, visualization and imagination, motivation level, positive energy and attitude control positive relationships between positive self-acceptance and positive energy were found.

People are known to be one of the important factors in their interaction with other people outside of themselves. Sport allows a person or team to interact with others, to be influenced or influenced by them. It is thought that individuals can learn to control their negative emotions such as anxiety, fear, aggression, unhappiness and violence while having the opportunity to express their emotions more easily through games and movements. The better one knows himself and his limits, the easier it will be to reach those limits, the more convenient and more equipped.

The psychologist's good state of being, his self-confidence before and after the competition, his positive and negative energy levels according to the changing conditions, his motivation and attitude towards the achievement of positive motivation and attitude It is thought to be influential in the direction.

Ryff and Singer (Ryff, Singer, 2003, p. 15-36) argue that enduring individuals are often better off physically and psychologically than stressful situations. Fredrickson (2001, p.218-226) also states that there is effective evidence that durability is the developmental effect of being psychologically good. The study of university students by Pidgeon and Keyes (2014, p.27-32) concluded that there is a positive and positive relationship between the two concepts. Malkoç and Yalçın (2015, p. 35-43) conducted psychological research on university students; psychological endurance has been achieved.

As a result, it is suggested that people with psychological endurance tend to be good psychologically. Therefore, it is considered that the psychological wellbeing and psychological well-being of the athletes will be determined, the factors that affect the performances of the athletes will be removed and the performance will be increased to the upper levels in the positive direction.

Reference

- Kararımk, Ö, Siviş Çetinkaya, R. (2011). Benlik Saygısının ve Denetim Odağının Psikolojik Sağlamlık Üzerine Etkisi, Duyguların Aracı Rolü, Türk Psikolojik Danışma ve Rehberlik Dergisi, 4(35), S.30-43
- Önder, A, Gülay, H. (2008). İlköğretim 8. Sınıf Öğrencilerinin Psikolojik Sağlamlığının Çeşitli Değişkenler Açısından İncelenmesi, Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi, s.192-197.
- Ryff, C. D, Keyes, C. L. M. (1995). The Structure Of Psychological Well – Being Revisited, Journal of Personality And Social Psychology, 69: p.719 – 727.
- Baysoy, H. (2014). Psikolojik İyi Olma ve Mükemmeliyetçilik, [Http://Hazelbaysoy.Blogspot.Fr/2014/01/Psikolojik-İyi-Olma-Hali-Ve.Html](http://Hazelbaysoy.Blogspot.Fr/2014/01/Psikolojik-İyi-Olma-Hali-Ve.Html).
- Keyes, C. L. and Ryff, C. D. (2002). Psychological Well-Being in Midlife, in S. L. Willis & J. D. Reid (Eds.), Life in the Middle, Psychological and Social Development in Middle Age, p.161-180.
- Keyes, C. L, Shmotkin, D, and Ryff, C. (2002). Optimizing Well-Being: The Empirical Encounter of Two Traditions. Journal of Personality and Social Psychology, 82, p.1007-1022.
- Tavacıoğlu, L. (1999). Spor Psikolojisi-Bilişsel Değerlendirmeler, Ankara: Bağırhan Yayınevi.
- Koç, H. (2004). Profesyonel Futbolcularda Durumluk Kaygı Düzeylerini Etkileyen Faktörlerin Değerlendirilmesi, Yayınlanmamış Yüksek Lisans Tezi, Dumlupınar Üniversitesi Sosyal Bilimler Enstitüsü, Kütahya.
- Masten, A. S. (1994). Resilience in Individual Development, Successful Adaptation Despite Risk and Adversity, in M. C. Wang, & G. W. Gordon (Eds.), Educational Resilience in Inner-City America, Challenges And Prospects, p. 3-25.
- Florian, V, Mikulincer, M, And Toubman, O. (1995). Does Hardiness Contribute to Mental Health During A Stressful Reallife Situation? The Roles Ofappraisal and Coping. Journal of Personality and Social Psychology, 68(4), p.687-695.
- Klag, S, Bradley, G. (2004). The Role of Hardiness in Stress and İllness, An Exploration of the Effect of Negative Affectivity and Gender, British Journal of Health Psychology, 9: p.137-161.
- Masten, A. S, Reed, M. J. (2002). Resilience in Development. In C. R. Snyder S. J. Lopez (Eds.), The Handbook of Positive Psychology, p.74- 88.
- Connor, K. M, Davidson, J. R. (2003). Development of A New Resilience Scale, The Connor-Davidson Resilience Scale (Cd-Risc), Depression and Anxiety, 18(2), p.76-82.
- Noorafshan, L, Jowkarb, B, Hosseini, F. S. (2013). Effect of Family Communication Patterns of Resilience Among Iranian Adolescents. Procedia-Social And Behavioral Sciences 84, p.900 – 904.
- Sagone, E, Caroli, M. E. D. (2013). Relationships Between Resilience, Self-Efficacy, and Thinking Styles in Italian Middle Adolescents, Procedia-Social And Behavioral Sciences, 92, p.838-845.
- Gürkan, U. (2006). Grupla Psikolojik Danışmanın Üniversite Öğrencilerinin Yılmazlık Düzeylerine Etkisi, Yayınlanmamış Doktora Tezi, Ankara Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Bahadır, E. (2009). Sağlıkla İlgili Fakültelerde Eğitime Başlayan Öğrencilerin Psikolojik Sağlamlık Düzeyleri, H. Ü. Sağlık Bilimleri Enstitüsü, Yüksek Lisans Tezi, Ankara.
- Güloğlu, B, Kararımk, Ö. (2010). Üniversite Öğrencilerinde Yalnızlığın Yordayıcısı Olarak Benlik Saygısı ve

- Psikolojik Sağlamlık, Ege Üniversitesi Eğitim Fakültesi Dergisi, 11(2), s.73-88.
- Sezgin, F. (2012). İlköğretim Okulu Öğretmenlerinin Psikolojik Dayanıklılık Düzeylerinin İncelenmesi, Kastamonu Eğitim Dergisi, 20(2), s.489-502.
- Kirimoğlu, H., Filazoğlu Çokluk, G., Yıldırım, Y. (2012). Türk Antrenörlerin Yılmazlık Düzeylerinin İncelenmesi, Electronic Journal of Social Sciences, 11(39), s.115-127.
- Özen, Y. (2010). Kişisel Sorumluluk Bağlamında Öznel ve Psikolojik İyi Oluş (Sosyal Psikolojik Bir Değerlendirme), Dicle Üniversitesi Sosyal Bilimler Enstitüsü Elektronik Dergisi (Düşbed), 2(4), s.46-58.
- Brown, K. W., Ryan, R. M. (2003). The Benefits of Being Present, Mindfulness and Its Role in Psychological Wellbeing. Journal of Personality and Social Psychology, 84, p.822-848.
- Falkenström, F. (2010). Studying Mindfulness in Experienced Meditators: A Quasi- Experimental Approach. Personality and Individual Differences, 48, p.305-310.
- Schmutte, P. S., Ryff, C. D. (1997). Personality and Well-Being: Reexamining Methods and Meanings. Journal of Personality and Social Psychology, 73, p.549-559.
- Sarıcaoğlu, H. (2011). Üniversite Öğrencilerinin Psikolojik İyi Olma Düzeylerinin Kişilik Özellikleri ve Öz-Anlayış Açısından İncelenmesi, Yayınlanmamış Yüksek Lisans Tezi, Selçuk Üniversitesi Eğitim Bilimleri Enstitüsü, Konya.
- Kuyumcu, B. (2012). Türk ve İngiliz Üniversite Öğrencilerinin Psikolojik İyi Oluşlar Duygusal Farkındalık ve Duygularını İfade Etmelerinin Ülke ve Cinsiyet Değişkenlerine Göre İncelenmesi, Erzincan Üniversitesi Eğitim Fakültesi Dergisi, 14(2), s.1-24.
- Ekşioğlu, H. (2011). İnanç veya Dünya Görüşüne Sahip Olma Tarzıyla Psikolojik İyi Olma Arasındaki İlişki, Yayınlanmamış Yüksek Lisans Tezi, Cumhuriyet Üniversitesi Sosyal Bilimler Enstitüsü, Sivas.
- Karasar, N. (2015). Bilimsel Araştırma Yöntemi (17.baskı), Ankara, Nobel Yayın Dağıtım, s.49-53.
- Ryff, C. D. (1989). Beyond Ponce de Leon and Life Satisfaction, New Directions in Quest of Successful Ageing. International Journal of Behavioral Development. 12, p.35-55.
- Cenkseven, F. (2004). Üniversite Öğrencilerinde Öznel ve Psikolojik İyi Olmanın Yordayıcılarının İncelenmesi. Yayınlanmamış Yüksek Lisans Tezi, Çukurova Üniversitesi Eğitim Bilimleri Enstitüsü, Adana.
- Loehr J.E. (1986). Mental Toughness Training for Sports Achieving Athletic Excellence, The Stephen Grene Press, New York, p.157-160.
- The Whoqol Group, (1996). What Quality of Life, World Health Forum, 17: p.354-356.
- Sucan, S. (2012). Ferdi ve Takım Sporcularının Yaşam Kalitesinin Psikolojik Performans Üzerindeki Etkisi, Erciyes Üniversitesi Spor Bilimleri Enstitüsü Beden Eğitimi ve Spor Bilimleri Anabilim Dalı, Yayınlanmamış Doktora Tezi.
- Ryff, C.D., Singer, B. (2003). Flourishing Under Fire, Resilience As A Prototype of Challenged Thriving. C. L. M. Keyes & J. Haidt (Eds.), Positive Psychology and The Life Well-Lived, p.15-36.
- Fredrickson, B. L. (2001). The Role of Positive Emotions in Positive Psychology: The Broaden-And-Build Theory of Positive Emotions. American Psychologist, 56, p.218-226.
- Pidgeon, A., Keyes, M. (2014). Relationship Between Resilience, Mindfulness, and Psychological Well-Being in University Students. International Journal of Liberal Arts and Social Science, 2(5), p.27-32.
- Malkoç, A., Yalçın, İ. (2015). Relationships Among Resilience, Social Support, Coping, and Psychological Well-Being Among University Students. Turkish Psychological Counselling and Guidance Journal, 5(43), p.35-43.

The Role Of Gatekeepers In Agenda-Setting In Social Media: The Twitter Sample In Turkey

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Abstract

The main purpose of this study was to reveal the extent to which the role of gatekeepers in traditional mass media is realized in agenda-setting in social media. In this context, this study focused on Twitter, the most common microblogging service classified under social media, examining the role of gatekeepers in agenda-setting on the Twitter accounts of major newspapers in Turkey. The Twitter accounts of three major national newspapers in Turkey were used as the research sample. The results revealed that all three Turkish newspapers followed their own agendas to a high degree, and those agendas demonstrated continuity. Namely, the newspapers continuously reported on certain issues on Twitter, which led to continuity within the own agenda of each newspaper. One of the most important roles gatekeepers play in the media in terms of agenda-setting is that of focusing on the same issues and report the same items in foreign and political news, as well as in sensational tabloid press news for creating a dramatic effect (Erdoğan and Alemdar, 2002: 215). It was observed that in the Twitter accounts of the newspapers in Turkey, the role of gatekeepers in agenda-setting mainly occurred within this context.

Keywords: Gatekeepers, Agenda-Setting, Social Media, Twitter, Turkey

Introduction

Gate-keeping, a term suggested by German-American psycho-sociologist Kurt Lewin with respect to the field of communication, was historically applied as a tool in traditional mass communication (Narmanlioğlu, 2016: 157).

As is known, not all news materials that are acquired by communications outlets can be turned into news; therefore, they do not all reach the community. Rather, gatekeepers inspect and make selections from the materials they have acquired and determine which to re-edit and present it to the public (Tekinalp and Uzun, 2009: 94). Thus, the term gatekeeper or door holder is used to refer to those individuals who handle the messages that are distributed to receivers through a mass communication outlet (Tekinalp and Uzun, 2009: 93). In other words, gatekeeping involves the process of taking control of the coding of messages or message components by selecting the information to be disseminated and making choices about a message's display, presentation, timing, storing and repetition (Donohue et al., 1972: 53).

Gatekeepers can refer to individuals or groups of people through whom a message passes as it proceeds from the sender to the receiver; the main purpose of the gatekeeper is to filter the messages that are sent. In this sense, while a gatekeeper may allow some messages to go through, they may also stop others from being distributed. For instance, an editor may decide to include one issue and to withhold another (Tekinalp and Uzun, 2009: 94). Weaver et al. (1975: 460) contend that gatekeepers always decide what is to be news and what is not, but that the news that is to be made public is not always evaluated justly. For instance, as they explain, in traditional newspapers, some items may be handled extensively, while others can be cut short; some stories may make the headlines, while others are left to a corner of the page. In this manner, newspapers reveal the importance they place on a story by the size of the headline and the arrangement of the page (Terkan, 2005: 71). Likewise, cases where some of the truth is included in the news, while some is left out; or where stories are edited to hide the facts of a political, economic or cultural interests issue, are also included as actions related to gatekeeping. Moreover, according to Narmanlioğlu (2016: 156), covering the main news stories in detail or leaving being covered with details or leaving certain events out altogether also comprises gatekeeping activities.

Even if the term gatekeeper is mostly based on news media's own economy politics, publisher's rules made in this line -general publication policy- other dynamics that affect this process are also mentioned. For instance, the personalities of those that make the news materials are also an important filter (Narmanlioğlu, 2016: 158).

Gatekeeping takes place in the important tasks that shape the agenda in media routines (Terkan, 2005: 69-70). As such, McCombs and Shaw (1972: 176) asserted that editors and publishers, through their choices, have an important impact on shaping the political reality. Because of this, the term gatekeeping is closely associated with agenda; by choosing the most important stories to disseminate, editors affect the public view according to their agenda (Carter, 1998: 392, as cited in Narmanlıoğlu, 2016: 157). According to Mcquail and Windhal (1993: 145), gatekeepers are the primary managers of the agenda of the organizations they work for, and as such, they contribute to defining the public agenda (Yaylagül, 2006: 73). Yüksel (1994: 109) likewise states that gatekeepers have significant influence on defining the agenda, a function that is considered as an extension of gatekeeping (İnceoğlu, 2000: 158, as cited in Terkan, 2005: 70-71).

Also, according to Erdoğan and Alemdar (2002: 212), with respect to agenda-setting, a given issue may or may not be repeated in the media in consideration of their importance in media. Mass communication outlets monitor information about agenda-setting; and in fact, agenda-setting and gatekeepers (also known as door holders) are equivalent in terms of the tasks they entail. In the process of agenda-setting, news and information pass through various gatekeepers before they are released for audience/reader use (e.g., for publication). For example, wire services such as the AP, AA and Reuters are important determinants or gatekeepers of a news agenda; the news items they emphasize are typically adopted by local mass media. Thus, gatekeepers' decisions about the selection, design, manifestation, timing, restriction, lack of delivery, and repeating or not repeating are important aspects of information supervision. In this sense, Erdoğan and Alemdar (2002: 214-215) summarize some important findings about the important roles of gatekeepers in agenda-setting in the media:

1. Gatekeepers act without thinking about their audience when making a decision about information bearing news content. Gatekeepers' decisions are more linked to what publishers or editors think than what the audience is interested in.
2. Wire services influence editors-in-chief.
3. In foreign news; politic news; sensational news that is reported to create a dramatic effect; and tabloid thematic news, gatekeepers dwell on the same issues and deliver same news. In this context, generally, there are rarely any news items delivered by one of these that are not delivered by the others.
4. Most news sources utilized by gatekeepers are official. News items are obtained from reporters' own efforts (interviews and research), from semi-official sources (confidential, other non-governmental organizations and institutions) and from the reporting of other news media.

When the media focuses on a particular issue, it has a tendency sustain the news related to that issue. As such, there are generally no other issues in an agenda when it is focused on a specific issue. Incidents may only enter a media agenda after they have reached a certain point in terms of politics and quality, after they have been viewed one by one. In short, the media keeps bringing forward the same issues in order to keep them on the agenda, thus increasing the interest of the public in the news (Retrieved July 13, 2016, from: http://hbgm.meb.gov.tr/modulerprogramlar/kursprogramlari/gazetecilik/moduller/gundem_organizasyonu.pdf).

Considering that nowadays news reporting has expanded to various forms of social media, it appears that gatekeepers have filtered into the realm of social media, as well. As with the traditional news media, the filter of the publisher also affects the information disseminated on the internet. However, the ease of use and the diversity of the internet allows us access, through diverse sources, to the information that any particular editor may have missed, deemed to be irrelevant or consciously left (Kahriman, 2013: 75).

The Purpose Of The Study

The main purpose of this study is to reveal the extent to which the role of the gatekeepers in agenda-setting in traditional mass-communication outlets is actualized in social media. In this context, the study focused on Twitter, the most popular micro-blog, as a social media source and examined the role of gatekeepers in agenda-setting in the Twitter accounts of major newspapers in Turkey. The goal of this effort was to determine the relationships between their own issue agendas of the Twitter accounts of major newspapers in Turkey.

Method

The Population and the Research Sample

The Twitter accounts of all national newspapers in Turkey make up the main population for this study. As entire the population was too large to be practical, the research sample was selected through purposive, rather than random sampling. As it is in all sample types, in purposive sampling, the ability to generalize from the sample to the larger population is fairly limited. However, in cases where there is extended information about a population, purposive sampling is recognized as a good alternative sampling method (Böke, 2009: 125). This method was

considered to be appropriate for agenda-setting research, as it allows the researcher to sample from media that have been shown in previous studies to play an agenda-setting role (Kushin, 2010: 56-57).

In this case, the Twitter accounts of Turkey's three leading major national newspapers were chosen as the research sample, including *Hürriyet*, *Sabah* and *Sözcü*. The Twitter accounts of these newspapers were chosen due to the newspapers' role as the most important agenda-setting channels, as opposed to other media sources (such as television). These newspapers were chosen on the grounds that they are the leading newspapers in Turkey, thus representing the other newspapers of the nation; more importantly, they are the newspapers with the highest profile in social networking. The chosen newspapers, published by the Press Ad Agency of national newspaper circulation in Turkey, are ranked among the top five newspapers in Turkey, according to the ranking report for September through October 2014.

The *Hürriyet* newspaper, which was established on May 1, 1948, joined Twitter in August 2009. From approximately 1.78 million followers on Twitter in October 2014, *Hürriyet* has 4.23 million followers as of July 2018 (Retrieved July 15, 2018, from: <https://twitter.com/Hurriyet>). This newspaper has the highest number of followers on Twitter among other newspapers of Turkey. Furthermore, the *Sabah* newspaper, published since April 22, 1985, joined Twitter in October 2009. From approximately 537,000 Twitter followers in October 2014, *Sabah* has 1.92 million followers by July 2018 (Retrieved July 15, 2018, from: <https://twitter.com/Sabah>). This paper has the second highest number of followers on Twitter in Turkey among the other newspapers in the sample. Finally, founded on June 27, 2007, the newspaper *Sözcü* joined Twitter in November 2010. There were approximately 486,000 followers on Twitter in October 2014, increasing to 1.57 million followers by July 2018 (Retrieved July 15, 2018, from: <https://twitter.com/gazetesozcu>). *Sözcü* ranks third in terms of the number of followers on Twitter among the newspapers in the sample.

Data Collection and Coding

In this study, the data were collected via content analysis. This step of the content analysis process, where the collection and coding of the data are carried out, is the one in which categories, time frames, coding units, and analysis units (also called contexts or resource units) are identified (Roberts et al., 2002: 457). This step, which McMillan (2000) also refers to as *defining the categories*, is the phase in which the time frame to be considered with the measuring instruments and units to be used in the study are determined. Budd, Thorp, and Donohew (1967: 33-36) identified two primary units of measurements used in content analysis studies as coding units and context units. Coding units are the smallest segment of content counted and scored in the content analysis. The analysis unit (source or context unit) is the body of material surrounding the coding unit. Therefore, it is the source of the variable to be measured. For example, if the coding unit is a word, the unit of analysis (the context unit) might be the sentence in which the word appears or the paragraph or the entire article. Many researchers use the term "unit of analysis" to refer to the context from which coding units are drawn (McMillan, 2000: 81-82).

The unit of analysis used in this study consisted of the tweets/posts that the three major national newspapers in Turkey shared in their official Twitter accounts. Furthermore, the coding units of the study consisted of content categories, which are commonly used by researchers working on content analysis on Web (see McMillan, 2000: 87). *Subject matter categories* are the most frequently used categories in content analysis. The goal is to determine what the communication is about (Holsti, 1969: 104). In this study, the content categories consisted of "subject matter categories". When the focus of study is on a specific issue, rather than on all the news stories published during a particular period, such an approach may overlook a clear relationship between agendas. Therefore, in this study, subjects that were routinely covered for a period of time were examined via the Twitter accounts of the major newspapers in Turkey, to reveal a clear relationship between their own issue agendas. The content categories/subject categories were used as coding units in the study were developed based on the previous literature and according to the contents of the tweets that the newspapers published on their official Twitter accounts during the time period examined.

In this study, the content analysis conducted in order to determine issue agendas of the Twitter accounts of major newspapers in Turkey, the resulting 21 subject categories are as follows:

Table 1: Issue Agendas of the Study

	Issue Agendas on Twitter of the Three Major National Newspapers in Turkey
1	Terror in Syria
2	USA
3	National Security
4	Terror in Turkey
5	National Policy
6	Foreign Policy
7	Military
8	Economy
9	Education
10	Science and Technology
11	Health
12	Sports
13	Art and Culture
14	Crime
15	Media
16	Environment
17	Law
18	Magazine
19	Human Rights
20	Travel and Transportation
21	Immigration

These 21 subject categories were defined and coded via content analysis. The total number of tweets in the Twitter accounts of the three major newspapers in Turkey and the issue agendas raised in this study are presented in Table 2:

Table 2: Total Number of Tweets and Issue Agendas

	Tweets	Issue Agendas
Hürriyet	965	2248
Sabah	334	951
Sözcü	491	1839

As shown in Table 2, during the time period the Twitter accounts were being examined, Hürriyet newspaper for a total of 965 tweets; Sabah newspaper 334; and Sözcü published a total of 491 tweets. The total number of agendas for all the issues covered in these tweets was 2248 for the Hürriyet newspaper; 951 for the Sabah newspaper; and 1839 for Sözcü. Among the newspapers, the one with the highest number of tweets, and in direct proportion to this, the one with the highest issue agenda, was Hürriyet.

One of the first steps in the content analysis was to specify the time frame of the study in which the categories were to be identified and the data collected. So far, there has been no research showing definitively the time period over which the agenda-setting process takes place on the Internet and/or social media. Winter and Eyal's (1981) standard duration of 4 to 6 weeks is still in use by most researchers, although it is known that researches covering other forms of social media often use a period of several weeks (e.g., Dunn et al., 2007).

As such, in this study, the Twitter accounts of the major newspapers in Turkey and the relationships between their own issue agendas were examined over a 4-week period in October of 2014. This specific period of time did not include any kind of groundbreaking or milestone events that endangered the stability of the news coverage. Namely, October of 2014 was chosen because it was a normal time period during which Twitter's newspapers were not exposed to external shocks; nor did it encompass a political campaign period, so as not to cause a convergence between their own weekly agendas. This was done in consideration of the fact that an important event or a political campaign can affect the entire agenda, as the media in general will continuously depict the same event or political content; thus, the various outlets display a convergence in their own agendas over time. With this in mind, a normal time frame was chosen to investigate the Twitter accounts of each of the selected newspapers in terms of whether there was a clear relationship between their own agendas. In this manner, it was assured that the situation under normal conditions was presented and that the surveys were objective. In other words, in case of an extraordinary event, the impact that the media takes the same event

constant on its agenda, the impact was under control. In this study, a 4-week time period was used, as suggested by Winter and Eyal's (1981) assertion that a 4- to 6-week time period is traditionally used in agenda-setting studies. Because the goal of analyzing each of the major newspaper's Twitter accounts was to determine the clear relationships between their own issue agendas, it was considered necessary to analyze the news tweeted over a sufficient period of time. Thus, a 1- or 2-week period was deemed to be insufficient. Moreover, a 4-week period was believed to allow for a more objective relationship analysis, since newspapers may not publish tweets on their Twitter accounts for some days (for example, on weekends), whereas during other periods, they may publish a large number. Thus, the 4-week time period was chosen to allow observations of both short-term (1 week) and long-term relationships (4 weeks) between the own issue agendas on the Twitter accounts of the newspapers. Furthermore, Lee, Lancendorfer and Lee (2005: 62-63) suggest that in such studies, it is more convenient to use four-time span than two-time span. For this reason, in this study, the time period for analysis was determined as four-time parts. These were arranged as follows. Week 1: October 1-7, 2014; Week 2: October 8-14, 2014; Week 3: October 15-21, 2014; and Week 4: October 22-28, 2014. Each week included 7 days, and the relationship between weeks was examined. In other words, the extent to which each newspaper maintained its own agenda for 4 weeks on Twitter was determined by examining each newspaper's relationship with its issue agendas on a weekly basis. Tweets were collected twice a day for 4 weeks, between 7:00-9:00 in the morning and 7:00-9:00 in the evening, because these are the time periods during which Twitter is most intensely used for news and the most tweets are sent. As such, these time periods are commonly known as morning and evening news hours.

Analysis of the Data

The data collection method for this study consisted of content analysis, which is one of the qualitative analysis types. Additionally, the data were analyzed with the use of frequency and Pearson correlation analysis, which are types of quantitative analysis. On account of this, this study is considered as mixed-method research.

Content analysis is considered as a first step in agenda-setting researches (Kushin, 2010: 62) and content analysis software is often used in for this purpose (e.g., Tedesco, 2005a; Tedesco, 2005b; Wallsten, 2007) (by Kushin, 2010: 64). The analysis that is carried in order to present the agendas of media outlets is considered content analysis (King, 1994: 50). The content analysis in this study consisted of an examination of the posts/tweets of the Twitter accounts of the major newspapers in Turkey in order to identify their issue/news agenda.

In this process, the statistical significance and relationships between the agendas were tested in the agendas that were identified by the researcher. The relationships between the issue agendas were identified using the Pearson correlation analysis method.

Findings

Relations among Newspapers' Twitter Agenda Contents in Turkey

The Pearson Correlations showing the relationships among the Twitter accounts of three major national newspapers in Turkey and their own issue agendas are shown in Table 3 below.

When the autocorrelations of Hürriyet's 4-week agenda in Table 3 were examined, it was determined that the correlation values were between about 0.86-0.93. This finding revealed that Hürriyet followed its own agenda to a high degree, and those agendas demonstrated continuity. When the autocorrelations of Sabah's Twitter agendas were observed for 4 weeks, the correlation values were found to be between about 0.72 to 0.93. These high autocorrelations indicate that Sabah is also a follower of its own agenda. When Sözcü's autocorrelations of Twitter account agendas were examined, it was found that the correlations were between 0.76 and 0.97. Maintaining its own agenda, which was observed in Hürriyet and Sabah, was also valid for Sözcü.

Table 3: Pearson Correlations among the Contents of Twitter Accounts of Turkish Newspapers

	Hür(T1)	Hür(T2)	Hür(T3)	Hür(T4)	Sab(T1)	Sab(T2)	Sab(T3)	Sab(T4)	Sözcü(T1)	Sözcü(T2)	Sözcü(T3)	Sözcü(T4)
Hürriyet(T1)	1											
Hürriyet(T2)	0,870**	1										
Hürriyet(T3)	0,870**	0,855**	1									
Hürriyet(T4)	0,851**	0,919**	0,921**	1								
Sabah(T1)	0,779**	0,806**	0,676**	0,697**	1							
Sabah(T2)	0,633**	0,754**	0,530**	0,538**	0,806**	1						
Sabah(T3)	0,626**	0,768**	0,574**	0,590**	0,875**	0,928**	1					
Sabah(T4)	0,679**	0,762**	0,667**	0,714**	0,920**	0,711**	0,836**	1				
Sözcü(T1)	0,462*	0,348	0,198	0,200	0,637**	0,653**	0,515**	0,463*	1			
Sözcü(T2)	0,507**	0,639**	0,376*	0,410*	0,696**	0,942**	0,796**	0,562**	0,758**	1		
Sözcü(T3)	0,550**	0,563**	0,448*	0,456*	0,765**	0,857**	0,777**	0,693**	0,826**	0,882**	1	
Sözcü(T4)	0,458*	0,540**	0,394*	0,413*	0,693**	0,861**	0,737**	0,632**	0,797**	0,916**	0,968**	1

* and ** indicate statistical significance levels of 5% and 1%, respectively.

Conclusions And Recommendations

In this study, the relationships between the own issue agendas of three major newspapers in Turkey, as evidenced by their Twitter accounts were investigated according to their autocorrelations. In other words, the autocorrelation of the four-week agenda of each newspaper in Twitter was examined.

In this study, it was found that statistically significant positive autocorrelations between its own issue agendas of Twitter accounts of each major newspaper in Turkey; the findings revealed high agenda autocorrelations in all three newspapers of Turkey over a four-week period. While *Hürriyet* had the greatest autocorrelation, *Sözcü* had the second-highest; and with a slight gap, *Sabah* had the third-highest autocorrelation.

These findings indicate that all three newspapers followed their own issue agendas throughout the period of examination. In conclusion, it has been found that all three newspapers followed their own agendas on Twitter and that they had a high level of continuity in this respect. *Hürriyet* followed its own agenda on Twitter most, often, followed by *Sözcü*, and then *Sabah*, with a slight gap.

The major Turkish newspapers put forward specific issue/issues in their agenda to attract public and followers' attention to these issues. This resulted in a continuation of agenda in each newspaper for four weeks, which accounts for the high agenda autocorrelation in each of these three newspapers. This finding can be explained by the role of gatekeepers in agenda-setting. In other words, the most important reason for the continuity of agendas in the Twitter accounts of the Turkish newspapers was the gatekeepers' agenda-setting role in the media.

As explained previously, one of the most important roles that gatekeepers play in agenda-setting in the media is their emphasis on the same issues in foreign news, political news, and also sensational (disruptive) and magazine themed news that creates a dramatic effect (Erdoğan and Alemdar, 2002: 215). The role of gatekeepers in the agenda-setting through Twitter accounts of Turkish newspapers has increased in this context, as the newspapers have made specific issues constant news items (for example, the *Hürriyet* magazine issues, or terrorism in Turkey; as well as in each of the three newspapers, the Syrian crisis, national security, foreign policy and national policy issues).

For example, in this study, it is seen that in the *Hürriyet*'s Twitter account, by giving place to issues that concern the whole country, as well as regular magazine issues, they keep this news at the top of their agendas, and that the magazine news has continuity in *Hürriyet*'s Twitter agenda. On the other hand, while this situation puts forward the role of gatekeepers in agenda-setting in the *Hürriyet* newspaper's Twitter agenda, the lack of magazine news that is put forward on the Twitter accounts of *Sabah* and *Sözcü* can again be explained by the role of gatekeepers in agenda-setting. A similar example from this study can be given in relation to sports news. Namely, while the sports news in *Hürriyet*'s Twitter agenda was given as much place as other important issues and events concerning the country, in the *Sabah* newspaper, only the most important sports news was given place in their agenda. In *Sözcü* newspapers' agenda, it was found that only the issues concerning the country are given more importance. On the other hand, as long as the terror in Syria, which stood out in October 2014, Turkey's most important agenda issues/problems terrorism and the issues relating to national security has also been seen on Twitter kept on the top of continuous agenda for 4 weeks by the newspapers. These examples show that the gatekeepers of all three newspapers are making decisions about which issues to keep at the top of their Twitter agendas.

The examples above support the findings of İrfan Erdoğan and Korkmaz Alemdar (2002) on the roles of gatekeepers on agenda-setting in the media, and indicate that these roles are also applied by Turkish newspapers on Twitter. Thus, in this study, the high autocorrelation levels on the Twitter agendas of Turkish newspapers are explained by the role of gatekeepers on agenda-setting in the media.

The most crucial benefits of this study are as follows:

- This study investigated the relationships between their own issue agendas of the Twitter accounts of major newspapers in Turkey.
- This study shows that Twitter is used by major newspapers in Turkey as an active and effective reporting tool in order to spread the news nowadays.
- This study shows that the specific issues that become prominent in mass media become also prominent in the Twitter accounts of major newspapers in Turkey; and that these issues are also frequently presented as news in the newspapers' Twitter agendas just as they are in the traditional media.
- This study shows that, just as the traditional and/or online media follow their own issue agendas, the major newspapers in Turkey also maintain their own issue agendas on Twitter.

- This study supports the findings of İrfan Erdoğan and Korkmaz Alemdar (2002) with reference to the roles of gatekeepers on agenda-setting in the media, and it also has revealed that these roles are also applied on Twitter by Turkey's newspapers. As such, the study shows that the role of gatekeepers on agenda-setting in the media are also applicable in the context of the newspapers' Twitter accounts.
- This study has extended the role of gatekeepers on agenda-setting in the media to Twitter.
- This study has important results regarding the media market and its implementers in Turkey. From the perspective of media markets, it is found that the Turkish newspapers are stable in terms of following their own agendas on Twitter. As such, there are no disruptions of their Twitter agendas in any sense and Twitter is consistently used by newspapers as a media tool. Thus, it can be seen that newspapers use Twitter as a media tool in terms of traditional media.
- This study shows the implementers of the news media embrace social media and use it actively. Because of this, it appears that traditional media has been integrated with social media, especially Twitter, in newspaper applications. The evidence in this study shows that social media tools such as Twitter have been embraced in terms of gathering news, publishing, sharing with followers and other media.

The most important recommendation arising from this study is that other social media tools, which the traditional media use as a news tool, should be used in order to test the role of gatekeepers on agenda-setting in terms of different media forms, time periods and issues.

References

- Böke, K. (2009). *Research Methods in Social Sciences*, Alfa Publishing, Istanbul.
- Budd, R.W., Thorp, R. K. & Donohew, L. (1967). *Content Analysis of Communications*, Collier-Mac.
- Carter T. B. (1998). "Electronic Gatekeepers: Locking Out the Marketplace of Ideas", *Communication Law and Policy*, 3 (3), pp. 389-408.
- Donohue, G.A., Tichenor, P.J. & Olien, C.N. (1972). "Gatekeeping: mass media systems and information control", in Kline, F.G. and Tichenor, P.J. (Eds), *Current Perspectives in Mass Communication Research*, Sage, pp. 41-70.
- Dunn, S., Mccollough, C. & Martin, J. (2007). "An Exploratory Analysis of Intermedia Agenda Setting Between Blogs and Newspapers in the 2006 Senate Race", [Article]. Conference Papers -- *National Communication Association*, 1.
- Erdoğan, İ. & Alemdar, K. (2002). *The Other Theory: A Historical and Critical Evaluation of Approaches to Mass Communication*, Erk Publications, Ankara.
- Holsti, Ole R. (1969). *Content Analysis for the Social Sciences and Humanities*, Reading, MA: Addison-Wesley.
- Kahriman, G. (2013). *The Role of the Gatekeepers in Selection of the News about Children in Visual and Printed Media*, Master's Thesis, Istanbul Arel University, Institute of Social Sciences, Istanbul.
- King, P. (1994). *Issue Agendas in the 1992 Taiwan Legislative Election*, Doctor of Philosophy, the University of Texas, Austin, May 1994.
- Kushin, M. J. (2010). *Tweeting the Issues in the Age of Social Media? Intermedia Agenda Setting Between the New York Times and Twitter*, Doctor of Philosophy, Washington State University, Edward R. Murrow College of Communication, May.
- Lee, B., Lancendorfer, K. M. & Lee, K. J. (2005). "Agenda-Setting and the Internet: The Intermedia Influence of Internet Bulletin Boards on Newspaper Coverage of the 2000 General Election in South Korea", *Asian Journal of Communication*, Vol. 15, No. 1, pp. 57-71.
- McCombs, M. E. & Shaw, D. L. (1972). "The Agenda Setting Function of Mass Media", *Public Opinion Quarterly*, 36(2), pp. 176-187.
- McMillan, Sally J. (2000). "The Microscope and the Moving Target: The Challenge of Applying Content Analysis to the World Wide Web", *Journalism & Mass Communication Quarterly*, Vol. 77, No. 1, pp. 80-98.
- Narmanlioğlu, H. (2016). "Gatekeeping at Online News Sites", *Journal of Atatürk University Social Sciences Institute*, 20 (1), pp. 153-168.
- Roberts, M., Wanta, W. & Dwzo, T.-H. (2002). "Agenda Setting and Issue Salience Online", *Communication Research*, 29 (4), pp. 452-465.
- Tedesco, J. C. (2005a). "Issue and Strategy Agenda Setting in the 2004 Presidential Election: Exploring the Candidate-Journalist Relationship", *Journalism Studies*, Vol. 6, Issue 2, pp. 187-201.
- Tedesco, J. C. (2005b). "Intercandidate Agenda Setting in the 2004 Democratic Presidential Primary", *American Behavioral Scientist*, 49 (1), pp. 92-113.
- Tekinalp, Ş. & Uzun, R. (2009). *Communication Studies and Theories*, 3rd Edition, Beta Publishing, Istanbul.
- Terkan, B. (2005). *Agenda Setting: A Study on Media and Political Agenda*, Tablet Bookstore, Konya.

- Wallsten, K. (2007). "Agenda Setting and the Blogosphere: An Analysis of the Relationship Between Mainstream Media and Political Blogs", *Review of Policy Research*, 24(6), pp. 567-587.
- Winter, J. P. & Eyal, C. H. (1981). "Agenda Setting for the Civil Rights Issue", *Public Opinion Quarterly*, 45 (3), pp. 376-383.
- Yaylagül, L. (2006). *Mass Communication Theories: Mainstream and Critical Approaches*, Dipnot Publications, Ankara.
- Retrieved July 13, 2016, from: http://hbogm.meb.gov.tr/modulerprogramlar/kursprogramlari/gazetecilik/moduller/gundem_organizasyonu.pdf.
- Retrieved July 15, 2018, from: <https://twitter.com/Hurriyet>.
- Retrieved July 15, 2018, from: <https://twitter.com/Sabah>.
- Retrieved July 15, 2018, from: <https://twitter.com/gazetesozcu>.

The Study Of Student's Personality Trait And University Brand Loyalty: University Brand Personality As A Mediating Effect

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Abstract

The purpose of the study is to explore the relationship between student's personality trait and university brand loyalty with university brand personality as mediator. Non-probability sampling and non-experimental research design were used in the study. Pearson correlation, stepwise regression and PROCESS analyses were adopted to test the hypotheses. The major findings were a significant relationship between student's personality trait and university brand loyalty except for neuroticism. Student's personality traits (extraversion, agreeableness, conscientiousness and openness) were correlated with university brand personality (prestige, sincerity, appeal and lively). University brand personalities has significant relationship with brand loyalty. Consumer with different personality traits will have different association towards brand loyalty, and brand personality mediate the relationship between personality traits and brand loyalty. The paper highlights the importance of developing university brand personality and the use of brand personality in extending brand loyalty by appealing to various types of personalities.

The Tpack Model In Teacher Training: Documentary Review

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Abstract

The TPACK model is currently a high-impact advance in teacher training in terms of teachers' technological and pedagogical content knowledge. These basic dimensions, as well as the four intersections they generate with reference to Pedagogical Content Knowledge (PCK), Technological Content Knowledge (TCK), Technological Pedagogical Knowledge (TPK) and Technological Pedagogical Content Knowledge (TPACK), together with the context of training, are considered to constitute a solid model for a good diagnosis of teachers in both initial and ongoing training. This paper presents an analysis of publications in international databases that address the issue of the TPACK model. For this purpose, a review of scientific literature is carried out, applying documentation as a method for systematization. The study presented analyzes 43 contributions between 2014 and 2017, indexed in the WOS and Scopus databases, with TPACK and TPK applied descriptors. A search strategy based on four criteria has been used: target audience, topic, methodological design and main conclusions. The results show that the publications reviewed focus on basic and higher education studies and present methodological designs in which case studies, validation of instruments, quantitative empirical studies and mixed studies predominate. Consequently, among other aspects, the lack of longitudinal studies that show teacher's actions when applying TPACK in their daily practice is deduced from the empirical studies.

Keywords: *TPACK, TPK, Technological Pedagogical Content Knowledge, teacher training, learning, students, ICT.*

Introduction

This paper presents the importance of the TPACK model designed by Mishra & Koehler (2006), with reference to the integration of content knowledge with pedagogical knowledge and technological knowledge when introducing technology into the classroom by teachers. It is also necessary to know the interaction with other knowledge, in terms of Pedagogical Content Knowledge (PCK), Technological Content Knowledge (TCK) and finally Technological Pedagogical Knowledge (TPK).

The relevance of the study lies in the integration of technology by teachers in their teaching practice. Therefore, teacher training in ICT needs to investigate the theoretical bases that guide their application and use in the classroom, both at the disciplinary and pedagogical levels (Shulman, 1986, 1987) together with technological knowledge, on how ICT work in practice (Cabero, 2014).

The TPACK model distinguishes three basic dimensions of training and four intersections between them, identifying a total of seven dimensions, together with the differentiated context of training.

1. Content Knowledge (CK-Content Knowledge): refers to the teacher's knowledge on the specific topics or area to be taught to students, including, but not limited to, concepts, theories, facts, and procedures in their area.
2. Pedagogical Knowledge (PK-Pedagogical Knowledge): knowledge that the teacher has of the pedagogical activities, processes, practices or methods of teaching and learning that could be used in the teaching-learning process and how they relate to the educational goals to be achieved. This includes knowledge about techniques or methods that can be used in the classroom and strategies for student assessment.
3. Technological Knowledge (TK-Technological Knowledge): it refers to the knowledge that teachers have on the different technologies in order to develop their teaching activity. For example, it includes knowledge of operating systems and hardware, how to install programs, and how to create documents. It is also pointed out the importance of the ability to learn and adapt to new technologies.
4. Pedagogical Content Knowledge (PCK-Pedagogical Content Knowledge): it refers to the didactic knowledge about a content area, which implies facilitating the learning of the students about that area.

This includes knowing which teaching approaches and strategies are best suited to the content and how the different elements of the content can be worked on for effective teaching.

5. Technological Content Knowledge (TCK-Technological Content Knowledge): knowledge on how to represent specific concepts with technology, in other words, knowledge on how technology and content are related to each other. Teachers need to know how the contents of their area may be affected by the application of technology.
6. Technological Pedagogical Knowledge (TPK-Technological Pedagogical Knowledge): knowledge of the general pedagogical strategies that can be achieved through technologies. This may include knowing what tools exist for a given task, the skills to choose a tool based on effectiveness or adequacy to the task and the ability to apply pedagogical strategies when using technologies.
7. Technological Pedagogical Content Knowledge (TPACK-Technological Pedagogical Content Knowledge): knowledge of a teacher on how to develop specific teaching strategies on various topics using ICT to facilitate learning. Thus, it is a form of knowledge that goes beyond the three components (content, pedagogy and technology) and includes, for example, knowledge of pedagogical strategies that enable the use of technologies in an effective way to teach content and knowledge of what makes content easy or difficult to learn and how technology can help in some of the problems that students face.

We present the documentary analysis developed around the TPACK model, after analyzing the studies published in databases such as WOS and Scopus during the years 2014 to 2017, about investigations carried out on the technological pedagogical content knowledge.

Methodology

The methodology of the study is based on the documentary analysis, applying documentation as a method of data gathering (Sampieri, Collado & Lucio, 2014). We sought to analyze empirical studies of TPACK model. Documents located in databases such as Web of Science and Scopus were considered. The search strategy applies the “topic” option in “Web of Science (WOS)”, while in Scopus the “article, title, abstract and keywords” option is used. The search period is based on the studies of Castillejos-López, Torres-Gastelú & Lagunes-Domínguez (2014), from 2014 to March 2018. The total amount of papers considered was 43, being TPACK and TPCK the applied descriptors, of which a high percentage of the publications belonging to scientific journals and conference proceedings indexed in both databases are repeated. A search strategy based on four criteria has been used: target audience, topic, methodological design and main conclusions, determined by Wollscheid, Sjaastad & Tømte (2016) and Torres-Toukoumidis, Romero-Rodríguez & Pérez-Rodríguez (2018), which facilitate the categorization and synthesis of the information gathered between “TPACK and TPCK” on the Web of Science (WOS) and Scopus:

- Audience: childhood education, primary education, secondary education, higher education, training of trainers and general education.
- Topic: ICT integration, ICT attitudes, teacher professional development; TPACK conceptual framework.
- Methodological design: empirical with qualitative techniques, empirical with quantitative techniques, empirical with mixed techniques.
- Main conclusions: effects and consequences of the results.

Outcomes

Audience

Among the publications reviewed, 34.8% of them used samples of students in higher education and Primary Education (30.2%) in the investigations. Moreover, 4.6% are publications aimed at Secondary Education, 11.6% at Childhood Education, 9.4% are general for the general public, and 9.4% are aimed at training of trainers.

Table 1. Distribution of publications by audience

Audience	Publications
Childhood Education [5]	Tarraga-Mínguez, Sanz-Cervera, Pastor-Cerezuela, Fernández-Andrés, 2017; Almería, Orellana, Suárez, Díaz García, 2016; Muñoz & Repiso, 2016; Szeto, Ching, Hong, 2016; Roig-Vila, Mengual-Andrés & Quinto-Medrano, 2015.
Primary Education [13]	Avidov-Ungar & Shamir-Inbal, 2017; Koh, Chai & Lim, 2017; Makenney & Voogt, 2017; Munyengabe, Zhao, He & Hitimana, 2017; Spiteri & Rundgren, 2017; Getenet, Beswick & Callingham, 2016; Hansen, Mavrikis & Geraniou, 2016; Wong, Chai, Zhang &

	King, 2015; Wu, & Wang, 2015; Coklar, 2014, Koh, Chai y Tay, 2014; Lye, Wee, Kwek, Abas & Tay, 2014; Polly, 2014.
Secondary Education [2]	Jones, Schupbach, Harvey, Bulger & Voelker, 2017; Nasution, Sriyati, Riandi & Safitri, 2017.
Higher Education [15]	Gill & Dalgarno, 2017; Yerdelen-Damar, Boz & Aydin-Gunbatar, 2017; Holland & Piper, 2016; Meletiou-Mavrotheris & Prodomou, 2016; Handal, Gómez Chova, López & Candel, 2015; Yelken, Konokman & Tokmak, 2015; Çalik, Özsevgec, Ebenezer, Artun & Küçük, 2014; Celik, Sahin, Akturk, Kopcha & Ottenbreitl, 2014; Kopcha, Ottenbreit-Leftwich, Jung & Baser, 2014; Lee & Kim, 2014; Messina & Tabone, 2014; Mouza, Karchmer-Klein, Nandakumar, Ozden & Hu, 2014; Yurdakul & Coklar, 2014.
Training of trainers [4]	Zhang, Liu & Wang, 2017; Chova, Martínez & Torres, 2016; Okumuş, Lewis, Wiebe & Hollebrands, 2016; Kontkanen, Dillom, Karkkainen, Kukkonen, Valtonen & Vaisanen, 2015.
General education [4]	Cabero, Roig-Vila & Mengual-Andrés, 2017; Cabero & Barroso, 2016; Holland & Piper, 2014; Lefebvre, 2014.

Topic

In terms of keywords and general objectives, 37.2% of the articles deal with the integration of technology, within the framework of the TPACK model. A 9.3% of them focus on students' attitudes towards the use of ICT. In addition, a 32.5% refers to the professional development of teachers, either in their initial or continuous training, in university and non-university contexts. Finally, a 21% refers to deepening the theoretical framework of the TPACK.

Table 2. Distribution of publications by topic

Topic	Publications
ICT integration [16]	Jones, Schupbach, Harvey, Bulger & Voelker, 2017; Munyengabe, Zhao, He & Hitimana, 2017; Chova, Martínez & Torres, 2016; Hansen, Mavrikis & Geraniou, 2016; Holland & Piper, 2016; Okumuş, Lewis, Wiebe & Hollebrands, 2016; Szeto, Ching, Hong, 2016; Kontkanen, Dillom, Karkkainen, Kukkonen, Valtonen & Vaisanen, 2015; Roig-Vila, Mengual-Andrés & Quinto-Medrano, 2015; Coklar, 2014; Lee & Kim, 2014; Lye, Wee, Kwek, Abas & Tay, 2014; Messina & Tabone, 2014; Mouza, Karchmer-Klein, Nandakumar, Ozden & Hu, 2014; Polly, 2014; Yurdakul & Coklar, 2014.
ICT attitudes [4]	Avidov-Ungar & Shamir-Inbal, 2017; Yerdelen-Damar, Boz & Aydin-Gunbatar, 2017; Holland & Piper, 2014; Koh, Chai y Tay, 2014.
Teaching professional development (Digital Competence) [14]	Cabero, Roig-Vila & Mengual-Andrés, 2017; Gill & Dalgarno, 2017; Koh, Chai & Lim, 2017; Makenney & Voogt, 2017; Nasution, Sriyati, Riandi & Safitri, 2017; Spiteri & Rundgren, 2017; Tarraga-Mínguez, Sanz-Cervera, Pastor-Cerezuela, Fernández-Andrés, 2017; Zhang, Liu & Wang, 2017; Almería, Orellana, Suárez & Díaz García, 2016; García Valcárcel & del Pozo, 2016; Getenet, Beswick & Callingham, 2016; Meletiou-Mavrotheris & Prodomou, 2016; Muñoz y Repiso, 2016; Yelken, Konokman & Tokmak, 2015.
TPACK Conceptual Framework [9]	Cabero & Barroso, 2016; Handal, Campbell, Cavanagh & Petocz, 2016; Gómez Chova, López & Candel, 2015; Wong, Chai, Zhang & King, 2015; Wu, & Wang, 2015; Çalik, Özsevgec, Ebenezer, Artun & Küçük, 2014; Celik, Sahin, Akturk, Kopcha & Ottenbreitl, 2014; Kopcha, Ottenbreit-Leftwich, Jung & Baser, 2014; Lefebvre, 2014.

Methodological design

In the methodological design, the most used systematic process is the substantiation through empirical studies with quantitative techniques (48.83%). Regarding qualitative studies, (47.87%), compared to mixed studies (9.3%). Moreover, the instruments used in empirical studies are surveys and questionnaires in an 85%. To a

lesser extent, intervention and instrument validation studies also appear. Furthermore, the samples size is highly variable, meaning that there is no common sampling size of the different studies.

Table 3. Distribution of publications according to the methodological design

Methodological design	Publications
Empirical with qualitative techniques [18]	Avidov-Ungar & Shamir-Inbal, 2017; Gill & Dalgarno, 2017; Jones, Schupbach, Harvey, Bulger & Voelker, 2017; Koh, Chai & Lim, 2017; Munyengabe, Zhao, He & Hitimana, 2017; Spiteri & Rundgren, 2017; Chova, Martínez & Torres, 2016; Hansen, Mavrikis & Geraniou, 2016; Meletiou-Mavrotheris & Prodomou, 2016; Okumuş, Lewis, Wiebe & Hollebrands, 2016; Szeto, Ching, Hong, 2016; Gómez Chova, López & Candel, 2015; Kontkanen, Dillom, Karkkainen, Kukkonen, Valtonen & Vaisanen, 2015; Wong, Chai, Zhang & King, 2015; Kopcha, Ottenbreit-Leftwich, Jung & Baser, 2014; Lee & Kim, 2014; Lefebvre, 2014; Polly, 2014.
Empirical with quantitative techniques [21]	Cabero, Roig-Vila & Mengual-Andrés, 2017; Makenney & Voogt, 2017; Nasution, Sriyati, Riandi & Safitri, 2017; Tarraga-Mínguez, Sanz-Cervera, Pastor-Cerezuela, Fernández-Andrés, 2017; Yerdelen-Damar, Boz & Aydin-Gunbatar, 2017; Zhang, Liu & Wang, 2017; Almería, Orellana, Suárez, Díaz García, 2016; Cabero & Barroso, 2016. García Valcárcel & del Pozo, 2016; Holland & Piper, 2016; Handal, Campbell, Cavanagh & Petocz, 2016; Muñoz & Repiso, 2016; Roig-Vila, Mengual-Andrés & Quinto-Medrano, 2015; Çalik, Özsevgec, Ebenezer, Artun & Küçük, 2014; Celik, Sahin, Akturk, Kopcha & Ottenbreitl, 2014; Coklar, 2014; Holland & Piper, 2014; Koh, Chai y Tay, 2014; Lye, Wee, Kwek, Abas & Tay, 2014; Messina & Tabone, 2014; Yurdakul & Coklar, 2014.
Empirical with mixed techniques [4]	Getenet, Beswick & Callingham, 2016; Yelken, Konokman & Tokmak, 2015; Wu & Wang, 2015; Mouza, Karchmer-Klein, Nandakumar, Ozden & Hu, 2014.

Main conclusions

The last criterion allows us to evaluate the contributions of each of the selected investigations. The convergence between ICT and TPACK is positive in a 58.14% of the texts analyzed. Specifically, 34.89% of them reveal the importance of the acquisition of skills within the framework of the TPACK, the achievement of objectives, the development of practical objectives, task execution and problem solving. A 23.5% of the texts point to technological competence and specifically to digital competence, while a 16.27% emphasize the improvement of learning outcomes in the context of TPACK. Other studies consider the TPACK model as a diagnostic reference in professional development (20.93%), discovering few studies based on the obstacles posed by the use of technology in the educational context.

Table 4. Distribution of publications according to the main conclusions

Conclusions	Publications
TPACK skills [15]	Avidov-Ungar & Shamir-Inbal, 2017; Gill & Dalgarno, 2017; Makenney & Voogt, 2017; Munyengabe, Zhao, He & Hitimana, 2017; Nasution, Sriyati, Riandi & Safitri, 2017; García Valcárcel & del Pozo, 2016; Muñoz & Repiso, 2016; Okumuş, Lewis, Wiebe & Hollebrands, 2016; Gómez Chova, López & Candel, 2015; Çalik, Özsevgi, Ebenezer, Artun & Küçük, 2014; Celik, Sahin, Akturk, Kopcha & Ottenbreitl, 2014; Holland & Piper, 2014; Kopcha, Ottenbreit-Leftwich, Jung & Baser, 2014; Lee & Kim, 2014; Yurdakul & Coklar, 2014.
Technological competence-digital competence [10]	Spiteri & Rundgren, 2017; Tarraga-Mínguez, Sanz-Cervera, Pastor-Cerezuela, Fernández-Andrés, 2017; Yerdelen-Damar, Boz & Aydin-Gunbatar, 2017; Zhang, Liu & Wang, 2017; Getenet, Beswick & Callingham, 2016; Orellana, Suárez & Díaz García, 2016; Coklar, 2014; Messina & Tabone, 2014.
Learning outcomes [7]	Jones, Schupbach, Harvey, Bulger & Voelker, 2017; Koh, Chai & Ling, 2017; Chova, Martínez & Torres, 2016; Handal, Campbell, Cavanagh & Petocz, 2016; Meletiou-Mavrotheris & Prodomou, 2016; Wong, Chai, Zhang & King, 2015; Mouza, Karchmer-Klein, Nandakumar, Ozden & Hu, 2014.
Teaching professional development [9]	Cabero, Roig-Vila & Mengual-Andrés, 2017; Cabero & Barroso, 2016; Holland & Piper, 2016; Szeto, Ching, Hong, 2016; Kontkanen, Dillom, Karkkainen, Kukkonen, Valtonen & Vaisanen, 2015; Roig-Vila, Mengual-Andrés & Quinto-Medrano, 2015; Yelken, Konokman & Tokmak, 2015; Koh, Chai y Tay, 2014; Lefebvre, 2014. Polly, 2014.
Obstacles [2]	Hansen, Mavrikis & Geraniou, 2016; Lye, Wee, Kwek, Abas & Tay, 2014.

Discussion And Conclusions

It has been observed in most of the investigations that the TPACK model can favor technological skills together with pedagogical and disciplinary content. We have also found that personal and contextual factors have a relevant impact on the subsets of the analyzed competences. In addition, it is considered how the current university study programs of Primary Education are providing future teachers with a sufficient level of professional skills (based on the TPACK model), considering the need to improve a wide range of specific subjects on digital technologies applied to education.

The TPACK model from the perspective of teachers favors technological competence-digital competence, finding outcomes of self-perception of teachers much higher in technological competence in the use of ICT in some of the studies. It was found that some studies helped to clarify and delimit the framework for teachers' ICT skills.

Investigations show that in the initial training of teachers, technological knowledge is not excessively focused in reference to learning outcomes, as some authors suggest, finding better outcomes in pedagogical training in Spanish universities.

Regarding the teaching professional development, studies raise the need for teachers to bring into play the three types of knowledge: pedagogy, content and technology. The need to plan activities in an integrated manner is highlighted (Castillejos-López, Torres-Gastelú & Lagunes-Domínguez, 2014).

As limitations, we have found the lack of longitudinal empirical studies; the target audience consists mostly of students of higher education and primary education, with few studies of secondary education and general education for all audiences.

References

Cabero, J. & Barroso, J. (2016). ICT teacher training: a view of the TPACK model / Formación del profesorado en TIC: una visión del modelo TPACK, *Cultura y educación*, 28:3, 633-663, DOI: [10.1080/11356405.2016.1203526](https://doi.org/10.1080/11356405.2016.1203526)

Cabero, J. (Dir.) (2014). *La formación del profesorado en TIC: Modelo TPACK. Conocimiento Tecnológico Pedagógico y de Contenido*. Retrieved from

- https://www.academia.edu/8021740/La_formaci%C3%B3n_dle_profesorado_en_TIC_Modelo_TPAC_K_Conocimiento_tecnol%C3%B3gico_pedag%C3%B3gico_y_de_contenido_
- Castillejos-López, Torres-Gastelú & Lagunes-Domínguez (2014). El enfoque del Conocimiento Tecnológico Pedagógico del Contenido (TPACK): Revisión del modelo. In Esquivel Gámez, I. (Coord.) Los Modelos Tecno-Educativos, revolucionando el aprendizaje del siglo XXI (pp. 237-252). Mexico. Retrieved from <https://goo.gl/G8nTdk>
- Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A new framework for teacher knowledge. *Teachers College Record*, 108(6), 1017-1054. Retrieved from http://punya.educ.msu.edu/publications/journal_articles/mishrakoehler-tcr2006.pdf
- Sampieri, R., Collado, C., & Lucio, P. (2014). Metodología de la investigación. Nueva York: Ed. McGraw-Hill.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.
- Shulman, L. S. (1987). Knowledge and Teaching: Foundations of the New Reform. *Harvard Educational Review*, 57 (1), 1-2. Trans. Spanish. In: Shulman, L.S. (2005). Conocimiento y Enseñanza: fundamentos de una nueva reforma. Profesorado. Revista de currículum y formación del profesorado, 9, 2. Retrieved from <http://www.ugr.es/local/recfpro/Rev92ART1.pdf>
- Torres-Toukourmidis, Romero-Rodríguez & Pérez-Rodríguez (2018). Ludificación y sus posibilidades en el entorno de blended learning: revisión documental, *RIED. Revista Iberoamericana de Educación a Distancia*, 21(1), pp. 95-111. DOI: <http://dx.doi.org/10.5944/ried.21.1.18792>
- Wollscheid, S., Sjaastad, J., & Tømte, C. (2016). The impact of digital devices vs. Pen (cil) and paper on primary school students' writing skills—A research review. *Computers & Education*, 95, 19-35. DOI: <https://doi.org/10.1016/j.compedu.2015.12.001>

The Use Of E-Learning In Social Work Education : Five Years Of Experment

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Abstract

Since 2013, University of Quebec in Chicoutimi's First Nations Centre Nikanite defined an e-learning program for Social Work, aimed at students in the native communities and social workers intervening with natives living in urban environments. This program includes four compulsory courses and one optional course. The main focus is the development of intervention skills to help with deviant, dependant, and delinquent behaviors or offenders, and provide accurate social care for children, youth, and elderly people.

For the design and development team, this was a real challenge. The program must be delivered in French -the second or third language of the target audience. Students are geographically distributed throughout Quebec where electronic services and equipment vary. Levels of experience are different, in the field of social work as well as in using technologies. Students are not available at the same time. The needs are enormous and a trained workforce is expected quickly. Since this program must help develop competencies in a social work context, students need to collaborate and interact in an authentic environment.

These limitations required team members think in terms of optimizing learning within a virtual context, based on imagination, experience and reinvestment instead of interactive technology. The purpose of this poster is to present the learning methodologies and hypotheses on which were built a mixed learning approach based on cognitive psychology in a socio-constructivist environment. The student is invited to resolve native social issues and problems in an asynchronous, collaborative, virtual context including both imaginative characters and real people case studies. Students meet the characters, develop their knowledge in a flipped classroom approach and reinvest their newly acquired knowledge in the next learning experience. We believe this mixed approach can lead students to better intervene in their future profession.

The Use Of Internet Content With Interest In Learning English On High Schools Students

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Abstract

The official language in Indonesia is Bahasa. English is one of the foreign languages taught since junior high school and it is mandatory to learn. However, the motivation to learn English among students is still relatively low. This has result in low ability of English speaking students. On the other hand the Internet is very popular among students and has a lot of English-speaking content. This study aims to determine: 1) the intensity of students in using internet content in English; and 2) the relationship of the intensity of the use of air-English Internet content with interest in learning English. This research uses survey method to high school students in Jakarta. The results of the data are known that: 1) the intensity of internet usage of English content in High School Students is low, and 2) there is a significant relationship between the intensity of English internet content usage with the interest of learning English. Therefore, to increase students' interest in learning English, it is recommended that students frequently access English Internet content.

Keywords: *Internet, English Internet content, Interest in learning English*

Preliminary

The international language used by various nationalities is English. Indonesia officially starts teaching English from junior high school. There are also some schools, especially those who managed by the private sector, have learned English starting from elementary school. The Indonesian government has determined that learning English is mandatory for student's starts in junior high school level. English lessons have also been established as one of the subjects tested in the National Exam (UN). It shows the great attention of the Indonesian government to its citizens to be able to master English as an International language.

The government is very serious in English Lesson however this has not directly influences to the quality of learning English in schools. Student's ability in English language is still low, this is also a result from low quality methods of learning English in schools and university level. For instance English learning process in one of the private universities in the suburbs East Java province performed by Maghfiroh (2016). The results of the study indicates constraints that happened in learning foreign language in the program of education English language: 1) Indonesian language is still dominant in the learning process; 2) Low motivation to learn and master English language, and also feel ashamed and scared if they will make mistakes while speaking English; 3) Supportive environment for student to speak foreign language among college student was not created; 4) Less time to practice the skills learned in speaking English.

At the junior secondary level, the results of research conducted by Ariastuti, et al (2014) in junior high schools in Makassar, South Sulawesi have indicates problems in learning English: (1) explaining the textbook with guidance from textbook without variations; (2) the instructional media used is not attractive, rarely practice such as listening, speaking, reading, and writing. Students are prepared with material that was used to answer the exam questions, smart students is defined only students who has good test scores.

The low quality of learning is exacerbated by the low interest of students to learn English. Interest is the tendency of an inactive subject, it is very important to feel interested in a particular subject and being happy to learn the material (Winkel, 2004). According to Hilgard (Slameto, 1995) explains that interest is the tendency to recall and remember some of the activities that a person is interested, constantly paying attention accompanied by

stimulus.

Interest means an individual's attracted feeling or happy to learn, in this case learning English. If the facilities and learning environment is less supportive, but have a strong interest in learning English, then the learning results will be better. This is in accordance with holistic theories of learning, emphasizing that the behavior is *purposive*, which means that the intrinsic aspect (intention, determination, will) of the individual is the important determinants for the birth of certain behaviors even in the absence of stimulation (*stimulus*) coming from the environment (naturalistic). This means according to the holistic school that the determinants of learning success are intrinsic factors of students concerned, one of which is interest in learning (Anwas, 2009).

Interest is very important in improving learning achievement. The Liang Gie (1995) confirms the importance of interest in learning, gaining attention, facilitate the creation of concentration, prevent interference from outside, strengthen the memory/learning comprehension, and minimize boredom to learn. Therefore, to improve the ability of English, students' interest in English lesson needs to be improved.

Efforts to increase interest in learning English can be done by using information and communication technology (ICT). Research on the utilization of ICT can facilitate student learning ((Anwas, 2015), (Gray, et al, 2007), (Ghadirian and Job, 2017), Mikal et al (2014), Aberg et al (2016), (Wang, 2018)). The results of the study done by Aberg et al (2016) shows that using digital learning resources can improve writing ability in participants. Sabar and Rahman (2011) conducted research on the Head Office of Briton International English School Makassar, Indonesia. The study aims in knowing the role and function of multimedia center and value added obtained by the students from using the Web (e-Learning) through multimedia center at Briton International English school Makassar. The results of this study indicate that the use of Web (e-Learning) has made, the students earn various kind of value added (benefits), such as: a) attain many information and materials learning, with ease, fast and more detailed; b) could access information inform of text, images, and occasionally interesting video; and c) students could develop skills especially reading, writing, vocabulary, and grammar.

The Internet has a lot of content that uses English. The content contained on the Internet varies greatly in text, image, audio, video, simulation and animation formats. The content is designed specifically for learning and some are not specifically designed but can be utilized for learning (by utilization). All English-language content can be optimized to improve English learning ability and achievement. The problem is the frequency of students using English, and whether there is a relationship between the frequencies of the use of English content with the interest of learning English. This study aims to determine: 1) the frequencies of students in using Internet content in English; and 2) the relation of the frequencies of using English internet content with the interest of learning English.

Research Methods

This research uses survey method towards high school students in Jakarta. The population is high school students in Jakarta. Samples taken using random sampling techniques, in number of 185 people. Data collection was conducted in March 2018.

The data is collected through questionnaire about the frequencies of the students in using English Internet content and the interest of learning English. Student frequencies indicators using English Internet content are measured by how often the students use English Internet content. Interest indicator is measured by the feeling of the student's likes or dislikes on English lessons. This means that students who have a positive feeling to learn English means that they have a good interest in English lessons. On the other hand, if students dislike learning English they will be categorized with no interest in learning English.

The collected data was analyzed using descriptive statistics and statistics Spearman's correlation. To facilitate data processing used SPSS application version 23. Through analysis of data is expected to be able to answer the research question.

Results And Discussion

In accordance with the purpose of research, the variables studied in this study is two that is 1) the frequencies of students in using English-language internet content; and 2) the relation of the frequencies in the use of English internet content with the interest of learning English. The result of data is using descriptive statistics, obtained data is shown in **Table 1**.

Table 1. Intensity of Accessing English Internet Content

No		f	%
1	Never	5	2.7
2	Rarely	112	60.5
3	Often	54	29.2
4	Always	14	7.6

Table 1 explains that the majority of students 60.5% are rarely access English Internet content, and even 2.7% claim never. Only a small part of the 29.2% who claims often and only 7.6% who claim always accessing English Internet content. The data pointed that the students use English Internet content is still low. However the results of previous research conducted by (Chalim and Anwas, 2018) that in general the frequencies of internet usage by students in the city of Jakarta is quite high, the average of more than two hours per day. This means the potential of students to take advantage from English language Internet content is great.

The use of Internet is closely related to the availability of Internet infrastructure. The location of this research in the city of Jakarta in general the Internet infrastructure is better when compared with rural areas and other cities. The question is how the English internet content are use in other cities and villages where the availability of Internet infrastructure is lower than Jakarta. More research needs to be done, how frequent the use of English Internet content utilization in other area outside Jakarta.

Interest in learning English, the result of descriptive statistical processing described in **Table 2** as follows.

Table 2.Interest in Learning English

No		f	%
1	No interest	3	1.6
2	Less interested	104	56.2
3	Interested	67	36.2
4	Very interest	11	5.9

Table 2 shows that more than half (56.2%) of students stated less interest in learning English, and there were 1.6% of students who expressed no interest. 36.2% of students who expressed interest and 5.9% who expressed great interest. The data explains that most students are less interested in learning English, and only a small proportion indicates interest in learning English. This research was conducted in the capital city of Indonesia that shows low English proficiency, it can be generalize also in the city level in Indonesia. How students who live in the village in the remote areas can learn English is another interesting issue that need to do further research.

This interest factor is very important to improve learning achievement. This is explained in the studies conducted by The Liang Gie (1995), Maghfiroh (2016), research conducted Ariastuti, et al (2014), and Malek, et al (2011). Therefore, the low English proficiency among students is caused by the low interest of the students towards the English lesson.

Spearman correlation test results are presented in **Table 3** below.

Table 3. Correlation of Interest in Learning English

	r	sig
Frequencies Accessing English Content	0.263	0,000 **

Table 3 shows that from the correlation test results the correlation value is 0.263 with 0.000 significance values. It means that the students' ability to access English Internet content is positively related and significant with their interest in learning English, at 99 percent confidence level. It can be interpreted that if students' frequencies in accessing Internet content in English is high, then students' interest in English lessons is also high. In reverse, if the students' intensity in accessing English Internet content is low, the student's interest in English lesson is also low.

In **Table 1**, in general the intensity of students in accessing Internet content in English is low. Similarly, in **Table 2**, in general the students' interest in learning English is also low. It can be interpreted that to increase students' interest in learning English, we can achieve it through increasing student's frequencies in accessing English Internet content. Previous research conducted by Chalim and Anwas (2018) in Jakarta states that the level of Internet usage among

students is quite high. It means there are potential for student's to change on how they use the Internet into accessing English Internet content. Internet contents that being accessed often by students are mostly from social media that presented in Bahasa (Chalim and Anwas, 2018). It is also recognized that in Indonesia the use of the Internet is dominantly for leisure purpose and communication activities. Results of a study conducted by Tech in Asia (2015) shows that majority of Internet users in Indonesia search for news and entertainment, but the percentage of users that accessing educational content is only 5% of total. Likewise, the television programs favored by the majority of viewer's are entertainment and information (Kusuma and Hardiyanto, 2015). This potential can be diverted to not only communicate or search for content in Bahasa, but also content in English language. The students' ability to access Internet content, especially in English has the potential to be upgraded, so interest in English lessons can be improved as well. This can be attributed to the advantages of the Internet that is able to present the content in a varied form. The Internet is able to present text-based content, images/photos, audio, video, animation, and simulation. Text based Internet contents can be: news, information, articles, books, short stories, novels, and other forms. Audio contents can be: song or poetry, dialogue or monologue or dramatization. The results of research done by Ariastuti, et. al. (2014) shows that many students interested in learning a language by using audio-visual media. Qualitatively, atmosphere in learning English language will be more fun and create positive effects to students' development.

Video and animation Internet content could be in the form of movies, songs, or games. Simulation content could be in a form of demonstration or practice related to the language skills such as reading, writing, listening, and speaking. The results of the study done by Laren (2012) shows that utilization of technology in learning, especially using audio-visual media, makes the students feel happy to read poetry by using pronunciation, stressing, intonation, and pausing method. The diversity of this content becomes an alternative choice for students who match and in accordance with the habits or learning conditions.

Internet media also has the advantage, that is able to communicate interactively. Research done by John et.al (2016) asserted that learning *online*

could improve interaction and engagement of participants (student-centered learning). This communication can be done directly (synchronous) or indirectly (asynchronous). Students can practice their ability in communicating English with their friends, teachers, parents, or anyone else, through, for example: email, video call, or through social media (facebook, whatsapp, twitter, instagram, etc.).

Using Internet in learning is flexible. As long as there is availability of devices and networks, students can use the Internet wherever and whenever there is a chance. The Internet is capable and easily accessed through various devices, such as: laptop, PC, mobile phones, smartphones, tablets, and other various devices. This shows that there is great opportunity and chance for students to utilize English Internet content in improving the students' interest and achievement in learning English.

How to make students who are frequently accessing the Internet for regular purpose to be diverted to utilize English Internet content? The results of Chalim and Anwas (2018) study confirmed that to familiarize students accessing Internet content that supports learning is the involvement of parents and teachers. The result of this study proves there is a positive and significant relationship between the role of parents and teachers with the use of the Internet for learning purposes.

The results of Chalim and Anwas research can be synthesized with the results of this study that to familiarize students access English internet content, the role of parents and teachers is very important. Parents need to guide and direct their children to access positive Internet contents. In this case, the content is relevant to increase the interest and achievement of learning English. Teachers need to provide guidance including learning tasks so that students are encouraged to utilize content in English in order to increase their interest and learning achievement of English subjects. Through this practice, students are expected to be train in English as a foreign language, both in reading, writing, listening and speaking.

Conclusion

The frequencies of high school students in accessing English Internet content are low. Similarly, students' interest in English lessons is also low. The low usage of English Internet content has a positive and significant relationship with the low interest in learning English. If the students frequencies in accessing English Internet content are high, then students interests in English lessons are also high. Then, if the students' frequencies in accessing English Internet content are low, the student's interests in English lesson are also low. Therefore, to increase students' interest in learning English, it is recommended for students frequently access English Internet content. English Internet content could be presented in many kinds of form: text, images, audio, video, animation, and simulation, it is very popular for students. Therefore, the Internet can be utilized interactively and communicatively to practice English proficiency globally, including the native speakers.

Bibliography

- Aberg, ES, Stahle, Y., Engdahl, I, Nyqvist, HK. (2016). *Designing a Website to Support Students Academic Writing Process*. TOJET: The Turkish Online Journal of Educational Technology, 15 (1), p. 33-42.
- Anwas, E. O. M. (2009). *Utilization of Media in Developing Agricultural Instructor Competence (Cases in Karawang and Garut District, West Java Province)*. Bogor IPB Dissertation. <http://repository.ipb.ac.id/handle/123456789/22439>
- Anwas, O. M. (2015). *Utilization of ICT at Pesantren Rakyat Malang East Java*. Journal of Education and Culture (National Accredited), Vol. 21 No. 3, December 2015, Balitbang Dikbud. DOI:[10.24832 / jpnk.v21i3.187](https://doi.org/10.24832/jpnk.v21i3.187)
- Ariastuti, Anik; Wahyuddin, HM; and Maryadi. (2014). *Increasing Interest of Student in Learning English Through Audio-Visual Media at SMP Negeri 1 Klaten*. Journal of Linguistics and Literature Studies, Vol. 26, No. 1, June 2014, p. 32-41.
- Chalim, S. and Anwas, O. M. (2018). *The Role of Parents and Teachers in Building the Internet as a Learning Source*. Journal of Counseling, Postgraduate IPB. March 2018 Vol. 14 No. 1. Page 42 -52. <http://jurnal.ipb.ac.id/index.php/jupe/article/view/19558>
- Ghadirian, H. and Job, FMJ. (2017). *Peer Moderation of Asynchronous Online Discussions: an Exploratory Study of Peer e-Moderating Behavior*. Australasian Journal of Education Technology Vol 33 No. 1 2017. <https://ajet.org.au/index.php/AJET/article/view/2882>.
- Gray, C., Pilkington, R., Hagger-Vaughan, L., and Tomkins, S. A. (2007). *Integrating ICT into classroom practice in modern foreign language teaching in England: making room for teachers' voices*. European Journal of Teacher Education, 30(4), P. 407-429.
- John, B., Thavavel, V., Jayaraj, J., Muthukumar, A., Jeevanandam, PK. (2016). *Design of Open Content Social Learning that Increases Learning Efficiency and Engagement Based on Open Pedagogy*. TOJET: The Turkish Online Journal of Educational Technology, 15 (1), p. 20-32.
- Kusuma, N. and Hadiyanto. (2015). *Watching Behavior and Farmer Satisfaction of the Knitting Program on TV Trans 7 TV*. Journal of Information, March 2015 Vol 11 No. 1. P. 60 - 68.
- Larlen. (2012). *Efforts to Increase Interest Learn Bahasa Indonesia Through Utilization Technology In Classroom Learning XS MA Pelita Raya Jambi*. Pen Journal. Vol. 2 No. July 2, 2012. FKIP University of Jambi. p. 49-70.
- Malek, T. J., Noor-Azniza, I., and Farid, T. M. (2011). Emotional intelligence in modifying social and academic adjustment among first year university students in North Jordan. International Journal of Psychological Studies, 3(2), 135
- Maghfiroh, A. (2016). *Problem in Foreign Language Character Establishment Among Students of English Education Study Program*. Journal Dimensions of Education and Learning. <http://eprints.umpo.ac.id/1771/>
- Mikal, J. P., Yang, J., and Lewis, A. (2014). Surfing USA: How Internet use prior to and during study abroad affects Chinese students' stress, integration, and cultural learning while in the United States. Journal of Studies in International Education, 1028315314536990.
- Sabar, K., and Rahman, A. (2011). *Using Web (E-Learning) in Learning English in Briton International English School Makassar*. Journal Communication KAREBA Vol. 1, October 4 - December 2011.
- Wang, Q.; Huang, C.; and Quek, CL. (2018). *Students' Perspectives the Design and Implementation of a Blended Synchronous Learning Environment*. Australasian Journal of Education Technology Vol. 34 No. 1 of 2018. <https://ajet.org.au/index.php/AJET/article/view/3404>
- Slameto. (1995). *Learning and Factors That Affects It*. Rineka Cipta: Jakarta
- Tech in Asia. (2015). *Statistics of Internet Users and Social Media in Indonesia*. <https://id.techinasia.com/talk/statistik-pengguna-internet-dan-media-sosial-di-indonesia>.
- The Liang Gie. (1995). *Effective Learning Method*. Yogyakarta: Liberti.
- Winkel. (2004). *Educational Psychology*. PT. Grasindo.

3D Software Environment For Educational Sprego Programming

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Abstract

The traditional methods for teaching spreadsheets are rather inefficient as they focus on the specific technical features of spreadsheet software. The main drawback of this approach is that students and end-users have to memorize an extensive amount of functions together with their arguments. Moreover, these functions can vary from interface to interface, or even become obsolete, be changed or be renamed in different versions of the same family of applications. With the technical details in the center, the focus is rather on the syntax and tools instead of developing the students' algorithmic and computational thinking skills and their ability to think abstractly.

By contrast, Sprego – Spreadsheet Lego – programming offers a scientifically proven, more effective alternative, because it establishes a concept-based problem-solving approach with real-world problems in focus, computational thinking, algorithmic and computer problem-solving skills and schema-construction to develop the students' capability to make reliable decisions at speed, yet it avoids the common pitfalls mentioned above.

Previous research and developments have introduced semi-unplugged tools for the visual representation of Sprego-implemented algorithms. Among them, a piece of software was implemented in a 2D environment which uses animations based on real-life examples to aid the students' learning process of the method. The application supports a searching algorithm and a counting algorithm, which are both fundamental parts of understanding Sprego programming principles. The research group has conducted experiments on applying this piece of software in education and the results were positive and promising, which clearly indicated that the visualizations of these algorithms are helpful for the students.

In our current work, we are presenting a new semi-unplugged application which transforms the functionality of the previously mentioned piece of software into a new 3D environment. Our aim is to increase the students' enthusiasm by creating a more engaging, modern and visually attractive representation of Sprego algorithms and formulae. The software is being implemented in Unity3D not just because it makes our project highly customizable, but it also provides support for a wide range of platforms including Windows, iOS, Macintosh, Linux and Android. This multi-platform availability will make it easy to use this application with distinct ICT devices such as smartphones, tablets and interactive whiteboards. In the subsequent phases of our research, we would like to improve our software by implementing new features and algorithms. After developing the application, we are planning to measure its effectiveness in classrooms in the near future.

Introduction

Sprego

The primary focus of our research is to develop a 3D visualization environment for Sprego-implemented algorithms. In this section we introduce Sprego methodology before discussing the details of our 3D software and the motivations for creating it.

Sprego is a relatively new method (Csernoch, 2014) which provides an alternative approach for spreadsheet-related real world problem-solving. The name Sprego itself is a portmanteau word which stands for **S**preadsheet **L**ego. In order to understand the core principles behind Sprego, we must start with examining the pitfalls and difficulties of the traditional method.

The first pitfall derives from the software itself because there are compatibility issues between the different versions. For example, spreadsheet functions can be renamed in newer releases as seen in Figure 1.

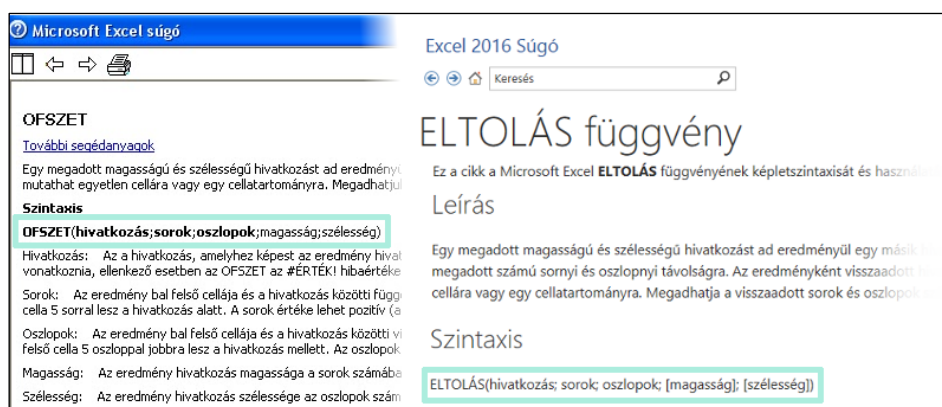


Figure 1. Name and syntax of the OFFSET() function in the Hungarian translation of Microsoft Excel 2003 (left) and 2016 version (right).

The second pitfall comes from an inconsistency between the order of the arguments of functions that are really similar in nature. As an example, SUMIF() takes its arguments in a completely different order compared to SUMIFS() which increases the risk of constructing semantically incorrect formulae (Sebestyén & Csapó, 2018). Another difficulty is related to the extensive amount of problem-specific functions. Memorizing these functions with their specific purposes and arguments is an overwhelming task, not just for students, but even for more experienced users. For instance, looking up a specific value from a vector or a matrix i.e. executing a linear search is a common problem in Spreadsheet environments. The user could theoretically solve the problem by using either LOOKUP(), HLOOKUP(), VLOOKUP(), or the INDEX(MATCH()) composite function (Microsoft 2018). However, the first 3 functions have their own limitations which makes them more problem-specific compared to using the INDEX(MATCH()) composite function (Table 1).

Table 1: Comparison of LOOKUP(), HLOOKUP(), VLOOKUP() and INDEX(MATCH()).

Function (or composite function)	Search vector	Sorting order of the search vector
LOOKUP()	both rows and columns	ascending
HLOOKUP()	only rows	ascending / unordered
VLOOKUP()	only columns	ascending / unordered
INDEX(MATCH())	both rows and columns	ascending / unordered / ascending

Teaching too many functions is not just unnecessary, but it is also inefficient as an average user only uses about 12 functions on a regular basis (Walkenbach, 2010). Furthermore, as we mentioned above, any of these functions can become obsolete or be changed in other spreadsheet software versions. Additionally, the most efficient way to develop students' programming skills in an environment like LOGO or Sprego is to gradually build up a set of instructions (in this case, functions) from 5 to a maximum limit of 15 (Freiermuth et al., 2008).

By contrast to the pitfalls of traditional spreadsheet education, Sprego offers an alternative which eliminates all the difficulties mentioned above. The core principle of this method is to use only 12 fundamental, general-purpose spreadsheet functions (Table 2).

Table 2: The 12 fundamental Sprego functions.

Text	Math	Miscellaneous advanced
LEFT()	MIN()	IF()
RIGHT()	MAX()	MATCH()
SEARCH()	SUM()	INDEX()
LEN()	AVERAGE()	ISERROR()

Focusing on functions that can be found in all interfaces ensures the compatibility of all variations of spreadsheet software and versions because these functions have been consistent in their names and arguments since their first appearances. Additionally, these 12 functions are unambiguous because they are properly named, and the names clearly indicate the one specific task that they carry out. In addition to this, a Sprego user needs to develop a

thorough understanding of these 12 functions only, which is less difficult compared to the countless amounts of problem-specific functions of the traditional spreadsheet workflow (Csernoch et al., 2014).

In addition, a crucial feature of the Sprego method is the usage of composite functions and array formulae. The main advantage of using composite functions is that it develops the students' algorithmic and computational thinking skills and it provides examples and applications for widening their mathematical knowledge in the subjects of functions and arrays (Csernoch, 2014 and 2017). Another benefit of using Sprego is that it opens up new opportunities for using unplugged teaching methods in the classrooms (Bell & Newton, 2013; Csernoch & Biró 2017). For example, Matryoshka dolls can be used to demonstrate how composite functions work and how they relate to functions in traditional text-based programming languages (Figure 2).



Figure 2. Unplugged teaching methods – Matryoshka dolls.

2D visualization of Sprego algorithms

Our software is based on a previous research project in which the researchers have developed a 2D visualization application for different Sprego-implemented algorithms (Figure 3). The application consists of two animations for two different scenarios, one visualizing conditional counting with a $\{=SUM(IF())\}$ array formula, and the other one simulating the execution of linear search with an $=INDEX(MATCH())$ composite function. The purpose of these animations is to provide a better understanding of the algorithms behind these Sprego solutions to show the executed actions step-by-step. The software features real-life based examples, coloured Matryoshka dolls (as avatars) and multi-platform availability to support Android, Windows, Mac and Linux (Csapó & Sebestyén, 2017; Csapó, 2017; Csapó & Sebestyén, 2018).



Figure 3. 2D Sprego visualization application.

MOTIVATION

The main goal of this piece of research is to transform the existing 2D visualizations into a 3D environment. More specifically, this transformation can be divided into two major areas:

- the first involves creating the 3D models, textures and UI elements for the new environment and
- the second is the programming aspect.

Our hypothesis is that if we implement a highly interactive, more appealing and videogame-like software into Sprego for students, they will show more interest towards Sprego in general, and it will result in increased efficiency regarding the understanding of the algorithms behind problems in Sprego.

We aimed to keep the core aspects of the 2D visualizations, i.e. the Matryoshka dolls, the authentic real-life examples and the multi-platform availability while implementing new features using the advantages provided by

the 3D environment (Figure 4). Interactivity is our further concern because we want to create a software that can be used efficiently in education that grasps the students' attention and facilitates their learning processes instead of making them passive observers.

Our distant goal is to create an application which serves a unique purpose in education, as it could be used to establish a bridge between the unplugged (for example, using Matryoshka dolls to demonstrate how composite functions work) and plugged-in methods (like solving spreadsheet problems in front of a computer).



Figure 4. Comparison between the 2D (left) and the 3D (right) environment.

RESULTS

Modelling

The modelling and art-related tasks of the creation process were carried out using Blender for most of the 3D models (Blender 2018), MagicaVoxel for the detached house models (MagicaVoxel, 2018) and GIMP for 2D textures and UI elements (GIMP, 2018). We decided to use these applications not just because they are freeware, but they are also popular and well-documented as well, which made it simpler to learn how to use them. The first step of the 3D modelling process was to establish an abstract environmental model. This specifically meant that we had to split the already given 2D environment into atomic elements. The abstraction provided an explicit list of 3D models we had to create one by one. This list was an efficient way to specify modelling tasks and to plan our workflow in advance (Table 3).

Table 3: Result of the abstraction process, a total of 38 3D models in the conditional counting (Forest) and the linear search (City) tasks.

Model	Scene	Number of variations
Tree	Forest	10
Bush	Forest	5
Campfire	Forest	1
Matryoshka Doll	Forest, City	10 (different textures)
House	City	9
Street lamp	City	2
Town sign	City	1

We have decided to aim for a low poly art style in our application for multiple reasons. First of all, performance is a crucial priority in educational software. When making a 3D application designed to use in schools, it is important to consider the possible hardware limitations. In addition to this, as we stated in subsection Motivation we want to target mobile platforms as well (primarily Android). Low poly art style is undoubtedly performant as it uses 3D models that only consist of a few polygons. Less polygons means less calculations for the graphics card which equals to better performance and lower system requirements for the application itself. Our second concern

was the students' perception of the visuals. The primary focus was to create the feelings of being in a video game and playfulness simultaneously in order to make the Sprego learning process more efficient. After considering a handful of options, we have decided to choose the low poly art style as it satisfied our criteria with its cartoon-like look and great performance (Figure 5).

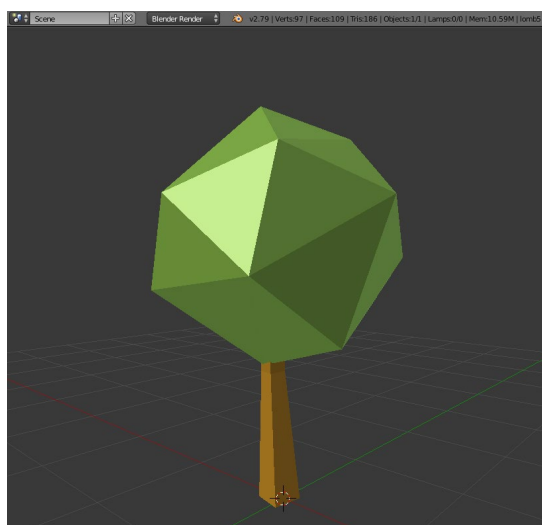


Figure 5. A low poly tree model in Blender.

Modelling the Matryoshka dolls required a different workflow and technical approach as we had to apply textures to them. The first step was to create a doll geometry which is appropriate to act as an avatar in the application, yet looks similar to the real-world dolls. After that, the next task was to unwrap the geometry of the dolls and to draw all the different textures in GIMP. The bright and detailed textures ensured that the avatars stand out from the low poly environment, thus making the application more user-friendly. Finally, we used UV mapping to map each different texture to each doll geometry one by one (Figure 6).

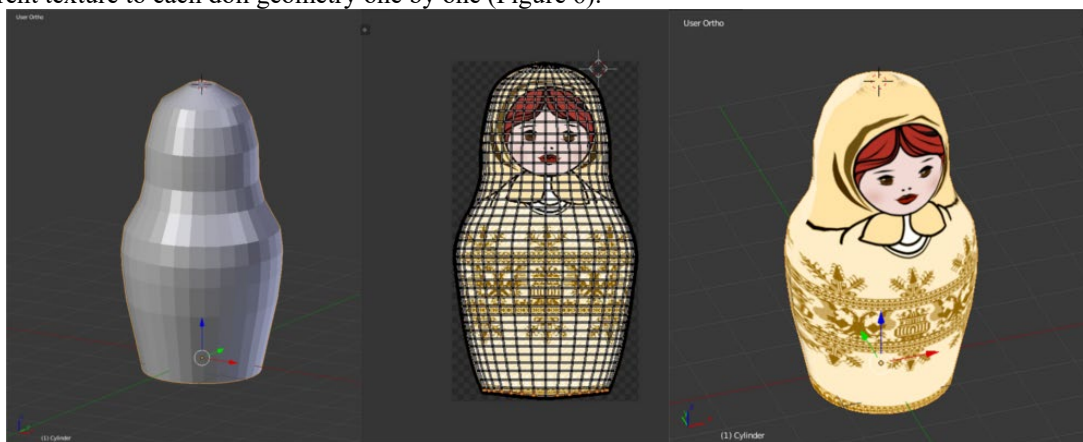


Figure 6. Applying the texture to the geometry via UV mapping.

Programming

Our software of choice was the Unity3D game engine (Unity Technologies, 2018) for the implementation process. Unity is a game engine which can be used to develop 2D and 3D applications via C# scripts and built-in tools. It is completely free for non-profit usage, and it is generally well-documented (Unity Documentation, 2018). Additionally, it is immensely popular and has a large, helpful and active developer community (Unity Forums, 2018). Furthermore, Unity is a feature-packed game engine, which made prototyping much easier compared to other available options. In addition to this, the easy learning curve and highly customizable behaviour provided the optimal workflow for our project.

Initially, we had to import all 3D models to build the environment from scratch using the Unity Editor. During this process we tweaked many settings to fit our visualization goals, including the lighting and shadows of the scenes (Figure 7). The prefab system of Unity made it possible to define reusable objects of the environment such as the dolls themselves. The primary advantage of using prefabs is that if you make any changes to the prefab, these changes are immediately reflected in all existing instances of this prefab.

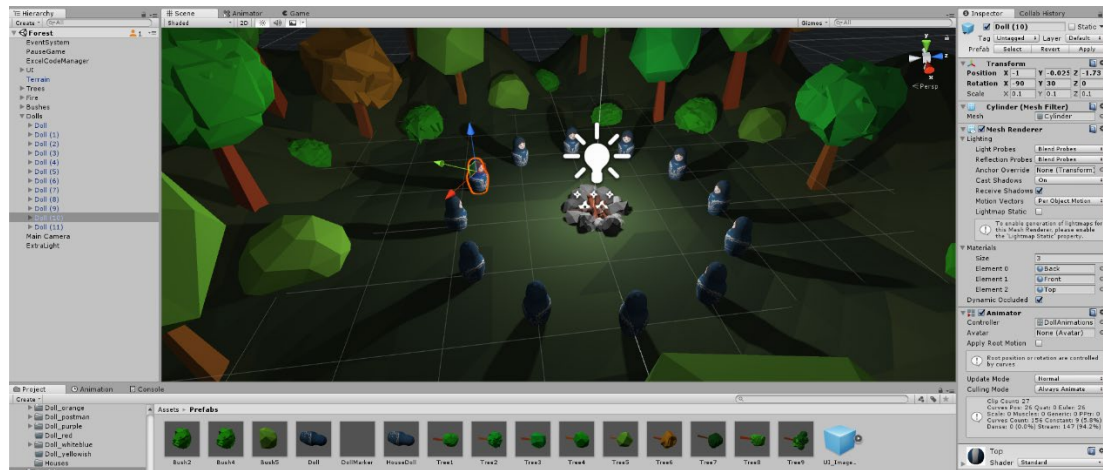


Figure 7. Creating the forest scene in Unity3D.

The animation of the conditional counting algorithm works similarly to the one present in the 2D application (Csapó & Sebestyén, 2017). However, the animating process was rather different due to the differences between the nature and purpose of Construct and Unity3D. In Unity, we relied on two provided tools:

- Animation Assets and
- Unity Animator.

Animation assets are used to create frame by frame animations for any object that resides in the current project. Our task was to create a different animation for each position that the dolls can walk into, which adds up to a total of 24 animations. After that, we used C# scripts and the Animator component to control how the animation behaves. The Unity Animator is similar to a finite state machine in the following respects:

- the states reflect the current status of the animated object (a state usually equals to an animation)
- there are special states (for instance, entry point of the animation)
- transitions can be defined to change the state of the animator

With this in mind, we designed a finite state machine that gave us full control over the animation (Figure 8). This proved to be very convenient later on, as with the control that the animator provided we were able to implement useful features such as a slider that controls the speed of the animation in runtime.

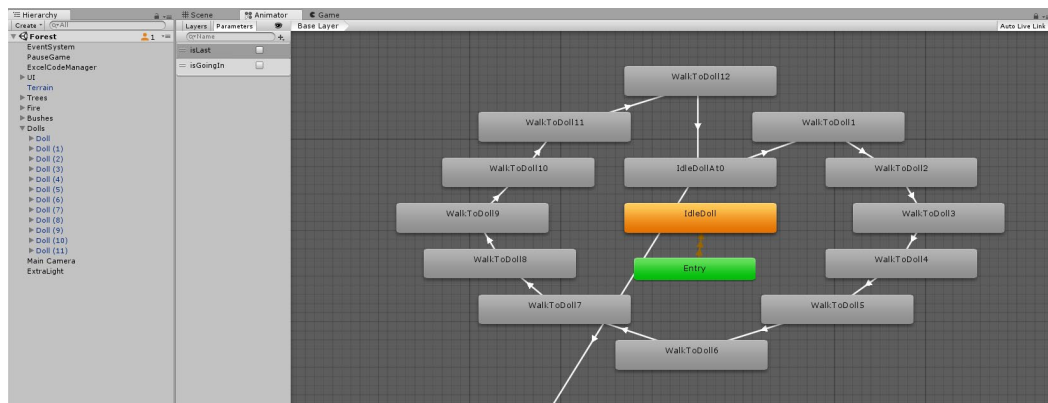


Figure 8. Part of the finite state machine that controls the forest scene.

After animating the dolls, our main focus was to assemble a user-friendly UI that can communicate easily with the animation-related components. Unity3D comes with a flexible UI system which includes many out-of-the-box UI elements such as buttons, sliders, panels and input fields. We drew fitting 2D graphics using GIMP to make the whole application visually appealing (Figure 9). Furthermore, we implemented a light setting feature which can be turned on and off with a checkbox. The reason behind this is that many classrooms are too bright during the day and we wanted to avoid the pitfall of the application being too dark while being presented with a projector under these conditions.

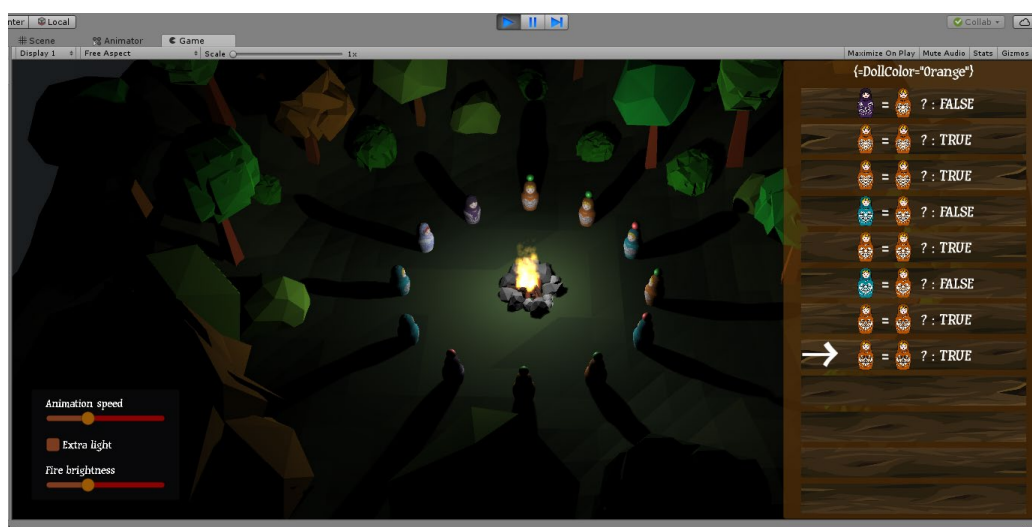


Figure 9. UI of the forest scene of our application.

As the last step, a localization manager system was created in order to provide multilingual support. Our primary concern was to make the system easily extendable in order to be more convenient to add more languages in the future (it currently supports English and Hungarian). The localization manager uses JSON files to store expressions as simple key-value pairs. Each language can be represented with a single data file in this way. The user can select the preferred language in the main menu from a dropdown list, and the application instantly loads the translations from the JSON file (Figure 10).



Figure 10. Changing language in the main menu of the application.

CONCLUSIONS

In conclusion, our primary focus was to create a 3D educational programme with the purpose of aiding the learning process of Sprego programming. Sprego is an alternative approach to traditional spreadsheet workflow and it relies on using composite functions and array formulae which are constructed using twelve fundamental functions (Csernoch, 2014).

Our 3D software is based on a previous research project in which the authors developed a 2D visualization application for various fundamental Sprego algorithms (Csapó & Sebestyén, 2018). Our goal was to implement the conditional counting and a linear search algorithm based on this 2D animations.

To achieve this, we had to transform the 2D environments into 3D while keeping the core aspects and advantages of the 2D solution and also implementing new features which we were able to implement because of the 3D environment. We have presented the details of our workflow and our application in the Results subsection.

In the future, we will keep developing the programme by implementing new features and algorithms and extending the range of supported languages. In addition to this, we will gather feedback from different sources in order to have reliable data that helps us in evolving the application in the right direction. Furthermore, we will deploy the software to Google Play to provide easy access for everyone. Moreover, we will test the efficiency of using this application with control groups in high schools and in tertiary education.

REFERENCES

Bell, T. & Newton, H. (2013). Unplugging Computer Science. *Improving Computer Science Education*,

- Routledge.
- Biró, P. & Csernoch, M. (2017). Unplugged tools for building algorithms with Sprego. *International Conference on Education and New Development*, Lisbon, Portugal, June 2017.
- Blender Foundation (2018). Free and Open 3D Creation Software. Retrieved August 10, 2018 from <https://www.blender.org/>.
- Csapó, G. & Sebestyén, K. (2017). Educational Software for the Sprego Method. *The Turkish Online Journal of Educational Technology*, INTE 2017 October, pp. 986-999. Retrieved July 22, 2018 from http://www.tojet.net/special/2017_10_1.pdf. ISSN 2146-7242
- Csapó, G. & Sebestyén, K. (2018). Sprego – Spreadsheet Lego. Retrieved May 30, 2018 from <https://play.google.com/store/apps/details?id=hu.sprego.oktatoprogram>.
- Csapó, G. (2017). Sprego Virtual Collaboration Space. 8th IEEE International Conference on Cognitive Infocommunications, (pp.137-142). Retrieved January 31, 2018 from <http://ieeexplore.ieee.org/document/8268230/>. ISBN 978-1-5386-1264-4. DOI=10.1109/CogInfoCom.2017.8268230
- Csernoch, M., Biró, P., Abari, K. & Máth, J. (2014). Programming-oriented spreadsheet functions. In Hungarian: Programozásorientált táblázatkezelői függvények. *XIV. Országos Neveléstudományi Konferencia*. 6–8 November, 2014. Debrecen, Hungary.
- Csernoch, M. (2014). *Programming with Spreadsheet Functions: Sprego*. In Hungarian: Programozás táblázatkezelő függvényekkel – Sprego. Budapest, Műszaki Könyvkiadó.
- Csernoch, M. (2017). Thinking Fast and Slow in Computer Problem Solving. *Journal of Software Engineering and Applications*, 10(1). Retrieved July 08, 2017 from http://file.scirp.org/pdf/JSEA_2017012315324696.pdf.
- Freiermuth, K., Hromkovič, J., & Steffen, B. (2008). Creating and Testing Textbooks for Secondary Schools. In R. T. Mittermeir & M. M. Sysło (Eds.), *Informatics Education - Supporting Computational Thinking* (pp. 216–228). Berlin Heidelberg, Germany: Springer. Retrieved January 25, 2016, from http://link.springer.com/chapter/10.1007/978-3-540-69924-8_20, pp. 219.
- GIMP (2018). About GIMP. Retrieved August 10, 2018 from <https://www.gimp.org/about/>.
- MagicaVoxel (2018). Magicavoxel by ephtracy. Retrieved August 10, 2018 from <https://ephtracy.github.io/>.
- Microsoft (2018a). LOOKUP function. Retrieved August 10, 2018 from <https://support.office.com/en-us/article/lookup-function-446d94af-663b-451d-8251-369d5e3864cb>.
- Microsoft (2018b). HLOOKUP function. Retrieved August 10, 2018 from <https://support.office.com/en-us/article/hlookup-function-a3034eec-b719-4ba3-bb65-e1ad662ed95f>.
- Microsoft (2018c). VLOOKUP function. Retrieved August 10, 2018 from <https://support.office.com/en-us/article/vlookup-function-0bbc8083-26fe-4963-8ab8-93a18ad188a1>.
- Microsoft (2018d). INDEX function. Retrieved August 10, 2018 from <https://support.office.com/en-us/article/index-function-a5dcf0dd-996d-40a4-a822-b56b061328bd>.
- Microsoft (2018e). MATCH function. Retrieved August 10, 2018 from <https://support.office.com/en-us/article/match-function-e8dff45-c762-47d6-bf89-533f4a37673a>.
- Sebestyén, K. & Csapó, G. (2018). Visualising Sprego Inequality Problems with 2D Representations. *The Turkish Online Journal of Educational Technology*. Accepted.
- Unity Documentation (2018). Unity Scripting API. Retrieved August 10, 2018 from <https://docs.unity3d.com/ScriptReference/index.html>.
- Unity Forums (2018). Unity Forum topics. Retrieved August 10, 2018 from <https://forum.unity.com/>.
- Unity Technologies (2018). Unity - The world's leading content-creation engine. Retrieved August 10, 2018 from <https://unity3d.com/unity>.
- Walkenbach, J. (2010). Microsoft Excel 2010 Bible. Wiley Publishing, Inc. Indianapolis, IN., pp. 202.

Towards better E-Administration of Tertiary Institutions for quality Teacher Education

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Abstract

Information and communication technology (ICT) is important in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology. The study examined towards better E-Administration of tertiary institutions for quality Teacher education. Two research questions and one hypothesis were formulated to guide the study. The 10 college of education in the south-southern zone of Nigeria were used. A total of 240 respondents (academic and non-academic) administrators purposively selected from the 10 tertiary institutions formed the population. An observation checklist for available and functional facilities, structured questionnaire, focus group discussion for 200 level N.C.E i.e. 10 N.C.E 11 students from each institution were used for data collection. The reliability indices for the instruments obtained through cronbach alpha method was 0.93. The data collected were presented using percentages, mean and standard deviations and the null hypothesis tested at 0.05 level of significance using t-test. It was found that only very few ICT facilities such as flash drives, CD-ROMs amongst others are available. The colleges have low rate of utilization of ICT facilities in the administration of various task areas in the institutions.

Key words: *E-Administration, Tertiary Institutions, Quality teacher Education.*

The need for better Electronic administration of tertiary institutions for quality teacher education cannot be over-emphasized because to attain, interpret and implement the policies, procedures and training requirements of the would be teachers to perform their tasks as teachers within and outside the classroom requires the school administrators ability to utilize information and communication technology (ICT) tools to find, explore, analyze, exchange and present information. Administration in the 21st century has moved from the traditional setting of handling issues manually through the movement of files and documents from one office or table to the other to the transmission of information electronically through wire, wireless cables and sound waves. These changes have ushered in a new dimension which necessitates the acquisition of electronic literacy skills for educational managers and administrators. One of the indices for measuring the growth and development of any nation is hinged on her technological skilled labour force. The level of its manpower and technological skill paves way for her creativity, innovation and higher productivity. The activities in school administration encompasses all the efforts and duties of the school administrator to plan & coordinate all the human and material resources within the school for optimal achievement of the pre-determined objectives/goals of the school.

Effective and efficient data communication and networking facilities are vital to any enterprise like the education sector. For our tertiary institutions to meet their objective and compete favourably in this information age, it is expedient that the necessary information and communication technological facilities be made available in forms of modern computer laboratories, internet services and software packages like Microsoft word, Microsoft excel, data base, Microsoft power point, among others, fully installed and properly utilized. The world as a whole and Nigeria in particular is experiencing population explosion with the consequent increment in enrolment figures in our tertiary institutions each year. This increment in enrolment demands the provision of information and communication technology (ICT) facilities for more effective and efficient administration of educational institution. Such areas where the facilities are needed may include e-learning, research, online assignment, e-library, e-administration amongst others.

ICT embraces all the modern electronic techniques of processing, storing, retrieving and circulating information within and outside an organization with speed and with little or no stress. Jim, (2012) refers to ICT as all

technologies that provide access to information through tele-communications. Hooker (2009) suggested that ICT can be employed in education systems for three purposes: to widen access to education, to raise its quality and reform it. It is therefore obvious that an administrator's leadership effectiveness and efficiency, management skills and the quality of education service delivery have a direct relationship with the availability and the administrator's ability to utilize the available ICT facilities for the day to day running of the institution. An administrator cannot take any decision without information which is better obtained through ICT.

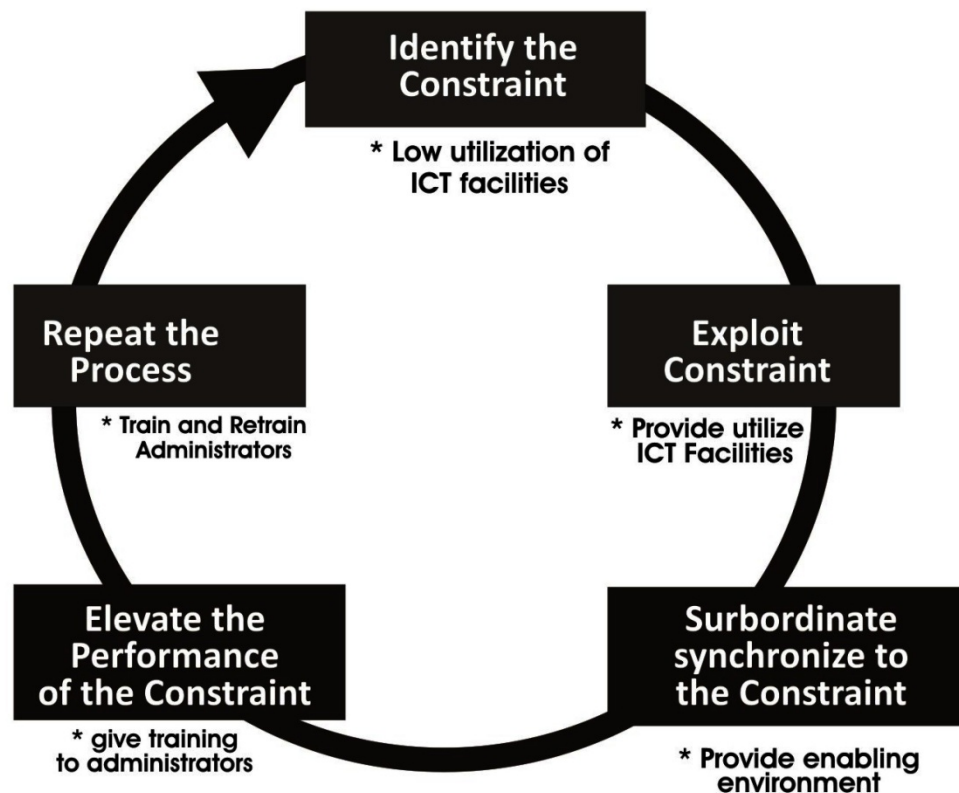
Based on this premise, it is the thrust of this paper to discuss the theme: Towards better E-administration of tertiary institutions for quality teacher education.

Theoretical Framework

This study is anchored on the theory of constraints which was propounded by Dr Eliyahu Goldratt in 1984 through his bestselling novel, 'The Goal'. The theory of constraint is a methodology for identifying the most important limiting factor that stands in the way of achieving a goal and then systematically improving that constraint until it is no longer the limiting factor. The theory of constraints takes a scientific approach to improvement.

The theory of constraints provides a powerful set of tools for helping to achieve that goal, including;

- ❖ The five focusing steps (a methodology for identify and eliminating constraints) i.e. ICT availability and utilization.
- ❖ The thinking process (tools for analyzing and resolving problems) ie Administrator's thinking process towards achieving quality teacher education through e-administration of tertiary institution.
- ❖ Throughput accounting (a method for measuring performance and guiding management decision) i.e. quality teacher education



**Fig 1: The theory of constraints uses a process known as the Five Focusing steps to identify and eliminate constraints (i.e. Bottlenecks).
Source adopted from Goldratt. 1984.**

This theory prioritizes improvement activities by trying to eliminate the current constraints, such as lack of ICT skills, high cost of setting up ICT infrastructure, unavailability of most ICT facilities is used to improve the constraints until it is completely eradicated. This will then lead to tertiary institutions achievement of effective and efficient management of different task areas such as staff personnel services, student personnel service, instructional service delivery and academic planning of tertiary institutions for quality teacher education.

Research Questions

The following research questions guided the study;

1. What ICT facilities are available for the administration of tertiary institution in south south Nigeria.
2. To what extent are the available ICT facilities adequate for effective administration of tertiary institutions in south south Nigeria.

Hypothesis

The following hypothesis was tested at probability level of 0.05 level of significance.

HO₁: there is no significant difference between the mean rating scores of academic and non-academic administrators on the adequacy of ICT facilities in tertiary institutions.

Methodology

The design of the study is descriptive survey research design. The design is also analytic survey because according to Nwankwo (2011), the variables being studied for any sample are compared for the various identified strata or categories of the sample; in this case, Academic and non-academic administrators in both federal and state government owned tertiary institutions through the use of hypothesis.

Area Of The Study

The area of study is the South-south zone of Nigeria. The states in the area include Akwa-Ibom, Bayelsa, Cross Rivers, Delta, Edo and Rivers States. These states are located in the South-Southern part of Nigeria.

Population Of The Study

The population for the study consist of 10 federal and state colleges of education in South South zone of Nigeria. The population of the respondent for this study is 240 academic and non academic administrators which consist of Dean, Heads of department, Coordinators of programmes, registrar, deputy registrars etc.

Instrument For Data Collection

In this study, a structured questionnaire and a check list for available ICT facilities and focus group discussion of selected 200 level students were instrument for data collection.

The questionnaire items were generated based on the research questions to elicit information from academic and non-academic administrators in the colleges of education in South South zone. The questionnaire, has items for answering research question 2 with response options (AV), (NA), (VAQ), (A), (LA) and (VLA) which means Available, Not available, Very adequate, Adequate, Less adequate and Very less adequate. While a checklist of 24 items was used to ascertain if these facilities are available in the colleges of education under survey and whether they are functional. A rater/researcher/research assistant is expected to identify and check those facilities available, the number available and whether they are functional.

Method Of Data Analysis

Research questions one was answered and analyzed using percentages while research questions 2 was answered using mean rating based on real limit of numbers on a four point scale as follows: 0.50 – 1.49 – Very less adequate, 1.50 – 2.49 – Less adequate, 2.50 – 3.49 – Adequate. The focus group was qualitatively analyzed.

t-test was used to test the hypothesis at $P \leq .05$

Results

Research question one

What are the ICT facilities available for the management of Colleges of Education in South-South Nigeria?

The data for answering the above research question are provided on Table 1 below.

Table 1: Frequency and percentages of ICT facilities available in colleges of Education in South-South, Nigeria (N = 10)

S/N	FACILITIES	ACADEMIC PLANNING UNIT		STAFF PERSONNEL UNIT		STUDENT PERSONNEL UNIT		INSTRUCT, SERVICE DELIVERY		TOTAL	%
		Freq	%	Freq	%	Freq	%	Freq	%		
1	Internet-connected laptop	7	70	10	100	8	80	9	90	34	85
	Internet-connected desktop										
2	Computer	10	100	10	100	9	90	8	80	37	93
3	Scanner	7	70	6	60	8	80	9	90	30	75
4	Electronic Library	0	0	0	0	0	0	7	70	7	18
5	Institutional Cybercafe	9	90	5	50	4	40	9	90	27	68
6	Fax (facsimile) machines	2	20	2	20	2	20	3	30	9	23
7	Department / School email address	2	20	5	50	10	100	2	2	21	53
8	CD-ROMs	10	100	10	100	10	100	10	100	40	100
9	Flash drives	10	100	10	100	10	100	10	100	40	100
10	Computer Laborator	0	0	0	0	0	0	4	40	4	10
11	Multimedia Projector	-	0	-	0	1	10	7	70	17	43
12	Interactive Board	1	10	0	0	0	0	6	60	7	18
13	Digital Camera	-	0	-	0	0	0	10	100	10	25
14	Institution Website	8	80	6	60	7	70	7	70	28	70
15	Dept/School Website	-	0	3	30	4	40	4	40	11	28
16	Management/Administrative software packages	1	10	0	0	0	0	1	10	2	5
17	Risograph Machine	1	10	0	0	1	10	1	10	3	8
18	Institutionally-produced educational software	-	0	0	0	1	10	1	10	2	5
19	College e-mail address	8	80	8	80	8	80	10	100	34	85
20	Computer-Networking (Local Area Network)	5	50	5	50	5	50	4	40	19	48
21	Computer -Networking (Wide Area Network)	3	30	3	30	3	30	3	30	12	30
22	Examination scoring machine or OMR reader	-	0	0	0	0	0	0	0	0	0
23	Multimedia classrooms (Audio Visual Centre)	0	0	0	0	0	0	5	50	5	13

Freq = Frequency; % = Percentage. Source: FILED STUDY

Data on Table 1 reveal that items 1,2,3,5,8,9,14,19 and 20 had high frequency and percentage scores for availability of ICT facilities for the management of academic planning task area in colleges of education as follows: 7(70%), 10(100%), 7(70%), 9(90%), 10(100%), 10(100%), 8(80%), 8(80%) and 5(50%) and very low frequencies and percentages for items 4,6,7,10,11,12,13,15,16,17,18,21,22 and 23 as follows: 0(0%), 2(20%), 2(20%), 0(0%), 1(10%), 0(0%), 0(0%), 1(10%), 1(10%), 0(0%), 3(30%), 0(0%), 0(0%) and 0(0%). The summary of the checklist table for academic planning task area show that the internet-connected laptop, internet-connected computers, scanner, institutional cybercafé, CD-ROMS, flash drives, institution website, college e-mail address and computer-networking (Local Area Network) were available ICT facilities for academic planning task area in colleges of education. While Electronic library, fax(facsimile) machines, Department e-mail address, Computer Laboratory, multimedia projector, interactive board, digital camera, dept/school website, management/administrative software

packages, Risograph machine, institutionally – produced educational software, computer-Networking (Wide Area Network), Examination scoring machine (OMR), multimedia classrooms(Audio visual centre) were not available ICT facilities for academic planning task area in colleges of education in South-South, Nigeria.

The data in table 1 also reveal that items 1,2,3,5,7,8,9,14,19 and 20 exhibit high frequency and percentages scores of available ICT facilities for management of staff personnel services in Colleges of Education as follows; 10(100%), 10(100%), 6(60%), 5(50%), 5(50%), 10(100%), 10(100%), 6(60%), 8(80%) and 5(50%). There are low frequency and percentage scores for items 4,6,10,11,12,13,15,16,17,18,21,22, and 23 as follows:0(0%), 2(20%), 1(10%), 0(0%), 0(0%), 3(30%), 0(0%), 0(0%) 0(0%), 3(30%), 0(0%), and 0(0%) respectively. The summary for staff personnel services show that internet-connected laptop, internet-connected desktop computers, scanners institution cybercafé, Department/school email address, CD-ROMs, flash drives, college email address and computer-Networking (LAN) were available ICT facilities, while electronic library, fax (facsimile), machines, computer laboratory, multimedia projector, interactive Board, Digital camera, Dept/School website, management/administrative software, packages Risograph machines , institutionally produced educational software, computer-Networking (Wide Area Network), Examination scoring machine (OMR) and multimedia classrooms (Audio Visual Centre) were not available ICT facilities for management of task area of staff personnel services in Colleges of Education in South South, Nigeria.

The Table also further reveal that items 1,2,3,7,8,9,14,19 and 20 show high frequency and percentage scores of ICT facilities available for management of student personnel services as follows: 8(80%), 9(90%), 8(80%), 10(100%), 10(100%), 10(100%), 7(70%), 8(80%), and 5(50%). There are low frequency and percentages scores for items 4,5,6,10,11,12,13,15,16,17,18,21,22, and 23 as follows: 0(0%), 4(40%), 2(20%), 0(0%), 1(10%), 0(0%), 0(0%), 4(40%), 0(0%), 1(10%), 1(10%), 3(30%), 0(0%), 0(0%), and 0(0%) respectively. The summary of the checklist for task area of student personnel services show that internet-connected laptop, internet-connected desktop computer, scanner, Dept/School email address, CD-ROMs, flash drives, institution website, Colleges email address and computer-Networking (WAN) were available ICT facilities, while electronic library, institutional cyber café, fax (facsimile) machines, computer laboratory, multimedia projector, interactive Board, digital camera, Dept/School website, management/Administrative software packages, Risograph machines, institutionally – produced educational software, Computer – networking (WAN) Examination scoring machine (OMR) and multimedia classrooms (Audio Visual Centre) were not available ICT facilities for management of task areas of student personnel services in College of Education in South South, Nigeria.

The findings is in line with the results of the focus group discussion for students' in the colleges of education which revealed that internet services are not always available and functional, hence the students' are always left at the mercy of private cybercafé's providers outside the school. In addition, the few available ICT facilities are not accessible to student to the extent that some students have not come near the computers since they were admitted into the college.

However, the table finally reveal that items 1,2,3,4,5,8,9,11,12,13,14 and 23 show high frequency and percentage scores respectively of ICT facilities available for instructional services as follows: 10(100%), 8(80%), 9(90%), 7(70%), 9(90%), 10(100%), 10(100%), 7(70%), 6(60%), 10(100%), 7(70%), and 5(50%) and low frequency and percentage scores for items 6,7,10,15,16,17,18,20,21,22 and 23 as follows: 3(30%), 2(20%), 4(40%), 4(40%), 1(10%), 1(10%), 1(10%), 4(40%), 3(30%), 0(0%), and 0(0%) respectively. Therefore, the table shows that internet-connected laptop, internet-connected desktop computers, scanner, electronic library, institution cybercafé, CD-ROMs, flash drives, multimedia projector, interactive Board, Digital Camera, institution website, college email address and multimedia classrooms (Audio Visual Centre) are available ICT facilities for management of different task area in colleges of education. Fax (facsimile) Machines, Department/School email address, computer laboratory, department/ school website, management/administrative software package, risograph machines, institutionally-produced educational software, computer-Networking (LAN) Computer-Networking (WAN) and OMR reader or examination scoring machine (OMR) are not available ICT facilities for management of different task area in colleges of education in South South, Nigeria. The ICT facilities that are available for the management of colleges of education in South South Nigeria are Internet-connected laptop, Internet-connected desktop computer, scanner, institutional cybercafé, departmental/school email address, CD-ROMs, flash drives, institution website, college email address, computer-Networking (Local Area Network).

Research Question Two:

To what extent are the available ICT facilities adequate for effective management of staff personnel services, Students affairs, instructional management and Academic planning of colleges of education?

The data for answering the above research question are provided on Table 2.

Table 2: Mean and standard deviation of adequacy of available ICT facilities in the management of colleges of education. (N = 240)

S/NO	ICT FACILITIES	Mean x	Std. Deviation	Decision	Mean of TASK AREAS			
					Staff.	Student.	Instr.	Acad. P
1	Internet-connected laptop	2.13	1.11	LA	2.29	2.00	2.50	1.33
2	Internet-connected desktop Computer	2.24	1.12	LA	2.13	2.00	2.70	1.67
3	Scanner	2.13	1.01	LA	2.67	1.71	2.23	1.83
4	Electronic Library	2.10	0.95	LA	2.33	1.87	2.00	2.16
5	Institutional Cybercafe	2.57	1.07	A	2.77	2.33	2.53	2.57
6	Fax (facsimile) machines	2.00	1.05	LA	2.00	1.75	2.08	2.00
7	CD-ROMs	2.91	1.09	A	3.28	3.25	2.64	2.85
8	Flash drivers	2.80	1.10	A	3.12	2.80	2.63	2.66
9	Dept/School website	2.30	1.02	LA	2.42	2.16	2.46	1.75
10	Computer Laboratory	2.19	0.98	LA	2.22	2.25	2.16	2.16
11	Multimedia Projector	2.30	1.06	LA	2.33	2.00	2.45	2.16
12	Interactive Board	1.92	1.08	LA	2.60	2.00	1.90	1.33
13	Digital Camera	2.20	1.10	LA	2.20	2.00	2.33	2.00
14	Institution website	2.85	0.92	A	3.57	2.40	2.62	2.66
15	Management/ Administrative software packages	2.33	1.11	LA	2.33	2.75	2.09	2.50
16	Rizograph machine (RZ)	2.04	1.07	LA	2.66	1.80	2.00	1.50
17	Institutionally-produced educational software	1.87	0.82	LA	2.00	1.83	1.75	2.00
18	Computer -Networking (Local Area Network)	2.13	0.98	LA	2.00	2.66	2.00	2.00
19	Computer-Networking (Wide Area Network)	2.00	0.92	LA	2.00	2.40	2.00	1.66
20	Examination scoring machines (OMR)	1.52	0.89	LA	1.60	1.50	1.50	1.50
21	Department / School email address	2.14	1.08	LA	1.57	2.66	2.33	2.00
22	College e-mail address	2.86	0.81	A	2.62	2.85	2.85	3.16
23	CD player	2.55	1.06	A	2.83	3.25	2.41	2.14
24	Multimedia classrooms (Audio Visual Centre)	2.03	0.93	LA	2.25	3.00	1.81	1.57
Cluster mean.		2.33	0.70	LA	2.40	2.30	2.33	2.05

Source: field study

Table 2 showed the mean and standard deviation of adequacy of available ICT facilities in the management of colleges of education in South-South Nigeria. Items 1 to 4 have low scores of 2.13, 2.24, 2.13, and 2.08 with standard deviation of 1.11, 1.12, 1.01 and 0.96 respectively. These indicate that: internet connected laptops,, internet connected desktop computers, scanners and electronic library were less adequate for the management of colleges of education. Item 5 has a mean score of 2.57 and standard deviation of 1.09. This means that institutional cybercafé was adequate for the management of colleges of education. Items 7 and 8 have means scores of 2.91 and 2.80 with standard deviation of 1.09 and 1.10 respectively. These show that CD-ROMs and flash drives were adequately available for the management of colleges of education. Items 9 – 13 have low mean scores ranging from 1.92 to 2.30 with standard deviation ranging from 0.92 – 1.10. these mean that Department/School website (x = 2.30, SD = 1.02), Computer laboratory. (x = 2.19, SD = 0.98), multimedia projector (x = 2.20. SD = 1.06), interactive board (x = 1.92, SD = 1.08), Digital Camera (x = 2.20, SD = 1.10) were less adequate for management of colleges of education. Item 14 have a mean score of 2.85 and Standard Deviation of 0.92. This indicates that institutional website was adequate for the management of colleges of education. Item 15 has a mean score of 2.33 and Standard Deviation of 1.11. This indicates that management/administrative software packages were less adequate for the management of colleges of education. Item 16 have a mean score of 2.04 and Standard Deviation of 1.07. This shows that Risograph machines

(RZ) were less adequate for the management of colleges of education; Item 17 has a mean score of 1.87 and standard deviation of 0.82. This means that institutional produced educational software was less adequate for the management of colleges of education. Item 18 have a mean score of 2.13 and standard deviation of 0.98. This means that computer-networking (Local Area Networking) was less adequate for the management of colleges of education. Item 19 have a mean score of 2.00 and standard deviation of 0.92. This means that computer-networking (Wide Area Network) was less adequate for the management of colleges of education. Item 20 and 21 have mean scores of 1.52 and 2.14 with standard deviations of 0.89 and 1.08 respectively. These mean that examination scoring machine (OMR) and Department/School email addresses were less adequate for the management of colleges of education. Items 22 and 23 have high mean scores of 2.86 and 2.55, and standard deviation of 0.81 and 1.06. These indicates that colleges email address and CD players were adequate for the management of colleges of education. Items 24 have mean scores of 2.03 with standard deviation of 0.93. These indicate that multimedia classroom (Audio Visual Centre) were less adequate for the management of colleges of education. Finally the cluster mean 2.33 and standard deviation of 0.70 indicate that ICT facilities were less adequate for the management of colleges of education in South South, Nigeria. Specifically ICT facilities for staff personnel services with a mean of 2.40, student personnel service 2.30, Instructional service delivery with a mean score of 2.05 and Academic planning with a mean score of 2.05 are less adequate.

Educational Implications

The findings of this have far reaching educational implications for quality teacher education in Nigeria in particular and the global community in general. The results have provided empirical evidence of low state of availability and poor ICT utilization in the administration of colleges of education in South South Nigeria toward E-administration of tertiary institutions for quality teachers education.

The implications of the finding are that the tertiary institutions are not ICT- compliant in the administration of the task areas.

Recommendations

1. The government should equip school ICT laboratories with functioning computers and internet services.
2. The government should institute and enforce ICT literacy and utilization as criteria for promotion of both academic and non-academic administrators in tertiary institutions.

Reference

- Felicia .O. Mormah: Application of ICT in E-Administration in tertiary institutions: prospects and challenges www.globalacademicgroup.com , journals Retrieve. 23/2/18
- Goldrat E.M (1984) The theory of constraints-Retrieved [https://en.wikipedia.org/wiki.Theory-1/3/18](https://en.wikipedia.org/wiki/Theory-1/3/18)
- Hooker, M. (2009). The use of ICT in Teacher Professional Development Dublin, Ireland. Retrieved February 19, 2015 from Mary.hooker@gesci.or
- Jim, R (2012), Retrieve May 19, 2014 from www.tutor2u.net/business/ict/introwhatisict.html
- Nwankwo O.C. (2011) A partial Guide to Research writing for students of research enterprise. (Revised Fourth Edition) Nigeria. Pan-unique publishers Co-Ltd.
- Sapru (2009) Administrative theories and management through. 2nd Edition. New Delin – 110001.

Tradition And Modernity: New Sound Proposals From The Music Schools Of The Federation Of Musical Societies Of The Valencian Community

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Abstract

The Federation of Musical Societies of the Valencian Community (FSMCV) is a democratic association started 50 years ago, which represents and provides support to the 550 associations that integrate it, has the goal of promoting, spreading, and teaching music. It promotes associations and provides society with a way of developing cultural articulation, mainly carrying out its activities within the Valencian Community, although its activity at national and international level is quite notable. This article describes one of the proposals made to commemorate the 50th anniversary of the FSMCV. The Soundcool collaborative creation system was a key part of this project, over 100 students from music schools of the Valencian Community played with their own mobile devices. The creative framework helped by the staging of a story where the main character travelled throughout the Valencian territory favoured the creation of different soundscapes related to the places the protagonist visited. With the proposal of the FSMCV, we reinforce creative commitment through the production of sound by the students of the music schools. The analysis of the experience and the results obtained from introducing elements and creative strategies through new digital tools such as Soundcool, allow for new spaces in the teaching of music students further integrating contemporary languages and creativity, as well as favoring their digital competence.

Türkiye İsviçre Ve Finlandiya Ülkelerinin Okul Öncesi Öğretmenliği Yerleştirme Programları Ve Çok Kültürlülük Bağlamında Karşılaştırılması

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Özet

Bu çalışmanın amacı Türkiye'de, İsviçre'de ve Finlandiya'da uygulanan okul öncesi öğretmen yetiştirme programlarını çok kültürlülük bağlamında incelemektir. Ayrıca üç ülkedeki okul öncesi öğretmen yetiştiren kurumların giriş koşulları, öğretim süreçleri, okul deneyimi ve öğretmenlik uygulamaları, program boyunca alınan dersler, programları bitirme ve öğretmen olabilme koşullarıyla ilgili benzerlikler ve farklılıklar karşılaştırılmıştır. Karşılaştırmalı araştırmalarda kullanılan yaklaşımlardan olan yatay ve tanımlayıcı yaklaşımlar bu çalışmada kullanılmıştır. Araştırma bulguları Türkiye'de çok kültürlü bir programın uygulanmadığını, buna karşın İsviçre'de ve Finlandiya'da çok kültürlü bir programın yer aldığını işaret etmektedir.

Anahtar kelimeler: Okul Öncesi Öğretmen Yetiştirme Programı, Türkiye, İsviçre, Finlandiya, Çok-kültürlülük..

Türkiye’de Arapça İlahiyat Programında Yürütülen Siyer ve İslâm Tarihi Dersi Öğretimindeki Bazı Problemler ve Öğrenci Beklentileri Üzerine Değerlendirmeler

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Öz

Türkiye’de son dört yıl içerisinde öğretim vermeye başlayan Arapça İlahiyat programında Türkçe ilahiyat programlarında olduğu gibi Siyer ve İslam Tarihi dersi bulunmaktadır. Bu dersler birinci ve ikinci sınıfta her iki dönemde de zorunlu olarak yürütülmektedir. Tebliğimizde Türkiye’de Arapça ilahiyat programında yürütülen Siyer ve İslam tarihi dersi öğretimindeki bazı problemler üzerinde durularak bu konudaki öğrenci beklentileri üzerine değerlendirmelerde bulunulacaktır. Problemlerin tespit edilmesinde ve değerlendirmeler yapılabilmesi için Necmettin Erbakan Üniversitesi Arapça ilahiyat Programında okumak da olan öğrencilere bir anket yapılarak bu programın içerisinde Siyer ve İslam Tarihi dersinin mevcut durumunu betimlenmeye çalışılmıştır.

Anahtar Kelimeler: *Siyer, İslam Tarihi, Arapça, İlahiyat Fakültesi.*

Türkiye’de Twitter’ın Demokratik Katılma Etkileri: Sakarya Üniversitesi İletişim Fakültesi Öğrencileri Örneği

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Özet

Sosyal medya, kişilerarası ilişkilerden toplumsal kültüre birçok alanda olduğu gibi siyasal iletişim bağlamında da dönüşüm heyecanı yaratmıştır. Özellikle Twitter, demokratikleşmeye öykünen akademik çalışmalara konu olmaktadır. Kuşkusuz, Twitter üzerinden oluşan siyasal tartışmaların yapıldığı yeni bir kamusal alanın varlığı inkar edilemez. Ancak, bu kamusal alanın niteliği tartışmalıdır. Zira, yeni kamusal alanın demokratik katılıma ne ölçüde etkili olduğu halen belirsizliğini korumaktadır. Şimdilerde, Twitter bir demokrasi idealinin yeni merkezi gibi görünmektedir. Bu çalışmada, Twitter’ın demokratikleşme idealine ne kadar yakın durduğu Müzakereci Demokrasi Modeli çerçevesinde araştırılmıştır.

Çalışmada, demokratikleşme bağlamında öğrencilerin Twitter’da siyasal gündemi takip etme, içerik paylaşma ve tartışma potansiyelini ölçme sorularından oluşan Likert tipi anket tekniğinin kullanıldığı nicel yöntem uygulanmıştır. SPSS 20 programı ile yapılan analiz sonucunda, öğrencilerin Twitter’ı sıklıkla kullandıkları, ancak Twitter’da siyasal katılım gerçekleştirme oranlarının düşük olduğu görülmüştür.

Anahtar Kelimeler: Sosyal Medya, Siyasal İletişim, Siyasal Katılım, Müzakereci Demokrasi Modeli, Twitter, Demokratik Katılım.

Giriş

Dünya, küreselleşme sürecine girmezden önce, medya/geleneksel medya merkezîyetçi bir yapıya sahipti. Ya iktidarların ya da uluslararası güçlerin tekelindeydi. Küreselleşen dünyada ise, internet teknolojilerinin gelişmesiyle birlikte medya araçları da değişime uğramıştır/uğramaktadır. Bu değişim karşımıza yeni medya kavramını çıkarır. Ve yeni medya, geleneksel hegemonyaları yıkmaktadır. Karagöz (2013), yaşanan yeni teknolojik devrim ile yeni bir toplumsal dönemin başladığına işaret etmektedir. Yeni medyayı, “artan bilgi, bireysel iletişime imkan sağlaması etkileşim ve evrensel erişim imkanı sağlaması gibi özelliklerinden dolayı katılımcı demokrasiyi gerçekleştirecek bir araç olarak” (s. 134) değerlendirmektedir. Nitekim, yeni medya, özellikle de sosyal medya dediğimiz iletişim ağları tüm dünyada demokrasi adına önemli bir güç olarak kendini göstermiştir. Bu anlamda, sosyal medyanın özellikleri demokrasi adına elverişli görünmektedir.

Sosyal medyanın katılım özelliği “ilgili olan herkesten geri bildirim almayı ve herkesin katkı sağlamasını teşvik etmektedir” (Aydın, 2015, s.89). Diğer yandan, mesajı gönderen ile alıcı arasında etkileşim sağlamaktadır. Ve bu etkileşim anında gerçekleşmektedir. Sosyal medyanın demokrasi bağlamında bir diğer önemli özelliği topluluk ve grupların hızla ve kolayca oluşmasına imkan tanımasıdır. Aynı şekilde, “sosyal medya ortamında iletişim ağı zincirleme biçimde kurulur. Örneğin, Facebook’ta arkadaşlık kurduğunuz birinin kendi arkadaş grubu da olduğu gibi sizin Facebook alanınıza eklenmiş olur” (Aydın, 2015, s.89). Sosyal medya bu özellikleriyle tüm insanlar için özgürlük fikrini çağrıştırmaktadır. Bu özgürlük, her kimlikten farklı bireyin kendilerini ifade etme olanağına kavuşmasını sağlamıştır. Örneğin, toplumlar dünyanın bir ucundaki insanların kendilerinden daha demokratik bir ortamda yaşadıklarını öğrenebildikleri gibi, başka toplumların yaşadıkları sıkıntılardan da haberdar olmaya başlamışlardır. Diğer yandan, sosyal medya sayesinde politikacılar ve toplum arasındaki etkileşimin arttığı da görülmektedir. Bu da, demokrasi ve özgürlük taleplerinin daha fazla ifade edilmesini sağlamaktadır (Çıldan, Ertemiz, Tumuçin, Küçük ve Albayrak, 2012).

Siyasal iletişim alanında ise sosyal medya, bir yandan siyasi partilere ve liderlere, siyasal iletilerini hedef kitlelere anında ve kolayca iletme, diğer yandan seçmenlere siyasal parti ve liderlerle etkileşime girme, siyasete katılma, içerik yayma ve kendi içeriğini oluşturma imkânı sağlamaktadır (Binark, 2009). Bu durum, siyaset kavramına da yeniden bakma ihtiyacını doğurmaktadır. Siyaset, bir iktidar mücadelesi olarak ya da değerlerin bölüşüm süreci olarak ya da değerlerin bir otoriteye dayanarak dağıtım süreci olarak tanımlanabilen geniş bir kavramdır (Kapani, 1992, s. 19-22). Bu bağlamda, hem bir çatışma alanı olarak görülmekte hem de bir uzlaşma ortamı anlamı taşıyabilmektedir. Sosyal medya ile birlikte, siyasetin ve siyasal iletişimin uzlaşma kültürüne, başka bir ifade ile demokratikleşmeye daha yakın durduğu yolunda bir kanaat oluşmuştur. “Facebook, Twitter, Youtube gibi sosyal paylaşım ağları milyonlarca insanı toplayarak yeni bir kamusal alan sağlarken, muhalif seslerin de yükseldiği yeni agoralar gibi değerlendirilmektedir. Özellikle Ortadoğu’daki büyük değişimle birlikte yaşanan süreçte yeni medya devrimci bir medya gibi ileri sürülmektedir ” (Karagöz, 2013, s. 132).

Kamusal alan kavramı, kamunun ne olduğu ve kamusal alanda kimlerin yer alacağı ile ilgili olarak üzerinde çokça tartışılmış bir kavramdır. Örneğin, Emmanuel Kant sadece özel mülk sahiplerinin kamusal alanda yer alabileceklerini yani burjuva kamusallığını savunurken, Karl Marx ücretli işçiler de dahil olmak üzere, herkesin kamusal alanda söz söyleme hakkına sahip olduğunu söyler (Habermas, 2017, s. 199-234). Habermas'a (2017) göre, "kamusal alanın asıl ödevi bir toplumun siyaset ile ilgili eleştirel kamusal tartışmada akıl yürütmesidir" (s. 52). Bugün, sosyal medyanın etkinliği Habermas'ın idealize ettiği toplumun bütün bireylerinin katılabilirdiği ve eleştirel akıl yürüttüğü kamusal alan fikrini yeniden canlandırmıştır. Sosyal medya platformlarının, pek çok kullanım tercihinin yanı sıra bu amaç için de kullanıldığını söylemek ise yanlış olmaz. Akademik çalışmalarda, örneğin Twitter'in *Arap Baharı*, *Wall Street'i işgal et* ve *Gezi Parkı* hareketlerindeki etkinliği bu duruma örnek gösterilmektedir (Köseoğlu ve Al, 2013).

Buna göre, devlet ile ilişkilerinde daha önce pasif konumda olan halk kitleleri sosyal medyanın gücü ile aktif hale gelmişlerdir. Bu durum önceden yerleşmiş geleneksel sistemin kültürel kodlarını birey merkezinde değiştirmiştir. Twitter gibi sosyal medya araçları sayesinde sosyal medya kişinin kendini ifade edebilmesini, kendini ait hissettiği örgütlü yapılara dâhil olmasını sağlayan bir platforma dönüşmüştür. Bu tip sosyal medya araçları organizasyon kurmak, organize olmak, fikirleri paylaşmak, belli inanç ve düşünceler etrafında toplanabilmenin yolunu açmıştır. Bu yeni yapı, rejim değiştirmeye yönelik hareketleri başlatmak üzere kamuoyunu harekete geçirecek güce değerlendirilmektedir (Eren ve Aydın, 2014, s. 198). Bir mikroblog uygulaması olan Twitter, sosyal medya platformları arasında oldukça popülerdir. "Mikroblog uygulaması; blog, anlık mesaj ve durum güncelleme gibi unsurları bir araya getiren devrim niteliğinde melez bir iletişim yöntemidir. Buna olanak veren olgu da, katılım ve geribildirimle dayalı bu kadar akıcı bir sosyal ağ içerisinde bu tür kısa güncellemeleri yayımlamanın kolaylığıdır" (Dağıtmaç, 2015, s. 51). Twitter, günümüzün en popüler mikroblog uygulaması olarak değerlendirilmektedir. Zira bütün dünyada, yaygın ve yoğun bir şekilde kullanılmaktadır (Dağıtmaç, 2015, s. 54).

Türkiye, sosyal medyanın siyasal hayattaki varlığına, gerçek anlamda ilk defa *Gezi Parkı Direnişi* sırasında Twitter'daki enformasyon trafiği ile şahitlik etmiştir (Binark, Karataş, Çomu ve Koca, s. 125). Bu noktada, sosyal medyanın gerçekten demokratikleşmeye hizmet edip etmediği tartışılması gereken bir konudur. Zira, bireylerin sosyal medyada siyasi içerik paylaşarak ya da tartışmalara katılarak sanal bir aktivizm içinde oldukları, bu faaliyetlerin demokratikleşmeye zannedildiği gibi fayda sağlamayacağı da diğer bir karşıt görüştür (Morozov 2009'dan Aktaran Fuchs, 2016, s. 260). Sosyal medyanın eleştirisinde, Twitter *sözde bir kamusal alan* olarak değerlendirilmektedir. Bu yaklaşımın en önemli dayanağı, "Twitter'da güçlüler (özellikle eğlendirici kişiler ve ünlüler) toplanma ve örgütlenme özgürlüğü alanında tanıtım açısından etkili ve siyasal açıdan belirleyici bir oligopolü ellerine tutarlar" (Fuchs, 2016, s. 278) biçiminde ifade edilmektedir. Dolayısıyla, Habermas'ın söylediği gibi kamusal alan burjuva sınıfının tekelinde olmaya devam mı etmektedir?

Şener, Emre ve Akyıldız'ın (2015, s. 91), sosyal medyanın siyasal katılıma etkilerini inceledikleri çalışmalarında *Gezi Parkı Direnişi* ile ilgili anket sonuçlarına göre yaptıkları değerlendirmede, Türkiye'de Twitter'ın zannedildiği gibi yaygın olmadığını, katılımcıların büyük çoğunluğunun protesto gösterileri ile ilgili haberleri televizyon ya da gazetelerden takip etmeyi tercih ettiklerini, Twitter'ın bu anlamda önemli bir etkisi olmadığını ifade etmişlerdir. Bu sonuç, Türkiye'de Twitter kullanıcılarının bir kamusal alan oluşturma potansiyeli hakkında bir kez daha düşünmeyi gerektirmektedir. Böylelikle, Türkiye'de sosyal medyanın demokratik katılıma ne ölçüde etki ettiği anlaşılabilmektedir.

Amaç

Sosyal medya eleştirisinde, teknolojik determinizm kavramsallaştırmasına göre, teknoloji ya olduğundan daha iyi ya da daha kötü algılanmaktadır/algılanması sağlanmaktadır. Buna göre teknolojik determinizm, tekno-iyimserlik ve tekno-kötümserlik olarak iki açıdan ele alınmaktadır. Tekno-iyimserlik, Twitter devrimine ve Twitter'ın kamusal alanı demokrasinin lehine güçlendireceğine dair inançla ilgilidir. Tekno-kötümserlik ise, 2011 yılında İngiltere'de meydana gelen isyanlarda, isyancıların *Twitter Çeteleri* olarak adlandırılmasıyla başlamış, hırsız ya da haydutların Twitter'ı amaçları doğrultusunda kullandıklarına dair olumsuz inançtır (Fuchs, 2016, s. 279).

Eleştirel kurama göre, Twitter konusunda bu denli iyimser ya da kötümser olmak teknolojinin gücünü abartmak yani teknolojik determinizmdir. Teknolojik determinizm kavramı, kabaca bütünü görebilme sorunsalına işaret etmektedir. Örneğin eleştirel kuramcılar, teknolojik determinizmin, olayların ya da olguların ekonomi politik boyutunu görememekten kaynaklandığını savunmaktadırlar (Fuchs, 2016, s. 281). O halde, bütünü görebilmek adına günümüzün ekonomi politik koşullarını akılda tutmakta fayda vardır. Dünya, Soğuk Savaş'ın sona erdiği tarihten günümüze küresel liberal politikaların yön verdiği bir sistemde dönmektedir. Ve tanık olduğumuz demokrasi kavramı bu sistemin dışında düşünülemez. Buna göre; "İnternet temsili demokratik sisteminin kurumsal sınırları içerisinde işleyen ve işlevleriyle bu sisteme katkı sağlayan bir konuma sahiptir" (Demirhan, 2017, s. 179). Aynı şekilde, Aziz'in (2003), "belli ideolojik amaçlarını, toplumda belli gruplara, kitlelere, ülkelere ya da bloklara kabul ettirmek ve gerektiğinde eyleme dönüştürmek, uygulamaya koymak üzere siyasal aktörler tarafından çeşitli iletişim tür ve tekniklerinin kullanılması ile yapılan iletişim" (s. 3) biçimindeki siyasal iletişim tanımı mevcut sistem içinde yadırganamaz. Diğer yandan, siyasal iletişimin "siyasette denetim ve şeffaflığı sağladığı" (Özkan, 2004, s. 38) yönünde bir yaklaşım da mevcuttur. Bu yaklaşım, siyasal iletişimin demokratikleşmesine vurgu yapmaktadır.

Demirhan (2017), liberal demokrasi, müzakereci demokrasi ve agnostik demokrasi yaklaşımlarını ele aldığı çalışmasında, demokrasi ve siyasal katılım hakkında geniş bir kapsam sunmaktadır. Buna göre; “Liberal modelde siyasal iletişim sürecinde katılımcı demokrasi anlayışından farklı olarak tabandan katılım aktörlerini güçlendirmek gibi bir hedef bulunmamaktadır. Bu modelde siyasal elitler siyasal iletişim sürecinde etkin olan temel aktörlerdir” (s. 178). Müzakereci demokrasi modelinde ise, sadece oy kullanmak siyasal katılım anlamına gelmemektedir (Demirhan, 2017, s. 179). Müzakereci demokrasi modeli, müzakere kavramının esasları üzerinde temellenmektedir. Müzakerenin usülleri, “iletişim sürecinde eşitlik, özgürlük, katılım, rasyonellik ve etkileşim öğelerini düzenlemeye yöneliktir” (Demirhan, 2017, s. 181). Bu modele göre, siyasal iletişimin amacı, ortak karar alma ve rasyonel uzlaşa sağlamaktır. Ayrıca, siyasal iletişim ortamı dikey bir hiyerarşik bir alan olarak değil yatay biçimde örgütlenmiş iletişim ağlarını ifade etmektedir (Demirhan, 2017, s. 182). Dolayısıyla, yeni medya ve sosyal medya platformlarının müzakereci demokrasi modeli için çok uygun bir ortam hazırladığını söylemek zor değildir.

Özellikle, mobil iletişim teknolojilerinin yaygınlaşması, herkesin doğal bir şekilde bu yeni ortamda yer almasını sağlamaktadır. Sosyal medya platformları, insanların yazılı ve görsel pek çok içeriğe ulaşmasına ve kendi içeriklerini paylaşmasına imkan sağlayan yeni bir yaşam biçimini oluştururken, her türlü sosyal medya platformuna erişim sağlayan akıllı telefonların sahneye çıkmasıyla bu yeni yaşam biçimi durmadan pekişmiştir/pekişmektedir. O halde, müzakereci demokrasi modelin işlerlik kazanması büyük ölçüde sosyal medya kullanıcılarına bağlıdır. Bu noktada, ilk olarak mobil iletişim teknolojilerini ve sosyal medya platformlarını etkin bir şekilde kullanan genç nüfus akla gelmektedir. Özkan’a göre (2004), gençler internetin imkanlarını kullanarak siyasal aktörleri daha iyi tanıyabilmekte ve siyasal gündemden haberdar olarak ülke sorunlarına karşı duyarlı hale gelmektedirler (s. 97). Şener, Emre ve Akyıldız (2015), “ ‘örgütsüzlerin’, genç kuşağın, toplumda sınırlara itilen kimliklerin bulunduğu *Gezi Parkı Direnişi*, sosyal medya kullanımını da etkileyerek sosyal ağları direnişin mekânları haline getirmiş, yeni alternatif katılım ağlarının doğmasına vesile olmuştur” (s. 97) şeklindeki yorumlarıyla, gençlerin demokratikleşme anlamında önemli bir rol üstlendiğine dikkati çekmektedirler.

Bu beklenti, teknolojik determinizm değerlendirmesinin dışına çıkmayacak bir hayal midir? Yoksa, müzakereci demokrasi modelinde olduğu gibi, Türkiye’de sosyal medya platformlarının katılımcı, özgür, eşitlikçi bir siyasal iletişimi sağlama noktasında beklenen etkinliği gösterme potansiyeli var mıdır? Bu sorular, halen belirsizliğini korumaktadır. Bu nedenle, Twitter aracılığı ile yürütülen siyasal faaliyetlerin Türkiye’de gençleri ne oranda etkilediği ve yönlendirdiği incelenmeye değer görülmüştür. Böylece, Twitter’da hız kazanmış görünen siyasal iletişimin gerçek dünyada siyasal katılımı ve demokratikleşmeyi artırıp artırmadığının müzakereci demokrasi modeli bağlamında ortaya konulması amaçlanmıştır.

Önem

İnternetin gelişimi siyasal tartışmalar ve siyasal katılımın sanal ortamda da yapılmasını mümkün kılmıştır. İletişim teknolojilerindeki gelişmeler ve internet, sanal platformda yeni bir kamusal alan sağlamış ve demokrasi olgusu gitgide sanallaşmaya başlamıştır. Bu durumun olumlu yanı katılım düzeyinde artış sağlaması fikridir. Küreselleşmenin öne çıkan iletişim aracı olan internet toplumsal muhalefetin etkileşimini artırmıştır. İnternet, kullanıcıların ortak bir siyasal bilince ulaşmalarını sağlamaktadır. Bu da egemen güç karşısında doğrudan muhalefet sergileyebilme olanağını doğurmaktadır (Karaçor, 2009).

Diğer yandan, geleneksel medyanın güvenilirliğinin tartışmalı olduğunu söylenebilir. Bu güvenilirlik sorununa karşı halkın isteklerini ve şikâyetlerini hükümete iletebilmesi sürecinde de en önemli araç internettir. İstek ve şikâyetlerin yazarak yönetime iletebiliyor olması iletişim teknolojilerindeki gelişmelerin katılım mekanizmasını geliştirdiği ve yönetimleri daha aktif kıldığını gözlemlemekteyiz. İnternetin temsili sisteme aracılık eden bir teknoloji olduğunu söyleyebiliriz. İnternetin bilgi yayılmasındaki hızı ve ucuzluğu siyasi kampanyalara önemli katkıları olan bir yapı haline gelmesini sağlamıştır. Yeni iletişim teknolojileri siyasal iletişimi geliştirici ve yaygınlaştırıcı faaliyetler üstlenmişlerdir. Bu faaliyetler ile yeni medya ve sosyal medya platformları çoğulcu ve katılımcı bir sistemin oluşturulmasında önemli bir noktada bulunmaktadırlar (Karaçor, 2009).

Sosyal medya platformları bu anlamda beklentilerle doludur. Özellikle Twitter, tüm dünyada *Arap Baharı*, *Wall Street’i İşgal Et* gibi hareketler nedeniyle, devrimsel bir anlama bürünmüştür. Öyle ki, bu hareketler *Devrim* (Bostancı, 2014, s. 88) olarak değerlendirilmiş, demokratikleşme ve siyasal katılım anlamında yeni bir umudun oluşmasına yol açmıştır. Örneğin, *Arap Baharı* 2010 yılında başlayan bir dizi sokak hareketleri zinciridir (Milliyet, 2013, 2 Ağustos). *Arap Baharı* sürecinde halkların meydanlara akın etmesinde sosyal medyanın etkisinin hayli fazladır. Akıllı telefonlar ile insan hakları ihlalleri ve olumsuzluklar anında dünyaya servis edilebilmiştir. Hatta, buna karşı koyamayan diktatörler koltuklarını bırakmak ya da daha demokratik haklar sunmak zorunda kalmışlardır (Toprak, 2014, s. 242-248).

New York’ta 17 Eylül 2011’de aktivistler tarafından başlatılan Wall Street’i İşgal Et hareketi de benzer biçimde sosyal medya aracılığı ile kısa zamanda Amerika’ya hatta dünyaya yayılmıştır. Hareketin amacı, özetle küresel ekonominin kurallarını belirleyen bankalar, çokuluslu şirketler ve zenginlere karşı mücadele etmektir. Wall Street’i İşgal Et, *Arap Baharı*’nın taktiklerini model almıştır (İhlas Haber Ajansı, 2011, 6 Ekim). Bu taktikler başarılı olmuş olacak ki, hareket kısa zamanda diğer ülkelere de yayılmıştır. Dünyanın birçok şehrindeki borsa

piyasalarına karşı aynı gün içerisinde protesto gösterileri ve işgal et kampanyaları başlatılmıştır. Bu harekette, Twitter, Facebook, Youtube ve hareketin resmi sitesi *occupywallst.org* organizasyon için etkin bir şekilde kullanılmıştır (Çıldan, Ertemiz, Tumuçin, Küçük ve Albayrak, 2012). Ancak, aktivistlerin liderliğinde gerçekleşen (Köseoğlu ve Al, 2013, s. 114) her iki hareketin de, demokrasi bağlamında bireylerin sosyal platformlarda oluşturduğu bir kamusal alan olup olmadığı ise tartışmalı bir konudur. *Gezi Parkı Direnişi* ile ilgili olarak da benzer şüpheler bulunmaktadır (İhlas Haber Ajansı, 2013, 1 Haziran). O halde, öncelikle neyin demokratik katılım olduğunu açıkça ortaya koymak, bir grup insanın her hareketini demokratikleşme olarak nitelendirmeye yönelik karışıklığı ortadan kaldırmak gerekmektedir.

Demokrasinin en bilinen tanımı, halkın yönetime katılmasıdır (Karaçor, 2009, s. 123). Dolayısıyla, siyasal katılımı zaten kendiliğinden ifade eder. Sosyal medyanın siyasal katılımı arttırmadığından elbette söz edemeyiz. Ancak bu katılım, liberal sistemin kuralları çerçevesinde gerçekleşmektedir. Başka bir ifadeyle, siyasal katılımın var olması katılımcı demokrasinin var olduğu anlamına gelmemektedir. Diğer yandan, Twitter aracılığı ile yayılan toplumsal hareketler, temsili demokrasiden katılımcı demokrasiye geçişin mümkün olup olmadığını tartışmaya açmıştır. Bu durum bizleri demokrasi üzerine yeniden düşünmeye sevk eder. Robert A. Dahl, demokrasinin beş ana kriterini belirlemiştir. “Bunlar; etkin katılım, oy kullanma eşitliği, bilgi edinebilme, gündem üzerine son sözü söyleme hakkı ve yetişkinlerin dahil olmasıdır” (Dahl, 2001’den Aktaran Karaçor 2009, s. 123). Bu kriterler arasında, siyasal katılım açısından kilit kavram *gündem üzerinde son sözü söyleyebilme* hakkıdır. Türkiye’de *Gezi Parkı Direnişi* de akademik olarak bu kapsamda değerlendirilmeye çalışılmıştır. Fakat, *Gezi Parkı* eylemlerinde Twitter’a yüklenen anlamın ne oranda gerçekçi olduğu ve eylemleri hazırlayan ve oluşturan nedenlerin ve Twitter’ın etkinliğinin iyi değerlendirilip değerlendirilmediği tartışmalıdır. En önemlisi, Türkiye’de üzerinden yaklaşık dört yıl geçen *Gezi Parkı Direnişi* sonrası katılımcı demokrasi anlamında bir ilerleme kaydedilip kaydedilmediğidir.

Bu çalışmada, Türkiye’de Twitter ile ilgili katılımcı demokrasinin gerçekleşmesine yönelik inancın doğruluğu ortaya konulmaya çalışılmıştır. Çalışma, sosyal medya aracılığıyla oluşan siyasal hareketler ile sınırlı tutulmamış, demokratik katılımın bütün kriterleri göz önüne alınarak, bireylerin Twitter’da gerçekleştirdikleri siyasal faaliyetler değerlendirilmeye çalışılmıştır. Bu anlamda, alana Twitter çerçevesinde kapsamlı bir demokratik katılım perspektifi kazandırılması umulmaktadır.

Kuramsal Temel

Hepimizin bildiği üzere ideal ve arzulanan demokrasi tipi doğrudan demokrasidir. Ancak teorik olarak en ideal sistem olsa da pratikte uygulamada bu sistemin modern devasa nüfus kitlelerinden oluşan sistemlerde uygulanabilmesi en azından günümüzde pek mümkün değildir. Doğrudan demokrasinin uygulanabilirliğinin durumu daha işleyebilir model olarak *temsili* kavramını içeren demokrasi yapısını ortaya çıkarır. Temsili yapısına bağlı olarak, birçok farklı demokrasi kavramı karşımıza çıkar (ekonomik, sosyal, ilerici, radikal, birleştirici, liberal vs.). Uygulanan yapıdan ideal kabul edilen demokrasi modeline doğru gidildikçe modern demokrasi yapıları belirginleşmeye başlamıştır. Bunlardan en öne çıkanı temsili, çoğulcu ve katılımcı demokrasi olarak karşımıza çıkar. Son yıllarda müzakereci demokrasi kavramının da bunlara eklendiğini görürüz. Türk Dil Kurumu’na göre müzakere kavramı “Bir konuyla ilgili fikir alışverişinde bulunma, oylasma” şeklinde tanımlanmaktadır (Türk Dil Kurumu, 2017).

Müzakereci demokrasi ise, her türlü sorunun çözüm aşamasında danışma ve karşılıklı görüşmeye önem veren bir yapıdır. Müzakereci demokrasi, liberal demokrasinin değişerek gelişen toplumların sorunlarının çözümünde yetersiz olduğu düşüncesi ile öne çıkan alternatif bir modeldir. (Kaypak, 2012, s. 174.) Müzakereci demokrasi katılım arar. Sadece katılım aramakla kalmaz, bir karar verilecekse bu karar ile ilgili olarak tüm bireylerin/vatandaşların eşit katılımı savunulur. Bundan hareket ile müzakereci demokrasi vatandaşların mevzu bahis olan konuya dair bilgilerini ortaya koyarak paylaşım sağladığı, toplumsal konuları konuştuğu, toplumu ilgilendiren konulara dair fikirlerin belirlendiği ve siyasi süreçlere katıldığı söylemci sosyo-politik bir sistemdir (Akdoğan, 2007, s. 38-39).

Liberal demokraside var olduğu iddia edilen temsiliyet krizine bir alternatif olarak karşımıza müzakereci demokrasi çıkar. Bu model, siyasi kararların alınmasını müzakere ve diyalog süreci ile ilişkilendirmektedir. Tabi bu müzakere sürecinin özgürce olması gereği önemlidir. Ön yargının olmadığı, kapsamlı, açık, eşit, şekilde yapılan bir müzakere süreci ister. Temsiliyet krizinin aşılması ile liberal demokrasinin meşruiyet krizinin de aşılabacağına işaret ederek bunun aşılmasının müzakereci demokrasi ile olacağı fikri kabul edilmektedir. Müzakereci demokrasi, temsil yerine vatandaşların karar alma sürecine katılmalarını, kararların müzakere ile alınması gereğine vurgu yapmaktadır (Eren ve Özden, 2014, s. 165).

Müzakereci demokrasi, Habermas’ın iletişimsel eylem kuramından yola çıkarak, Seyla Benhabib’in siyasal alanda yapılandırılan kuralların ve yasaların vatandaşların katılımı ile eşitlikle gerçekleştirilen müzakere süreçleri ile meşru bir yapı kazanmasını öngören modelidir (Aydın, 2017, s. 140).

Bu modelin çabası kararları etkileyen kültürü, geçmiş sistemleri, hukuksal kuralları sisteme uyarlamaktır. Dolayısıyla, Habermas’ın demokrasi modeli, siyasal sistemin ötesine genişleyerek, kamusal alan olarak isimlendirilen karmaşık ve geniş bir iletişim ağına yayılmaktadır (Satıcı, 2014, s. 144). Habermas’ın (2017, s. 107)

kamusal alan olarak ortaya koyduğu yapı katılımcıların kendi görüşlerini açık ve özgürce tartıştıkları bir platformdur. Habermas, vatandaşların eşitçe, eleştirel bir şekilde ve rasyonel olarak tartışabilmesini demokrasi için olmazsa olmaz kabul eder. Habermas'ın kamusal alanı müzakereci demokrasi ile bir bütün kabul edilir.

Müzakereci demokrasi anlayışı iletişimsel eyleme dayanır. Bu anlayışta toplum devletin çevresinde eklenmiş tek parça bir bütünden oluşmaz. Zira eğer ki demokrasi bağımsız yurttaşların kamu yararına akıl kullanımının kurumsallaştırılması şeklinde algılanıyor ise, ne devletin ne de bir başka kurumun merkezi rolüne ihtiyaç olmaz. Bu modelde birçok değere dair çoğulculuk var olsa da ortak yarara ilişkin kabul edilebilir formülasyonlara ulaşmak amaçlanır. Çıkar çatışmalarının söz konusu olmasına rağmen, insanlar işbirliği koşullarının varlığına ikna edilmez. Mağdur olan kişilerin bakış açılarını ortaya koyma şansının olduğu birlik oluşturma tarzları çoğulculuğuna öncelik tanınmaktadır. Bu demokrasi yapısı toplumsal bütünleştiricilik işlevini, meşrulaştırıcı gücünü, vatandaşlar arasında yapılan kamusal müzakereden almaktadır (Yükselbaba, 2008, s. 232).

Bu demokrasi yapısında iki aşama söz konusudur. İlki kamusal alandaki müzakerelerdir. İkincisi bu müzakereler sonucunda ele edilen kararların seçimler ile parlamentoya taşınır ya da iktidar uygulamaları veya yasalar şeklinde yurttaşlara geri yansır. Karar alma sürecindeki katılımın sağlanması ile sistem meşru hale getirilmiş olur. Habermas (1999, s. 47), demokrasinin tamamlayıcısı olarak kabul ettiği hukuk sisteminin kurucu unsuru olarak iletişimsel eylemi, müzakere sürecini görür. Ortak katılımın varlığı, demokratik adalet prosedürlerin işleyişi ile sağlanır. Bu sayede yasa yapma işlemi vatandaşa devredilmiş olacaktır. Bu durum da doğrudan demokrasiyi andıran bir rejimin ortaya konulmasını sağlar.

Özetlemek gerekirse, müzakereci demokrasi modelinde, vatandaşlar eleştirel ve özgür bir biçimde siyasal karar alma sürecine katılabilmektedir. Ayrıca, sürece katılan vatandaşlar, bu katılda eşit olmalıdırlar. Müzakere süreci, sadece ortak faydaya odaklanmalı, ortak faydaya yönelik olmayan hiçbir karara varılmamalıdır. Diğer yandan, bu süreçte siyasal diyalog, karşılıklı olarak birbirini anlamaya çalışma ve başkalarının fikirlerine saygı gösterme önemli nüanslardır. Bu durum, toplumun ortak faydasının en yukarıda tutulması gerektiğini ifade etmektedir. Ayrıca, anlaşmazlıkların çözülmesinde, siyasal diyalog en makul çözüm olarak öne çıkmaktadır (Young, 1999, s. 176, Tunç, 2008, s. 1128).

Literatür Taraması

Yapılan literatür taraması sonucunda bulunan araştırmalardan birincisi (Aydın, 2015); sosyal medya ve özellikle twitter hakkında kapsamlı bir açıklama sunmaktadır. Sosyal medyanın günlük yaşamımızı nasıl değiştirdiğine vurgu yapan çalışmada, sosyal medya kavramı “bireylerin internet üzerinden yer ve zaman sınırlaması olmaksızın fikirlerini ve görüşlerini belirtmelerine olanak sağlayan, internetin sunduğu multimedya özelliklerini sınırsız bir şekilde kullanım imkanı tanıyan, aynı zamanda başka bireyler ile görüş alışverişine ve paylaşımına dayalı bir interaktif ortamın varlığını hayata geçiren geniş tabanlı platform” (Aydın, 2015, s. 82) olarak tanımlanmıştır.

Sosyal medyanın özellikleri ise, Katılım; Açıklık; Konuşma; Topluluk; Bağlanmışlık/Bağlantılı Olma; Anındalık; Küçük Grup İletişimi; Multimedya; Uzamsızlık; Zincirleme İletişim ve Aşırı Enformasyon olarak sıralanmıştır. Bu çalışma, sosyal medyanın anılan özelliklerinden katılım, anındalık, topluluk, küçük grup iletişimi ve zincirleme iletişim özellikleri ile yakından ilişkilidir. Örneğin katılım özelliği, herkesin sosyal bir platforma katılabileceğini ifade etmektedir. Buna göre, bireyler kendi içeriklerini oluşturabilmekte ve yayabilmektedirler. Böylece, kitle iletişim araçlarının tek yönlü geleneksel iletişiminin dışına çıkan yeni bir iletişim biçimi ortaya çıkmaktadır.

Sosyal medya platformları arasında, özellikle Facebook, Twitter, Instagram, Foursquare, Pinterest Twitter ön plana çıkmaktadır. Bu çalışmanın Twitter ile sınırlandırılması nedeniyle Twitter ele alınmıştır. Aydın'a göre (2015) Twitter, “kullanıcıların (kişiler ya da kurumlar) ne yaptıklarını, düşüncelerini, görüşlerini, fotoğrafları ya da başka kullanıcılara ait içerikleri paylaştıkları ve 140 karakterle sınırlı olan bir mikroblog servisi olarak tanımlanabilir” (s. 84). Twitter'ın en önemli fonksiyonu, *retweet* özelliğidir. Retweet özelliği sayesinde, herhangi bir içeriğin hızla çok geniş bir kitleye yayılması mümkün olabilmektedir. Demokratik katılım bağlamında, Twitter'ı elverişli kılan ya da elverişli olduğu varsayımını ortaya çıkaran da tam olarak budur.

İkincisi; Karagöz'ün (2013), *Yeni medya çağında dönüşen toplumsal hareketler ve dijital aktivizm hareketleri* isimli çalışmasıdır. Çalışmada, iletişim teknolojilerinde meydana gelen gelişmelerin toplumsal hareketleri nasıl etkilediği araştırılmıştır. Bireyler, siyasal iktidara taleplerini iletebilmek ve örgütlenebilmek için yeni medya teknolojilerini kullanmaktadırlar. Karagöz (2013), Genç Siviller, Greenpeace ve Chance.org hareketlerini inceleyerek dijital aktivizm hareketlerinin yeni medyayı nasıl kullandıklarını ortaya koymaktadır. Buna göre, dijital aktivizm hareketleri demokratik katılım anlamında, önemli bir dönüşüm yaratmaktadır. Buna göre, “Yeni medya radikal medya görevi üstlenmiş ve konvansiyonel medyanın göz ardı ettiği grupların sesini duyuran bir kanala dönüşmüştür. Daha dünyanın çok farklı birbirine uzak kitlelerini eylem gruplarının birbirinden haberdar olmasını da sağlamıştır. Arap baharı, Greenpeace eylemleri gibi hareketler bu sayede yerel değil küresel ölçekte etkiler uyandırmaya başlamıştır” (s. 152).

Yeni medyanın aktivizm hareketleri bağlamında bu denli önemsenmesi, üzerinde düşünülmesi gereken bir konudur. Zira, bu anlayış yeni medya teknolojilerine kendi başına devrimci bir nitelik yüklenmesi sonucunu doğurmaktadır. Bu çalışmadan, yeni medya teknolojileri ve sosyal medya platformlarının siyasallaşma ve demokratik katılım anlamında dönüştürücü etkisini savunan bu yeni anlayışın kavranması bakımından

yararlanılmıştır. Karagöz (2013), Facebook, Twitter, Youtube gibi sosyal medya platformlarının, bireylerin ifade özgürlüğünün arttırdığı ve kolayca örgütlenebildikleri yeni bir kamusal alan oluşturduğu iddiasında bulunmaktadır ki, *Arap Baharı*'nın gerçekleştirdiği değişim tamamen bu kamusal alanın etkinliğine bağlanmaktadır. Hatta, bir süre sonra bireylerin aktivist hareketlere ihtiyaç duymaksızın bu yeni kamusal alanda doğal olarak örgütleneceklerini öngörür. Bu da bizleri *Arap Baharı* gibi toplumsal hareketleri ve bu hareketlerin sosyal medya ile ilişkisini yeniden düşünmeye sevk etmektedir.

Üçüncüsü; Köseoğlu ve Al'ın (2013) *Arap Baharı, Wall Street'i İşgal Et, Gezi Parkı Direnişi* gibi toplumsal hareketleri inceledikleri çalışmalarıdır. Mevcut çalışmada, sosyal medya platformları bir propaganda aracı olarak ele alınmaktadır. Köseoğlu ve Al (2013), internet teknolojilerinde gerçekleşen değişimin bireylerin iletişim alışkanlıklarını değiştirdiğini, diğer yandan siyasal iletişim ve propagandanın biçiminin de değiştiğini ifade etmektedirler. Bu nedenle, sosyal medyanın yalnızca toplumsal hareketler bağlamında değil, siyasal propaganda işlevi bakımından da ele alınması gerekmektedir. Zira, siyasal propaganda işlevi, demokratikleşme anlamında olumlu kabul edilmektedir. Yine *Arap Baharı, Wall Street'i İşgal Et* gibi toplumsal hareketler süresince sosyal medya platformlarının başarısından söz eden bu çalışmadan, bu hareketlerin nasıl organize edildiği hakkında fikir edinmek üzere yararlanılmıştır. Buna göre;

“Yapılan araştırmalarda, Arap Baharı olarak adlandırılan halk hareketlerinden önce ve bu hareketler süresince başta Facebook olmak üzere, Twitter, Instagram ve Youtube özellikle göstericiler tarafından kitleleri harekete geçirme ve hareketin dünya kamuoyuna duyurulmasında etkin birer araç olarak kullanılmıştır. Bunun da ötesinde söz konusu sosyal medya araçları, bu hareketlere meşruiyet kazandırma anlamında da birer propaganda aracı olarak aktif rol üstlenmişlerdir” (Köseoğlu ve Al, 2013, s. 112).

Sosyal medyanın siyasal propaganda aracı olarak kullanılmasının demokratikleşme anlamında avantajlarının vurgulandığı çalışmaya göre, internet teknolojilerine ulaşabilen her bireyin “bir siyasal aktör olarak propaganda yapabilme, taraftar toplayabilme ve siyasal sistemi etkileyebilme şansı bulunmaktadır” (Köseoğlu ve Al, 2013, s. 122). Diğer yandan, bu durum demokratikleşme anlamında heyecan verici bulunmaktadır. Temsili demokrasiden katılımcı demokrasiye geçişte sosyal medyanın sürece ivme kazandıracağı ileri sürülmektedir ki, bu iddianın en önemli dayanağı toplum içerisindeki her bireyin ve grubun kendini ifade etme şansının bulunmasıdır.

Dördüncüsü; Karaçor'un (2009), yeni iletişim teknolojileri bağlamında siyasal katılım ve demokrasiyi ele aldığı çalışmasıdır. Bu çalışmada, demokrasi bireylerin birbirlerine saygı gösterme ve siyasal katılım sağlama düzeylerine göre değerlendirilmiştir. Medya ise, bireylerin siyasal katılım gerçekleştirmelerinin önemli bir yoludur. Bu noktada medyanın işlevi, her bir bireyin düşüncesine yer vermek olacaktır. Yeni iletişim teknolojileri ile birlikte, medyanın bu işlevi de geleneksel olmayan yollarla gerçekleşmektedir. En basit anlatımla, “yeni iletişim teknolojileri ve siyasal iletişim çalışmaları sayesinde bireylerin seçim zamanlarında hangi siyasal partiye ya da adaya oy vereceklerini belirlemeleri daha kolay ve etkili olmaktadır” (Karaçor, 2009, s.130).

Diğer yandan, yeni iletişim teknolojileri, seçim zamanlarıyla sınırlı olmayan bir siyasal katılım olanağı sunmaktadır. Bireyler, sosyal ağlar aracılığı ile siyasal tartışmalara katılabilmekte, kendi siyasal fikirlerini ifade edebilmektedirler. Ayrıca, yeni iletişim teknolojileri sayesinde, bireyler kendilerinden düşünce, etnisite, inanç vs. bakımından farklı olanlarla karşılaşabilmekte ve iletişim kurabilmektedirler. Tüm bunlar, Karaçor (2009) tarafından demokrasinin gelişmesini ve yaygınlaşmasını sağlayan gelişmeler olarak nitelendirilmiştir.

Bu çalışmadan, ayrıntılı bir şekilde ele aldığı demokrasi kavramının anlaşılması bakımından yararlanılmıştır. Demokrasiden söz edebilmek için, hangi kriterlerin mevcut olması gerektiği konusunda Karaçor (2009), Dahl (2001)'den beş ana kriter aktarmıştır. Bunlar; “etkin katılım, oy kullanma eşitliği, bilgi edinebilme, gündem üzerine son sözü söyleme hakkı ve yetişkinlerin dahil olmasıdır” (s. 123). Özellikle, “gündem üzerine söz söyleyebilme” hakkı, demokrasinin esasen ne olduğunu anlamak bakımından önem taşımaktadır. Zira, temsili demokrasilerde oy kullanma eşitliği ya da bilgi edinebilme gibi haklar zaten mevcuttur. Ancak, gündem üzerinde son sözü söyleyebilmek, katılımcı demokrasiye ve demokrasinin gelişmesi sürecine ışık tutmaktadır.

Beşincisi; Bostancı'nın (2014) siyasal iletişim kavramını ele aldığı çalışması, siyasal iletişim ve demokrasi ilişkisinin anlaşılması bakımından önemli görülmüştür. Çalışmada, siyasal iletişimin sosyal medyanın etkisiyle nasıl değiştiği nicel araştırma yöntemi ile ortaya konulmaktadır. Buna göre, katılımcılara 12 adet anket sorusu yöneltilmiş, “katılımcıların siyasi parti üyesi olmasalar dahi sosyal medya üzerinden siyasi paylaşımlarda bulundukları, Twitter kullanıcılarının daha çok siyasallaştığı ve sosyal medyada paylaşılan siyasi içeriklerin kullanıcıların siyasi tercihlerini etkilediği gibi sonuçlara ulaşılmıştır” (Bostancı, 2014, s. 84). Çalışmada, Web 2.0 teknolojileri aracılığıyla yürütülen siyasal iletişim faaliyetleri *Siyasal İletişim 2.0* kavramlaştırmasıyla karşımıza çıkmaktadır. Siyasal iletişim ve Siyasal İletişim 2.0 karşılaştırması ise, alana yapılmış önemli bir katkıdır. Bu karşılaştırmaya aşağıda sunulmuştur;

“İletişim Aracı: Siyasal iletişim için geleneksel medya yani televizyon, gazete ve radyo stratejik bir öneme sahipken, siyasal iletişim 2.0 için sosyal medya yani Facebook, Twitter, LinkedIn vb. ortamlar olarak ön plana çıkmaktadır.

İletişim Türü: Siyasal iletişim kitle iletişimini daha sık kullanırken, siyasal iletişim 2.0 kitle iletişiminin yanında kişilerarası iletişimi tercih etmektedir.

İletişim Şekli: Siyasal iletişim’de propaganda, tek yönlü iletişim ve monolog yaygın kullanılırken, siyasal iletişim 2.0’de iki yönlü iletişim ve diyalog daha yaygın kullanılmaktadır.

Mesaj: Mesaj siyasal iletişimde genelde kitleleri hedef alırken, siyasal iletişim 2.0 mesajı kitlelere, gruplara ve bireylere göre şekillendirebilme imkanı sunmaktadır.

Geri Bildirim: Siyasal iletişim’de geri bildirim seviyesi ve imkanı düşüken, siyasal iletişim 2.0 geri bildirim kolaylığı sağlamakta ve geri bildirim seviyesi yüksek olmaktadır.

İletişim Maliyeti: Siyasal iletişimde kampanya ve tanıtım maliyetleri yüksek iken, siyasal iletişim 2.0 maliyeti daha düşük hatta ücretsiz kampanya çözümleri sunmaktadır” (Bostancı, 2014, s. 88-89).

Altıncısı; sosyal medyanın siyasal katılıma etkilerini incelen bir diğer çalışma Şener, Emre ve Akyıldız’ın (2015), *Türkiye’de sosyal medyanın siyasal katılıma etkileri* başlıklı çalışmasıdır. Çalışmada, telefonla anket görüşme tekniğiyle katılımcıların sosyal medya platformlarını demografik özellikler ve üç bağımsız değişken üzerinden ölçen bir araştırma yapılmıştır. Bu üç bağımsız değişken, siyasi görüş ve siyasete ilgi düzeyi, sosyal ağlara erişim ve kullanım düzeyi ve *Gezi Parkı* eylemleri olarak belirlenmiştir.

Çalışmanın bulguları ise, sosyal medyanın siyasal katılıma zannedildiği kadar etkisi olmadığını ortaya koyması bakımından ilginçtir. Bulgulara göre, bireyler sosyal medyayı siyasal ilgiden çok yakın çevreyle iletişim kurma motivasyonunun daha fazla olduğu tespit edilmiştir. Katılımcıların % 66.4’ü sosyal medyayı siyasal içerik paylaşmak için kullanmadıklarını ifade etmiştir. Hatta, sosyal medya platformlarının siyasi bir arena olmadığı kanaati de ironik bir şekilde yaygındır. Diğer yandan, özellikle sosyal medyayı etkin bir şekilde kullanan genç insanların, sosyal medya platformlarında siyasal içerik ve siyasal aktörlerin faaliyetlerine ilgi düzeylerinin az olduğu görülmektedir. *Gezi Parkı Direnişi* sırasında da gelişmeleri sosyal medya yerine gazete ve televizyondan takip edenlerin oranının daha fazla olduğu tespit edilmiştir.

Çalışmadan, bu çarpıcı sonuçların sosyal medya platformlarının siyasal katılıma katkılarının beklenildiği gibi olmayabileceği tartışması için yararlanılmıştır. “Türkiye’de, yeni medya olanaklarının yaygınlaşması sosyal ağ üyelikleri ve kullanımına etki etse de, siyasal anlamda katılımın sağlanması için yeterli görünmemektedir” (Şener, Emre ve Akyıldız, 2015, s. 95). Ayrıca, Türkiye’de siyasal aktörlerle sosyal ağlar aracılığı ile iletişime geçme isteği bulunmamaktadır. Aynı şekilde, Şener, Emre ve Akyıldız (2015) siyasal aktörlerin de böyle bir iletişime mesafeli olduklarını ifade etmektedirler. O halde, Türkiye’de sosyal medyanın siyasal ve demokratik katılımı arttırdığından söz etmek zorlaşmaktadır.

Yedincisi; Balcı ve Sarıtaş’ın (2015), 2014 Yerel Seçimleri’nde Facebook’un siyasal katılıma etkilerini araştırdıkları çalışmadır. Çalışmada, yöntem olarak 2014 Yerel Seçimleri bağlamında Konya’da bulunan üç üniversitenin öğrencilerinden oluşturulan örnekleme, siyasal katılımı ölçmeye yönelik anket tekniği uygulanmıştır. Çalışmanın bulgularına bakıldığında, “katılımcıların; son dakika gelişmelerini takip etme, bir politik aday veya partiyi beğenme, profile siyasi bir haber ekleme ya da silme, anlık sohbet uygulamasında siyasi bir bilgiyi tartışma gibi Facebook aktivitelerini daha sık gerçekleştirdikleri” (Balcı ve Sarıtaş, 2015, s. 511) tespit edilmiştir. Ayrıca, bir partiye bağlılık ve Facebook kullanım sıklığı arasında anlamlı bir ilişki olduğu görülmektedir.

Bu çalışmadan, 5’li likert tipi anket sorularının oluşturulması anlamında yararlanılmıştır. Çalışmada kullanılan katılımcıların Facebook’ta siyasal katılım düzeylerini ölçen anket soruları, Twitter olarak değiştirilerek uygulanmıştır. Sorular şu şekildedir: Son dakika siyasal gelişmeleri takip etme; Bir politik aday veya partiyi beğenme; Facebook profiline siyasi haber ekleme veya silme; Facebook anlık sohbet uygulamasında siyasi bir bilgiyi tartışma; Siyasi bir olayın fotoğrafını paylaşma; Siyasi bir içeriğe yorum yapma; Facebook mesaj uygulamasında siyasi bir bilgiyi tartışma; Siyasi içerik taşıyan bir durum güncellemesinde bulunma; Siyasi bir uygulamayı ekleme veya silme; Siyasi bir belge paylaşma; Siyasi konularla ya da adaylarla ilgili videolar paylaşma; Siyasi bir link paylaşma; Başkalarına siyasal konularda cevap yazma/ davet gönderme; Siyasi bir anket yapma veya ankete katılma; Siyasi bir gruba katılma veya gruptan ayrılma; Siyasi bir kişi, aday ya da liderin fotoğrafını paylaşma (Balcı ve Sarıtaş, 2015). Bu sorular, Türkiye’de Twitter’ın demokratik katılıma etkilerini ölçebilecek nitelikte bulunduğu, soruların içeriğinde bir değişikliğe gidilmeden, Facebook yerine Twitter bağlamında katılımcılara sorulmuştur.

Sekizincisi; Arıcı’nın (2015), siyasi parti liderlerinin sosyal medya kullanımlarını araştırdığı çalışmasıdır. Bu çalışma, siyasal aktörlerin sosyal ağlar aracılığı ile bireylerle iletişim kurmaya ne ölçüde açık oldukları hakkında fikir edinmek bakımından önemli bulunmuştur. Çalışmada, AK Parti, MHP, CHP ve Barış ve BDP’nin ve parti liderlerinin internet ve sosyal medya hesapları üç aylık bir zaman diliminde içerik analizi yöntemi kullanılarak incelenmiştir.

Çalışmanın bulguları ise, demokratik katılım anlamında bir veri sunmamaktadır. Zira, Arıcı’nın (2015), en önemli tespiti, partilerin ve parti liderlerinin internet siteleri ve sosyal medya hesaplarını sadece kendi kitlelerine hitap eder şekilde kullandıkları yönünde olmuştur. Diğer yandan, siyasal aktörlerin sosyal medya platformlarını kendilerini tekrarlar bir biçimde ve geri bildirim olmaksızın kullandıkları görülmektedir. Bu durum, demokratikleşme anlamında olumsuz bir görünüm vermektedir. Arıcı (2015), Türkiye’de siyasal aktörlerin sosyal medya kullanımını şu şekilde özetlemektedir;

“Parti teşkilatlarınca yürütüldüğü anlaşılan ‘kimliksiz’ sosyal medya hesapları, ortama özgü stratejiler geliştirmeden, hedef kitle analizi yapılmaksızın mevcudiyet kaygılı temsil içermektedir. Bu doğrultuda Türk siyasetince içselleştirilemeyen sosyal medya olgusu, siyasal iletişimi sanal boyuta taşımaktan uzak görünmektedir. İnternet üzerinden seçim yapılmasının, sosyal medya seçim stratejilerinin ve sanal partilerin tartışıldığı günümüz yeni medya çağında, sosyal medya kampanyalarının, içerik tasarımının ve sanal temsilin uygulamaya dönüşmediği Türk siyaseti, sosyal medya gerçekliğine mesafeli durmaktadır” (s. 64).

Literatürde benzer sonuçlara ulaşan başka çalışmalar da mevcuttur.

Dokuzuncusu; Genel’in (2012), 2011 Genel Seçimleri bağlamında, siyasal iletişim kampanyalarında sosyal medyanın kullanımını araştırdığı çalışma da bunlardan biridir. Türkiye’de sosyal medyanın seçim kampanyalarında nasıl kullanıldığının ele alındığı çalışmada, 2008 yılında Amerika Birleşik Devletleri Başkanlık Seçimleri’nde Barak Obama’nın sosyal medya kullanım başarısı örnek olarak sunulmaktadır. Bu noktadan hareketle, Türkiye’de seçim kampanyalarında siyasal aktörlerin sosyal medya kullanımlarının ne ölçüde başarılı olduğu araştırılmıştır. Çalışmanın bulgularına bakıldığında, Türkiye’de de aktörlerin sosyal medyayı kullandıkları ancak siyasal kampanya yürütmede anlamlı bir başarı sağlayamadıkları sonucuna ulaşılmıştır. Örneğin;

“siyasi liderlerin teknik olarak sosyal medyayı yeterince kullanamadıkları anlaşılmaktadır. Özellikle twitter hesaplarının takipçilerin mesajlarına kapalı olması, Liderlerin yok denecek düzeyde takip listelerinin azlığı, siyasi kampanya süreci dâhilinde sosyal medyaya çok kısa denebilecek derecede zaman ayırmaları, sosyal medyayı daha çok ‘demeç verme’ platformu olarak görüp etkileşimden uzak durmaları dikkat çeken olumsuzluklardan bazılarıdır” (Genel, 2012 s. 30).

Adalet ve Kalkınma Partisi’nin kurumsal olarak sosyal medyayı diğer partilere kıyasla iyi kullandığı görülmektedir. Ancak, lider düzeyinde teyit edilen resmi bir hesap bulunmamaktadır. Cumhuriyet Halk Partisi Genel Başkanı’nın çoğunlukla iktidar partisine muhalefet eden paylaşımlar yaptığı, Milliyetçi Hareket Partisi Genel Başkanı’nın *Milliyetçilik* eksenli paylaşımlarda bulunduğu ve Barış ve Demokrasi Partisi Genel Başkanı’nın ise, etnisite vurgusuna dayanan paylaşımlarının çoğunlukta olduğu görülmektedir. Sonuç olarak, Türkiye’de siyasal aktörler sosyal medyada siyasal kampanya yürütme ile ilgili bir strateji belirlemedikleri, geleneksel olarak kendi gündemlerini devam ettirdikleri açıkça görülmektedir.

Onuncusu ise; Bayraktutan, Binark, Çomu, Doğu, İslamoğlu ve Aydemir’in (2012), yine 2011 Genel Seçimleri sırasında, sosyal medya platformlarında siyasi partilerin ve liderlerinin paylaşımları ve seçmenlerin tartışmaları arasındaki ilişkiyi inceleyen çalışmalarıdır. Çalışmada öncelikle, çevrimiçi kamusal alanların sınıflandırmasına yer verilmiştir. Buna göre, beş tane çevrimiçi kamusal alan vardır. Bunlar; siyasal alanlar, gazetecilik alanları, siyasal savunuculuğun yapıldığı alanlar, alternatif aktivist alanları ve e-devlet alanıdır (Dahlgren, 2009, s. 168).

Bu kamusal alan iddiası, sosyal medya platformlarında siyasal aktörler ve bireyler arasında bir etkileşim olduğu varsayımından beslenir. Amerika’da 2008 yılında yapılan Başkanlık Seçimleri’ni inceleyen çalışmalar bu iddiayı desteklemektedir. Zira, bireylerin Başkan adaylarıyla sosyal medya platformlarında etkileşim halinde oldukları görülmüştür. Türkiye’de sosyal medyanın seçim kampanyalarında nasıl bir rol üstlendiği ile ilgili çalışmalar ise oldukça azdır. Bayraktutan vd. (2012), 2011 Genel Seçimleri ile ilgili olarak başarılı bir nitel araştırmaya soyunmuşlardır. Henüz tamamlanmayan çalışmada, sosyal medyada bireyler ve siyasal aktörler arasındaki etkileşimi ortaya koymak üzere geliştirilen nitel yöntem, alana önemli katkılar sağlayacaktır.

Bu çalışmaya göre, Türkiye’de 2002 yılından 2011 yılına kadar siyasal anlamda internet ve sosyal medya kullanımının çok zayıf olduğu söylenebilir. Genel olarak bakıldığında, siyasal partilerin sosyal medyada yürüttükleri Amerika’daki gibi bir seçim stratejisinden söz etmek güçtür. Siyasal aktörler, sosyal medyayı yalnızca seçim dönemlerinde bir siyasal reklam aracı olarak kullanmaktadırlar. Diğer yandan, çalışmada, 2002 yılında siyasi partilerin hemen hemen hiçbir stratejileri bulunmazken, 2009 yılına gelindiğinde, sosyal medyanın siyasal reklam aracı olarak kullanılması umut verici olarak değerlendirilmiştir. Ayrıca, bireylerin siyasi partilerin sosyal medya platformlarında geribildirimde bulunabildikleri ifade edilmiştir.

Literatür taraması ışığında, sosyal medyanın demokratik katılımı arttırdığına dair iddialara rastlandığı gibi, demokratik katılım açısından sosyal medyanın bu denli etkili olmadığı yönünde görüşlerin de olduğu görülmektedir. Bu çalışmada, Sakarya Üniversitesi İletişim Fakültesi öğrencileri örnekleminde nicel bir analiz yapılarak, sosyal medyanın Türkiye’de gençlerin siyasete ilgi düzeyini, siyasal katılımı ve son kertede demokratik katılımı artırıp artırmadığına ilişkin bir sonuca varılmak hedeflenmiştir. Diğer yandan, vatandaşların oy vermek, siyasal liderleri takip etmek gibi siyasal katılım aktiviteleri göstermelerinin, müzakereci demokrasi modeli bağlamında demokratik katılımın kusursuz bir biçimde gerçekleşmesi anlamına gelmediği ortaya konmak durumundadır. Bu nedenle, siyasal katılımı ölçen anket bulgularının değerlendirilmesinde müzakereci demokrasi anlayışı çerçevesinde bir bakış açısı geliştirilmeye çalışılmıştır. Vatandaşın iktidarın kararlarını etkileme gücünün olup olmadığı sorunsalı, bu çalışmanın ileri bir tarihte siyasetçilerin vatandaşların sosyal medyadaki aktivitelerinden nasıl etkilendiklerini ortaya koyan bulgular eklenerek devam etmesi gerektiğini göstermektedir.

Yöntem

Problem Cümlesi

Türkiye’de Twitter’ın Demokratik Katılıma Etkileri: Sakarya Üniversitesi İletişim Fakültesi Öğrencileri Örneği.

Alt Problemler

1. Öğrencilerin cinsiyeti, Twitter kullanım amaçlarına göre anlamlı bir fark oluşturmaktadır mıdır?
2. Öğrencilerin yaşı, Twitter kullanım amaçlarına göre anlamlı bir fark oluşturmaktadır mıdır?
3. Öğrencilerin ailelerinin aylık gelir düzeyi, Twitter kullanım amaçlarına göre anlamlı bir fark oluşturmaktadır mıdır?
4. Öğrencilerin bir oturumda Twitter kullanım süresi, Twitter kullanım amaçlarına göre anlamlı bir fark oluşturmaktadır mıdır?
5. Öğrencilerin Twitter’a erişim aracı, Twitter kullanım amaçlarına göre anlamlı bir fark oluşturmaktadır mıdır?
6. Öğrencilerin cinsiyeti, Twitter’da siyasal katılım aktiviteleri sıklığına göre anlamlı bir fark oluşturmaktadır mıdır?
7. Öğrencilerin yaşı, Twitter’da siyasal katılım aktiviteleri sıklığına göre anlamlı bir farklılık fark oluşturmaktadır mıdır?
8. Öğrencilerin ailelerinin aylık gelir düzeyi, Twitter’da siyasal katılım aktiviteleri sıklığına göre anlamlı bir fark oluşturmaktadır mıdır?
9. Öğrencilerin bir oturumda Twitter kullanım süresi, Twitter’da siyasal katılım aktiviteleri sıklığına göre anlamlı bir fark oluşturmaktadır mıdır?
10. Öğrencilerin Twitter’a erişim aracı, Twitter’da siyasal katılım aktiviteleri sıklığına göre anlamlı bir fark oluşturmaktadır mıdır?

Araştırma Modeli

Bu çalışmada, öğrencilerin Twitter’daki siyasal katılım düzeylerini ölçen sorulardan oluşan anket tekniğinin kullanıldığı nicel yöntem seçilmiştir. Böylelikle, Twitter’da demokratik katılımın gerçekliği ile ilgili bir sonuca varılması umulmaktadır. Öncelikle kavramsal çerçevenin oluşturulabilmesi adına literatür taraması yapılmıştır. Daha sonra, mevcut literatür içerisinde araştırma ile ilgili olanlardan yararlanılmıştır. Uygulama olarak, Sakarya Üniversitesi İletişim Fakültesi öğrencilerinin Twitter’da siyasal katılım düzeylerini ölçmek için 100 öğrenciyle anket yapılmıştır.

Evren

Çalışmanın evrenini, Sakarya Üniversitesi İletişim Fakültesi’de öğrenim gören 934 Lisans öğrencisi oluşturmaktadır.

Örnekleme

Çalışmanın örneklemini Sakarya Üniversitesi İletişim Fakültesi öğrencileri arasından 100 kişi olarak seçilmiştir. Örnekleme *rastgele örnekleme yöntemi* ile belirlenmiştir.

Veri Toplama Aracı

Veri toplama aracı, Balcı ve Sarıtaş’ın (2015), *Facebook ve siyasal katılım: 2014 yerel seçimleri araştırması* isimli çalışmasında kullanılan 50 sorudan oluşan anket formunun iki bölümünden oluşmaktadır. Bu çalışmada, kullanılan anket formunda Facebook ifadesi yerine Twitter ifadesi kullanılmıştır. Öncelikle, ankette bulunan katılımcıların demografik özellikleri, Facebook kullanım alışkanlıkları ile siyasal tutum ve davranışlarına ilişkin sorulardan, demografik özellikler ve Facebook kullanım alışkanlıklarını ölçen sorular Twitter olarak değiştirilerek bu çalışma için seçilmiştir. Buna göre, cinsiyet, yaş, katılımcıların ailelerinin aylık gelir düzeyi demografik özellikler olarak belirlenmiş, katılımcıların hangi üniversitede okudukları sorusu, bu çalışma Sakarya Üniversitesi ile sınırlı olduğundan çıkarılmıştır. Katılımcıların yaşı, ailelerinin aylık gelir düzeyi ve bir oturumda Twitter kullanım sürelerine ilişkin yanıt maddeleri anket formunun bu bölümüne ulaşılamadığından yeniden düzenlenmiştir.

Likert tipi soru formunun ilk bölümünde (1: Hiç katılmıyorum, 5: Tamamen Katılıyorum aralığında) 10 soruluk bir ölçekle katılımcıların Twitter kullanım amaçları sorgulanmıştır. Ölçeğin güvenilirliğini ortaya koyan Cronbach’s Alpha: 0,832’dir. Twitter’da siyasal katılım aktivitelerini gerçekleştirme sıklığını ölçmek için ise, 16 maddelik (1: Hiç, 5: Her Zaman aralığında) tipindeki Balcı ve Sarıtaş’ın (2015), *Facebook’ta Siyasal Katılım Aktiviteleri Ölçeğinden* yararlanılmıştır. Ölçeğin güvenilirliğini ortaya koyan Cronbach’s Alpha: 0,67’dir. Bu bölümden sadece Facebook ile ilgili olan iki soru Twitter’ın özelliklerine göre yeniden düzenlenmiştir. Buna göre, Facebook anlık sohbet uygulamasında siyasi bir bilgiyi tartışma sorusu Twitter’da anlık olarak siyasi bir bilgiyi tartışma; Facebook mesaj uygulamasında siyasi bir bilgiyi tartışma sorusu Twitter direkt mesaj uygulamasında siyasi bir bilgiyi tartışma; Siyasi içerik taşıyan bir durum güncellemesinde bulunma sorusu Siyasi içerik taşıyan anlık bir paylaşımda bulunma; Siyasi bir gruba katılma veya gruptan ayrılma sorusu Siyasi bir gruba (liste) katılma veya gruptan ayrılma olarak uyarlanmıştır.

Veri Analizi

Anket sonuçlarından elde edilen nicel değerler SPSS 20 programı ile çözümlenmiştir. Analizde, öncelikle yüzdelikler hesaplandıktan sonra, t-testi ve anova analizi uygulanarak Sakarya Üniversitesi İletişim Fakültesi öğrencilerinin Twitter kullanım amaçları ve Twitter’da siyasal katılım düzeylerini ölçen sorulara verdikleri yanıtlar arasında diğer sorulara göre anlamlı bir fark olup olmadığı ölçülmüştür.

Varsayımlar

Varsayım 1:

Twitter öğrencilerin fazlasıyla vakit geçirdikleri bir sosyal medya platformudur.

Varsayım 2:

Twitter’da öğrencilerin aktiviteleri siyasal katılıma yönelik değildir.

Varsayım 3:

Sosyal medya öğrencilerin siyasal katılımını arttırmamaktadır.

Varsayım 4:

Üniversite öğrencileri gençleri temsil ederler.

Varsayım 5:

Öğrenciler, anket sorularını dürüst bir şekilde yanıtlamışlardır.

Sınırlılıklar

Bu çalışma, Sakarya Üniversitesi İletişim Fakültesi Lisans öğrencileri ile sınırlandırılmıştır. Türkiye’deki bütün insanlara ulaşmak mümkün olmadığından ve üniversite öğrencilerinin sosyal medya platformlarını etkin bir biçimde kullandıkları varsayımından yola çıkılmıştır. Böylece, çalışmanın evreni Sakarya Üniversitesi İletişim Fakültesi öğrencileri olarak belirlenmiştir. Anketin uygulandığı dönem, 2017-2018 Eğitim ve Öğretim Yılı Güz Yarıyılıdır. Çalışmanın örnekleme, anket uygulaması için rastgele örnekleme yöntemiyle seçilen olan 100 kişi ile sınırlandırılmıştır.

Tanımlar

Sosyal Medya: Web 2.0 teknolojisinin hayata geçmesiyle birlikte, etkileşimli, anında ve eş zamanlı bilgi paylaşımı sağlayan bir yeni medya sistemidir.

Siyasal İletişim: Yönetenler ve yönetilenler arasındaki etkileşimi ifade eden, tarafların birbirlerini etkiledikleri iletişim biçimidir.

Siyasal Katılım: Vatandaşların siyasal karar verme süreçlerinde yer almasını ifade eden bir kavramdır. Temsili demokrasilerde, oy verme davranışı ile özdeşleşmiştir.

Müzakereci Demokrasi Modeli: Vatandaşların siyasal konularda belirleyici olma gücüne sahip olduğu siyasal bir sistem modelidir.

Twitter: Kullanıcıların internet aracılığı ile içerik oluşturduğu, paylaştığı ve birbirleriyle iletişime geçtikleri bir mikroblog uygulamasıdır.

Demokratik Katılım: Siyasal katılımdan daha geniş bir kavram olup, vatandaşların hak arama, düşüncelerini özgürce ifade edebilme ve çözüm süreçlerine katılmaları olarak tanımlanabilir.

Bulgular

Öncelikle, ankette bulunan bütün sorulara verilen yanıtların yüzde hesabı yapılmıştır.

Tablo 1-Cinsiyetiniz

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	kadın	55	27,2	55,0	55,0
	erkek	45	22,3	45,0	100,0
	Total	100	49,5	100,0	
Missing	System	102	50,5		
Total		202	100,0		

Katılımcıların cinsiyetini ifade eden Tablo 1’e göre, katılımcıların %55’i (55 kişi) kadın ve %45’inin ise (45 kişi) erkek olduğu görülmektedir.

Tablo 2-Yaşınız

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 17-19	26	12,9	26,0	26,0
20-22	61	30,2	61,0	87,0
23-25	8	4,0	8,0	95,0
Diğer	5	2,5	5,0	100,0
Total	100	49,5	100,0	
Missing System	102	50,5		
Total	202	100,0		

Katılımcıların yaşını ifade eden Tablo 2'ye göre, katılımcıların %61'i (61 kişi) 20-22, %26'sı (26 kişi) 17-19, %8'i (8 kişi) 23-25 yaş aralığında ve %5'i ise (5 kişi) diğer yaş aralığındadır.

Tablo 3- Ailenizin Aylık Gelir Düzeyi

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1000 TL-2000 TL	28	13,9	28,0	28,0
2000 TL- 3000 TL	32	15,8	32,0	60,0
3000 TL ve üzeri	36	17,8	36,0	96,0
Ailemin geliri 1000 TL'nin altında ya da yok	4	2,0	4,0	100,0
Total	100	49,5	100,0	
Missing System	102	50,5		
Total	202	100,0		

Katılımcıların ailelerinin aylık gelir düzeyini ifade eden Tablo 3'e göre, katılımcıların %36'sının (36 kişi) 3000 TL ve üzeri, %32'sinin (32 kişi) 2000-3000 TL, %28'inin (28 kişi) 1000-2000 TL ve %4'ünün ise (4 kişi) ise ailemin geliri 1000 TL'nin altında ya da yok yanıtını verdiği görülmektedir.

Tablo 4- Bir Oturumda Twitter Kullanım Süreniz

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 5 dk.-30 dk.	78	38,6	78,0	78,0
30 dk.-2 saat	17	8,4	17,0	95,0
3 saat ve üzeri	5	2,5	5,0	100,0
Total	100	49,5	100,0	
Missing System	102	50,5		
Total	202	100,0		

Katılımcıların bir oturumda Twitter'ı ne kadar süre kullandıklarını ifade eden Tablo 4'e göre, ankete katılımcıların %78'inin (78 kişi) 5 dk.-30 dk., %17'sinin (17 kişi) 30 dk. ve üzeri, %5'inin (5 kişi) 3 saat ve üzeri yanıtını verdiği görülmektedir.

Tablo 5- Twitter'a Erişim Aracınız

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Bilgisayar	2	1,0	2,0	2,0
Akıllı telefon	58	28,7	58,0	60,0
Her ikisi	40	19,8	40,0	100,0
Total	100	49,5	100,0	
Missing System	102	50,5		
Total	202	100,0		

Katılımcıların Twitter'a erişim aracını ifade eden Tablo 5'e göre, katılımcıların %58'inin (58 kişi) Akıllı telefon, %40'ının (40 kişi) Akıllı telefon ve Bilgisayar, %2'sinin (2 kişi) Bilgisayar kullandıkları görülmektedir.

Twitter Kullanım Amaçları

Tablo 6- Olaylar Ve Kişiler Hakkında Bilgi Sahibi Olmak İçin

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç katılmıyorum	8	4,0	8,0	8,0
Katılmıyorum	8	4,0	8,0	16,0
Kararsızım	20	9,9	20,0	36,0
Katılıyorum	28	13,9	28,0	64,0
Tamamen katılıyorum	36	17,8	36,0	100,0
Total	100	49,5	100,0	
Missing System	102	50,5		
Total	202	100,0		

Olaylar ve kişiler hakkında bilgi sahibi olmak için sorusunu ifade eden Tablo 6'ya göre, katılımcıların %8'i (8 kişi) hiç katılmıyorum, %8'i (8 kişi) katılmıyorum, %20'si (20 kişi) kararsızım, %28'i (28 kişi) katılıyorum ve %36'sı (36 kişi) ise tamamen katılıyorum yanıtını vermiştir. Katılımcıların %64'ü (64 kişi) Twitter'ı olaylar ve kişiler hakkında bilgi sahibi olmak için kullanmaktadırlar.

Tablo 7- Arkadaşlarla İletişimde Bulunmak İçin

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç katılmıyorum	36	17,8	36,0	36,0
Katılmıyorum	19	9,4	19,0	55,0
Kararsızım	19	9,4	19,0	74,0
Katılıyorum	15	7,4	15,0	89,0
Tamamen katılıyorum	11	5,4	11,0	100,0
Total	100	49,5	100,0	
Missing System	102	50,5		
Total	202	100,0		

Arkadaşlarla iletişimde bulunmak için sorusunu ifade eden Tablo 7'ye göre, katılımcıların %36'sı (36 kişi) hiç katılmıyorum, %19'u (19 kişi) katılmıyorum, %19'u (19 kişi) kararsızım, %15'i (15 kişi) katılıyorum ve %11'i (11 kişi) ise tamamen katılıyorum yanıtını vermiştir. Katılımcıların %55'i (55 kişi) Twitter'ı arkadaşlarıyla iletişimde bulunmak için kullanmamaktadırlar.

Tablo 8- Mesaj Göndermek Ya Da Mesaj Almak İçin

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç katılmıyorum	49	24,3	49,0	49,0
Katılmıyorum	20	9,9	20,0	69,0
Kararsızım	15	7,4	15,0	84,0
Katılıyorum	11	5,4	11,0	95,0
Tamamen katılıyorum	5	2,5	5,0	100,0
Total	100	49,5	100,0	
Missing System	102	50,5		
Total	202	100,0		

Mesaj göndermek ya da mesaj almak için sorusunu ifade eden Tablo 8'e göre, katılımcıların %49'u (49 kişi) hiç katılmıyorum, %20'si (20 kişi) katılmıyorum, %15'i (15 kişi) kararsızım, %11'i (11 kişi) katılıyorum ve %5'i (5 kişi) ise tamamen katılıyorum yanıtını vermiştir. Katılımcıların %69'u (69 kişi) Twitter'ı mesaj göndermek ya da mesaj almak için kullanmamaktadırlar.

Tablo 9- Eğlenmek Ve Rahatlamak İçin

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiç katılmıyorum	15	7,4	15,0
	Katılmıyorum	12	5,9	27,0
	Kararsızım	19	9,4	46,0
	Katılıyorum	23	11,4	69,0
	Tamamen katılıyorum	31	15,3	100,0
	Total	100	49,5	100,0
Missing	System	102	50,5	
Total		202	100,0	

Eğlenmek ve rahatlamak için sorusunu ifade eden Tablo 9'a göre, %15'i (15 kişi) hiç katılmıyorum, %12'si (12 kişi) katılmıyorum, %19'u (19 kişi) kararsızım, %23'ü (23 kişi) katılıyorum ve %31'i (31 kişi) tamamen katılıyorum yanıtını vermiştir. Katılımcıların %54'ü (54 kişi) Twitter'ı eğlenmek ve rahatlamak için kullanmaktadır.

Tablo 10-Tanıdıklarının Fotoğraflarına Bakmak / Fotoğraf Yükleme İçin

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiç katılmıyorum	60	29,7	60,0
	Katılmıyorum	12	5,9	72,0
	Kararsızım	13	6,4	85,0
	Katılıyorum	6	3,0	91,0
	Tamamen katılıyorum	9	4,5	100,0
	Total	100	49,5	100,0
Missing	System	102	50,5	
Total		202	100,0	

Tanıdıklarının fotoğraflarına bakmak / fotoğraf yüklemek için sorusunu ifade eden Tablo 10'a göre, katılımcıların %60'ı (60 kişi) hiç katılmıyorum, %12'si (12 kişi) katılmıyorum, %13'ü (13 kişi) kararsızım, %6'sı (6 kişi) katılıyorum ve %9'u (9 kişi) ise tamamen katılıyorum yanıtını vermiştir. Katılımcıların %72'si (72 kişi) Twitter'ı tanıdıklarının fotoğraflarına bakmak / fotoğraf yüklemek için kullanmamaktadır.

Tablo 11- Boş Zamanları Değerlendirmek İçin

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiç katılmıyorum	14	6,9	14,1
	Katılmıyorum	15	7,4	29,3
	Kararsızım	28	13,9	57,6
	Katılıyorum	13	6,4	70,7
	Tamamen katılıyorum	29	14,4	100,0
	Total	99	49,0	100,0
Missing	System	103	51,0	
Total		202	100,0	

Boş zamanları değerlendirmek için sorusunu ifade eden Tablo 11'e göre, katılımcıların %14'ü (14 kişi) hiç katılmıyorum, %15'i (15 kişi) katılmıyorum, %28'i (28 kişi) kararsızım, %13'ü (13 kişi) katılıyorum ve %29'u (29 kişi) ise tamamen katılıyorum yanıtını vermiştir.

Tablo 12-Tanıdıkların Duvarına Yazmak/ Duvarıma Yazılanları Okumak İçin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiç katılmıyorum	35	17,3	35,0	35,0
	Katılmıyorum	21	10,4	21,0	56,0
	Kararsızım	19	9,4	19,0	75,0
	Katılıyorum	12	5,9	12,0	87,0
	Tamamen katılıyorum	13	6,4	13,0	100,0
	Total	100	49,5	100,0	
Missing	System	102	50,5		
Total		202	100,0		

Tanıdıklarının duvarına yazmak/ duvarıma yazılanları okumak için sorusunu ifade eden Tablo 12'ye göre, katılımcıların %35'i (35 kişi) hiç katılmıyorum, %21'i (21 kişi) katılmıyorum, %19'u (19 kişi) kararsızım, %12'si (12 kişi) katılıyorum ve %13'ü (13 kişi) ise tamamen katılıyorum yanıtını vermiştir. Katılımcıların %56'sı (56 kişi) Twitter'ı tanıdıklarının duvarına yazmak/ duvarlarına yazılanları okumak için kullanmamaktadırlar.

Tablo 13- İnsanların İletişim Bilgilerine Ulaşabilmek İçin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiç katılmıyorum	36	17,8	36,4	36,4
	Katılmıyorum	22	10,9	22,2	58,6
	Kararsızım	20	9,9	20,2	78,8
	Katılıyorum	10	5,0	10,1	88,9
	Tamamen katılıyorum	11	5,4	11,1	100,0
	Total	99	49,0	100,0	
Missing	System	103	51,0		
Total		202	100,0		

İnsanların iletişim bilgilerine ulaşabilmek için sorusunu ifade eden Tablo 13'e göre, katılımcıların %36'sı (36 kişi) hiç katılmıyorum, %22'si (22 kişi) katılmıyorum, %20'si (20 kişi) kararsızım, %10'u (10 kişi) katılıyorum ve %11'i (11 kişi) ise tamamen katılıyorum yanıtını vermiştir. Katılımcıların %58'i (58 kişi) Twitter'ı insanların iletişim bilgilerine ulaşabilmek için kullanmamaktadırlar.

Tablo 14-Kişisel Sunum Ve Profil Bilgilerimi Paylaşmak İçin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiç katılmıyorum	42	20,8	42,0	42,0
	Katılmıyorum	23	11,4	23,0	65,0
	Kararsızım	11	5,4	11,0	76,0
	Katılıyorum	14	6,9	14,0	90,0
	Tamamen katılıyorum	10	5,0	10,0	100,0
	Total	100	49,5	100,0	
Missing	System	102	50,5		
Total		202	100,0		

Kişisel sunum ve profil bilgilerimi paylaşmak için sorusunu ifade eden Tablo 14'e göre, katılımcıların %42'si (42 kişi) hiç katılmıyorum, %23'ü (23 kişi) katılmıyorum, %11'i (11 kişi) kararsızım, %14'ü (14 kişi) katılıyorum ve %10'u (10 kişi) ise tamamen katılıyorum yanıtını vermiştir. Katılımcıların %58'i (58 kişi) Twitter'ı kişisel sunum ve profil bilgilerini paylaşmak için kullanmamaktadırlar.

Tablo 15-İnsanları Daha İyi Tanımak İçin

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç katılmıyorum	31	15,3	31,0	31,0
Katılmıyorum	19	9,4	19,0	50,0
Kararsızım	24	11,9	24,0	74,0
Katılıyorum	12	5,9	12,0	86,0
Tamamen katılıyorum	14	6,9	14,0	100,0
Total	100	49,5	100,0	
Missing				
System	102	50,5		
Total	202	100,0		

İnsanları daha iyi tanımak için sorusunu ifade eden Tablo 15'e göre, katılımcıların %31'i (31 kişi) hiç katılmıyorum, %19'u (19 kişi) katılmıyorum, %24'ü (24 kişi) kararsızım, %12'si (12 kişi) katılıyorum ve %14'ü (14 kişi) ise tamamen katılıyorum yanıtını vermiştir. Katılımcıların %50'si (50 kişi) Twitter'ı insanları daha iyi tanımak için kullanmamaktadırlar.

Twitter'da Siyasal Katılım Aktiviteleri Sıklığı

Tablo 16-Son Dakika Siyasal Gelişmeleri Takip Etme

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç	11	5,4	11,0	11,0
Nadiren	9	4,5	9,0	20,0
Ara sıra	13	6,4	13,0	33,0
Çoğunlukla	22	10,9	22,0	55,0
Her zaman	45	22,3	45,0	100,0
Total	100	49,5	100,0	
Missing				
System	102	50,5		
Total	202	100,0		

Son dakika siyasal gelişmeleri takip etme sorusunu ifade eden Tablo 16'ya göre, katılımcıların %45'i (45 kişi) her zaman, %22'si (22 kişi) çoğunlukla, %13'ü (13 kişi) ara sıra, %9'u (9 kişi) nadiren ve %11'i (11 kişi) ise hiç yanıtını vermiştir.

Tablo 17- Bir Politik Aday Veya Partiyi Beğenme

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç	36	17,8	36,0	36,0
Nadiren	12	5,9	12,0	48,0
Ara sıra	21	10,4	21,0	69,0
Çoğunlukla	13	6,4	13,0	82,0
Her zaman	18	8,9	18,0	100,0
Total	100	49,5	100,0	
Missing				
System	102	50,5		
Total	202	100,0		

Bir politik aday veya partiyi beğenme sorusunu ifade eden Tablo 17'ye göre, katılımcıların %18'i (18 kişi) her zaman, %13'ü (13 kişi) çoğunlukla, %21'i (21 kişi) ara sıra, %12'si (12 kişi) nadiren ve %36'sı (36 kişi) ise hiç yanıtını vermiştir.

Tablo 18-Twitter Profiline Siyasi Haber Ekleme Veya Silme

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç	45	22,3	45,5	45,5
Nadiren	15	7,4	15,2	60,6
Ara sıra	16	7,9	16,2	76,8
Çoğunlukla	14	6,9	14,1	90,9
Her zaman	9	4,5	9,1	100,0
Total	99	49,0	100,0	
Missing				
System	103	51,0		
Total	202	100,0		

Twitter profiline siyasi haber ekleme veya silme sorusunu ifade eden Tablo 18'e göre, katılımcıların %9'u (9 kişi) her zaman, %14'ü (14 kişi) çoğunlukla, %16'sı (16 kişi) ara sıra, %15'i (15 kişi) nadiren ve %45'i (45 kişi) ise hiç yanıtını vermiştir.

Tablo 19-Twitter'da Anlık Olarak Siyasi Bir Bilgiyi Tartışma

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç	41	20,3	41,4	41,4
Nadiren	17	8,4	17,2	58,6
Ara sıra	13	6,4	13,1	71,7
Çoğunlukla	13	6,4	13,1	84,8
Her zaman	15	7,4	15,2	100,0
Total	99	49,0	100,0	
Missing				
System	103	51,0		
Total	202	100,0		

Twitter'da anlık olarak siyasi bir bilgiyi tartışma sorusunu ifade eden Tablo 19'a göre, katılımcıların %15'i (15 kişi) her zaman, %13'ü (13 kişi) çoğunlukla, %13'ü (13 kişi) ara sıra, %17'si (17 kişi) nadiren ve %41'i (41 kişi) ise hiç yanıtını vermiştir.

Tablo 20-Siyasi Bir Olayın Fotoğrafını Paylaşma

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç	43	21,3	43,0	43,0
Nadiren	18	8,9	18,0	61,0
Ara sıra	18	8,9	18,0	79,0
Çoğunlukla	9	4,5	9,0	88,0
Her zaman	12	5,9	12,0	100,0
Total	100	49,5	100,0	
Missing				
System	102	50,5		
Total	202	100,0		

Siyasi bir olayın fotoğrafını paylaşma sorusunu ifade eden Tablo 20'ye göre, katılımcıların %12'si (12 kişi) her zaman, %9'u (9 kişi) çoğunlukla, %18'i (18 kişi) ara sıra, %18'i (18 kişi) nadiren ve %43'ü (43 kişi) ise hiç yanıtını vermiştir.

Tablo 21-Siyasi Bir İçeriğe Yorum Yapma

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç	45	22,3	45,0	45,0
Nadiren	16	7,9	16,0	61,0
Ara sıra	20	9,9	20,0	81,0
Çoğunlukla	4	2,0	4,0	85,0
Her zaman	15	7,4	15,0	100,0
Total	100	49,5	100,0	
Missing				
System	102	50,5		
Total	202	100,0		

Siyasi bir içeriğe yorum yapma sorusunu ifade eden Tablo 21'e göre, katılımcıların %15'i (15 kişi) her zaman, %4'ü (4 kişi) çoğunlukla, %20'si (20 kişi) ara sıra, %16'sı (16 kişi) nadiren ve %45'i (45 kişi) ise hiç yanıtını vermiştir.

Tablo 22-Twitter Direkt Mesaj Uygulamasında Siyasi Bir Bilgiyi Tartışma

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç	64	31,7	64,0	64,0
Nadiren	14	6,9	14,0	78,0
Ara sıra	11	5,4	11,0	89,0
Çoğunlukla	6	3,0	6,0	95,0
Her zaman	5	2,5	5,0	100,0
Total	100	49,5	100,0	
Missing				
System	102	50,5		
Total	202	100,0		

Twitter direkt mesaj uygulamasında siyasi bir bilgiyi tartışma sorusunu ifade eden Tablo 22'ye göre, katılımcıların %5'i (5 kişi) her zaman, %6'sı (6 kişi) çoğunlukla, %11'i (11 kişi) ara sıra, %14'ü (14 kişi) nadiren ve %64'ü (64 kişi) ise hiç yanıtını vermiştir.

Tablo 23-Siyasi İçerik Taşıyan Anlık Bir Paylaşımında Bulunma

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç	46	22,8	46,5	46,5
Nadiren	16	7,9	16,2	62,6
Ara sıra	12	5,9	12,1	74,7
Çoğunlukla	12	5,9	12,1	86,9
Her zaman	13	6,4	13,1	100,0
Total	99	49,0	100,0	
Missing				
System	103	51,0		
Total	202	100,0		

Siyasi içerik taşıyan anlık bir paylaşımında bulunma sorusunu ifade eden Tablo 23'e göre, katılımcıların %13'ü (13 kişi) her zaman, %12'si (12 kişi) çoğunlukla, %12'si (12 kişi) ara sıra, %16'sı (16 kişi) nadiren ve %46'sı (46 kişi) ise hiç yanıtını vermiştir.

Tablo 24-Siyasi Bir Uygulamayı Ekleme Veya Silme

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç	58	28,7	58,0	58,0
Nadiren	18	8,9	18,0	76,0
Ara sıra	12	5,9	12,0	88,0
Çoğunlukla	5	2,5	5,0	93,0
Her zaman	7	3,5	7,0	100,0
Total	100	49,5	100,0	
Missing				
System	102	50,5		
Total	202	100,0		

Siyasi bir uygulamayı ekleme veya silme sorusunu ifade eden Tablo 24'e göre, katılımcıların %7'si (7 kişi) her zaman, %5'i (5 kişi) çoğunlukla, %12'si (12 kişi) ara sıra, %18'i (18 kişi) nadiren ve %58'i (58 kişi) ise hiç yanıtını vermiştir.

Tablo 25-Siyasi Bir Belge Paylaşma

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç	64	31,7	64,0	64,0
Nadiren	15	7,4	15,0	79,0
Ara sıra	9	4,5	9,0	88,0
Çoğunlukla	7	3,5	7,0	95,0
Her zaman	5	2,5	5,0	100,0
Total	100	49,5	100,0	
Missing				
System	102	50,5		
Total	202	100,0		

Siyasi bir belge paylaşma sorusunu ifade eden Tablo 25'e göre, katılımcıların %5'i (5 kişi) her zaman, %7'si (7 kişi) çoğunlukla, %9'u (9 kişi) ara sıra, %15'i (15 kişi) nadiren ve %64'ü (64 kişi) ise hiç yanıtını vermiştir.

Tablo 26-Siyasi Konularla Ya Da Adaylarla İlgili Videolar Paylaşma

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç	56	27,7	56,0	56,0
Nadiren	14	6,9	14,0	70,0
Ara sıra	11	5,4	11,0	81,0
Çoğunlukla	11	5,4	11,0	92,0
Her zaman	8	4,0	8,0	100,0
Total	100	49,5	100,0	
Missing				
System	102	50,5		
Total	202	100,0		

Siyasi konularla ya da adaylarla ilgili videolar paylaşma sorusunu ifade eden Tablo 26'ya göre, katılımcıların %8'i (8 kişi) her zaman, %11'i (11 kişi) çoğunlukla, %9'u (9 kişi) ara sıra, %15'i (15 kişi) nadiren ve %64'ü (64 kişi) ise hiç yanıtını vermiştir.

Tablo 27-Siyasi Bir Link Paylaşma

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiç	59	29,2	59,0
	Nadiren	20	9,9	79,0
	Ara sıra	6	3,0	85,0
	Çoğunlukla	10	5,0	95,0
	Her zaman	5	2,5	100,0
	Total	100	49,5	100,0
Missing	System	102	50,5	
Total		202	100,0	

Siyasi bir link paylaşma sorusunu ifade eden Tablo 27'ye göre, katılımcıların %5'i (5 kişi) her zaman, %10'u (10 kişi) çoğunlukla, %6'sı (6 kişi) ara sıra, %20'si (20 kişi) nadiren ve %59'u (59 kişi) ise hiç yanıtını vermiştir.

Tablo 28-Başkalarına Siyasal Konularda Cevap Yazma/ Davet Gönderme

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiç	58	28,7	58,0
	Nadiren	23	11,4	81,0
	Ara sıra	4	2,0	85,0
	Çoğunlukla	6	3,0	91,0
	Her zaman	9	4,5	100,0
	Total	100	49,5	100,0
Missing	System	102	50,5	
Total		202	100,0	

Başkalarına siyasal konularda cevap yazma/ davet gönderme sorusunu ifade eden Tablo 28'e göre, katılımcıların %9'u (9 kişi) her zaman, %6'sı (6 kişi) çoğunlukla, %4'ü (4 kişi) ara sıra, %23'ü (23 kişi) nadiren ve %58'i (58 kişi) ise hiç yanıtını vermiştir.

Tablo 29-Siyasi Bir Anket Yapma Veya Ankete Katılma

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiç	50	24,8	50,5
	Nadiren	20	9,9	70,7
	Ara sıra	10	5,0	80,8
	Çoğunlukla	9	4,5	89,9
	Her zaman	10	5,0	100,0
	Total	99	49,0	100,0
Missing	System	103	51,0	
Total		202	100,0	

Siyasi bir anket yapma veya ankete katılma sorusunu ifade eden Tablo 29'a göre, katılımcıların %10'u (10 kişi) her zaman, %9'u (9 kişi) çoğunlukla, %10'u (10 kişi) ara sıra, %20'si (20 kişi) nadiren ve %50'si (50 kişi) ise hiç yanıtını vermiştir.

Tablo 30-Siyasi Bir Gruba (Liste) Katılma Veya Gruptan Ayrılma

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiç	64	31,7	64,6
	Nadiren	13	6,4	77,8
	Ara sıra	10	5,0	87,9
	Çoğunlukla	6	3,0	93,9
	Her zaman	6	3,0	100,0
	Total	99	49,0	100,0
Missing	System	103	51,0	
Total		202	100,0	

Siyasi bir gruba (liste) katılma veya gruptan ayrılma sorusunu ifade eden Tablo 30'a göre, katılımcıların %6'sı (6 kişi) her zaman, %6'sı (6 kişi) çoğunlukla, %10'u (10 kişi) ara sıra, %13'ü (13 kişi) nadiren ve %64'ü (64 kişi) ise hiç yanıtını vermiştir.

Tablo 31- Siyasi Bir Kişi, Aday Ya Da Liderin Fotoğrafını Paylaşma

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Hiç	67	33,2	67,0	67,0
Nadiren	14	6,9	14,0	81,0
Ara sıra	3	1,5	3,0	84,0
Çoğunlukla	8	4,0	8,0	92,0
Her zaman	8	4,0	8,0	100,0
Total	100	49,5	100,0	
Missing System	102	50,5		
Total	202	100,0		

Siyasi bir kişi, aday ya da liderin fotoğrafını paylaşma sorusunu ifade eden Tablo 31'e göre, katılımcıların %8'i (8 kişi) her zaman, %8'i (8 kişi) çoğunlukla, %3'ü (3 kişi) ara sıra, %14'ü (14 kişi) nadiren ve %67'si (67 kişi) ise hiç yanıtını vermiştir.

Tablo 32- T Test- Cinsiyete Göre Siyasal Katılım Aktiviteleri Sıklığı

	Levene's Test ^a for Equality of Variances	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Equal variances assumed		,345	,558	-2,119	98	,037	-,636	,300	-1,232	-,040
Bir politik aday veya partiye beğenme	Equal variances not assumed			-2,100	90,322	,039	-,636	,303	-1,238	-,034
Twitter'da anlık siyasi bilgiyi tartışma	Equal variances assumed	1,382	,243	-2,031	97	,045	-,609	,300	-1,204	-,014
olarak bir siyasi bilgiyi tartışma	Equal variances not assumed			-2,011	88,440	,047	-,609	,303	-1,211	-,007
Başkalarına siyasal konularda cevap yazma davet gönderme	Equal variances assumed	4,774	,031	-2,183	98	,031	-,556	,255	-1,061	-,050
	Equal variances not assumed			-2,135	83,549	,036	-,556	,260	-1,073	-,038

Cinsiyete göre t-test analiz sonuçları değerlendirildiğinde, Twitter kullanım amaçları ile ilgili yanıtlar arasında anlamlı bir fark bulunamamıştır. Tablo 32 incelendiğinde, Twitter'da siyasal katılım aktivitelerini ölçen üç soruya verilen yanıtlarda anlamlı fark bulunmaktadır. Bir politik aday veya partiye beğenme sorusunun yanıtlarında, hesaplanan α değeri 0,04 normal α değeri 0,05'ten küçük olduğu için cinsiyete göre anlamlı bir fark vardır. Ortalamalara göre erkekler kadınlardan daha fazla bir politik aday ya da partiye beğenmektedirler.

Twitter’da anlık olarak siyasi bir bilgiyi tartışma sorusunun yanıtlarında, hesaplanan α değeri 0,014 normal α değeri 0,05 ten küçük olduğu için cinsiyete göre anlamlı bir fark vardır. Ortalamalara göre, erkekler kadınlardan daha fazla Twitter’da anlık olarak siyasi bir bilgiyi tartışmaktadır. Son olarak, başkalarına siyasal konularda cevap yazma/ davet gönderme sorusunun yanıtlarında hesaplanan α değeri 0,05 normal α değeri 0,05’e eşit olduğu için cinsiyete göre anlamlı bir fark vardır. Ortalamalara göre, yine erkekler kadınlardan daha fazla Twitter’da başkalarına siyasal konularda cevap yazma/ davet gönderme aktivitesinde bulunmaktadır.

Tablo 33-Anova-Yaşa Göre Twitter’da Siyasal Katılım Aktiviteleri Sıklığı

		Sum of Squares	df	Mean Square	F	Sig.
Bir politik aday veya partiyi beğenme	Between Groups	23,186	3	7,729	3,609	,016
	Within Groups	205,564	96	2,141		
	Total	228,750	99			
Twitter direkt mesaj uygulamasında siyasi bir bilgiyi tartışma	Between Groups	16,146	3	5,382	4,267	,007
	Within Groups	121,094	96	1,261		
	Total	137,240	99			
Siyasi bir uygulamayı ekleme veya silme	Between Groups	12,765	3	4,255	2,960	,036
	Within Groups	137,985	96	1,437		
	Total	150,750	99			
Siyasi bir belge paylaşma	Between Groups	16,095	3	5,365	4,182	,008
	Within Groups	123,145	96	1,283		
	Total	139,240	99			
Siyasi bir link paylaşma	Between Groups	14,482	3	4,827	3,503	,018
	Within Groups	132,278	96	1,378		
	Total	146,760	99			
Baskalarına siyasal konularda cevap yazma/ davet gönderme	Between Groups	16,941	3	5,647	3,668	,015
	Within Groups	147,809	96	1,540		
	Total	164,750	99			
Siyasi bir anket yapma veya ankete katılma	Between Groups	32,716	3	10,905	6,787	,000
	Within Groups	152,637	95	1,607		
	Total	185,354	98			
Siyasi bir kişi, aday ya da liderin fotoğrafını paylaşma	Between Groups	14,172	3	4,724	2,944	,037
	Within Groups	154,068	96	1,605		
	Total	168,240	99			

Yaşa göre anova analiz sonuçları değerlendirildiğinde, Twitter kullanım amaçları ile ilgili yanıtlar arasında anlamlı bir fark bulunamamıştır. Tablo 33 incelendiğinde, Twitter’da siyasal katılım aktivitelerini ölçen sekiz soruya verilen yanıtlarda anlamlı fark bulunmaktadır. Bir politik aday veya partiyi beğenme sorusunun yanıtlarında, hesaplanan α değeri 0,016 normal α değeri 0,05’ten küçük olduğu için yaşa göre anlamlı bir fark vardır. Bu anlamlı fark, 17-19 ile 23-25 ve 20-22 ile 23-25 yaş aralığındadır. Twitter direkt mesaj uygulamasında siyasi bir bilgiyi tartışma sorusunun yanıtlarında, hesaplanan α değeri 0,007 normal α değeri 0,05’ten küçük olduğu için yaşa göre anlamlı bir fark vardır. Bu anlamlı fark, 17-19 ile 23-25 ve 20-22 ile 23-25 yaş aralığındadır. Siyasi bir uygulamayı ekleme veya silme sorusunun yanıtlarında, hesaplanan α değeri 0,036 normal α değeri 0,05’ten küçük olduğu için yaşa göre anlamlı bir fark vardır. Bu anlamlı fark, 17-19 ile 23-25 yaş aralığındadır. Siyasi bir belge paylaşma sorusunun yanıtlarında, hesaplanan α değeri 0,008 normal α değeri 0,05’ten küçük olduğu için yaşa göre anlamlı bir fark vardır. Bu anlamlı fark, 17-19 ile 23-25 ve 17-19 ile 20-22 yaş aralığındadır. Siyasi bir link paylaşma sorusunun yanıtlarında, hesaplanan α değeri 0,018 normal α değeri 0,05’ten küçük olduğu için yaşa göre anlamlı bir fark vardır. Bu anlamlı fark, 17-19 ile 23-25 yaş aralığındadır. Başkalarına siyasal konularda cevap yazma/ davet gönderme sorusunun yanıtlarında, hesaplanan α değeri 0,015 normal α değeri 0,05’ten küçük olduğu için yaşa göre anlamlı bir fark vardır. Bu anlamlı fark, 17-19 ile 23-25 yaş aralığındadır. Siyasi bir anket yapma veya ankete katılma sorusunun yanıtlarında, hesaplanan α değeri 0,00 normal α değeri 0,05’ten küçük olduğu için yaşa göre anlamlı bir fark vardır. Bu anlamlı fark, 17-19 ile 23-25 ve 20-22 ile 23-25 yaş aralığındadır. Siyasi bir kişi, aday ya da liderin fotoğrafını paylaşma sorusunun yanıtlarında, hesaplanan α değeri 0,037 normal α değeri 0,05’ten küçük olduğu için yaşa göre anlamlı bir fark vardır. Bu anlamlı fark, 17-19 ile 23-25 yaş aralığındadır.

Ortalamalara bakıldığında, 23-25 yaş aralığındaki katılımcıların bu sorulara diğerlerine göre olumlu yanıt verdikleri görülmektedir.

Tablo 34-Anova- Gelir Düzeyine Göre Twitter'da Siyasal Katılım Aktiviteleri Sıklığı

		Sum of Squares	df	Mean Square	F	Sig.
Siyasi bir link paylaşma	Between Groups	12,331	3	4,110	2,935	,037
	Within Groups	134,429	96	1,400		
	Total	146,760	99			

Katılımcıların ailelerinin aylık gelir düzeyine göre anova analiz sonuçları değerlendirildiğinde, Twitter kullanım amaçları ile ilgili yanıtlar arasında anlamlı bir fark bulunamamıştır. Tablo 34 incelendiğinde, Twitter'da siyasal katılım aktivitelerini ölçen bir soruya verilen yanıtlarda anlamlı fark bulunmaktadır. Siyasi bir link paylaşma sorusunun yanıtlarında, hesaplanan α değeri 0,037 normal α değeri 0,05'ten küçük olduğu için ailenin aylık gelir düzeyine göre anlamlı bir fark vardır. Bu anlamlı fark, ailesinin geliri 1000 TL-2000 TL ile ailesinin geliri 1000 TL'nin altında ya da olmayanlar arasındadır. Ortalamalara bakıldığında, ailesinin geliri 1000 TL'nin altında ya da olmayanlar diğerlerine göre olumlu yanıt vermişlerdir.

Tablo 35-Anova-Twitter Kullanım Süresine Göre Twitter Kullanım Amaçları

		Sum of Squares	df	Mean Square	F	Sig.
Mesaj göndermek ya da mesaj almak için	Between Groups	12,426	2	6,213	4,290	,016
	Within Groups	140,484	97	1,448		
	Total	152,910	99			
Eğlenmek ve rahatlamak için	Between Groups	18,827	2	9,414	5,026	,008
	Within Groups	181,683	97	1,873		
	Total	200,510	99			
Boş zamanları değerlendirmek için	Between Groups	15,742	2	7,871	4,285	,016
	Within Groups	176,338	96	1,837		
	Total	192,081	98			
Kişisel sunum ve profil bilgilerimi paylaşmak için	Between Groups	16,051	2	8,025	4,432	,014
	Within Groups	175,659	97	1,811		
	Total	191,710	99			

Katılımcıların Twitter kullanım süresine göre anova analiz sonuçları değerlendirildiğinde, Twitter'da siyasal katılım aktiviteleri ile ilgili yanıtlar arasında anlamlı bir fark bulunamamıştır. Tablo 35 incelendiğinde, Twitter kullanım amaçlarını ölçen dört soruya verilen yanıtlarda anlamlı fark bulunmaktadır. Mesaj göndermek ya da mesaj almak için sorusunun yanıtlarında, hesaplanan α değeri 0,016 normal α değeri 0,05'ten küçük olduğu için Twitter kullanım süresine göre anlamlı bir fark vardır. Bu anlamlı fark, bir oturumda 5 dk.-30 dk. ile 3 saat ve üzeri Twitter kullananlar arasındadır. Eğlenmek ve rahatlamak için sorusunun yanıtlarında, hesaplanan α değeri 0,008 normal α değeri 0,05'ten küçük olduğu için Twitter kullanım süresine göre anlamlı bir fark vardır. Bu anlamlı fark, bir oturumda 5 dk.-30 dk. ile 3 saat ve üzeri Twitter kullananlar arasındadır. Boş zamanları değerlendirmek için sorusunun yanıtlarında, hesaplanan α değeri 0,016 normal α değeri 0,05'ten küçük olduğu için Twitter kullanım süresine göre anlamlı bir fark vardır. Bu anlamlı fark, bir oturumda 5 dk.-30 dk. ile 3 saat ve üzeri Twitter kullananlar arasındadır. Kişisel sunum ve profil bilgilerimi paylaşmak için sorusunun yanıtlarında, hesaplanan α değeri 0,014 normal α değeri 0,05'ten küçük olduğu için Twitter kullanım süresine göre anlamlı bir fark vardır. Bu anlamlı fark, bir oturumda 5 dk.-30 dk. ile 3 saat ve üzeri Twitter kullananlar arasındadır. Ortalamalara bakıldığında, 3 saat ve üzeri Twitter kullananlar bu sorulara diğerlerine göre olumlu yanıt vermişlerdir.

Tablo 36- Anova- Twitter'a Erişim Aracına Göre Twitter Kullanım Amaçları

		Sum of Squares	df	Mean Square	F	Sig.
Boş zamanları değerlendirmek için	Between Groups	15,701	2	7,850	4,273	,017
	Within Groups	176,380	96	1,837		
	Total	192,081	98			

Katılımcıların Twitter'a erişim aracına göre anova analiz sonuçları değerlendirildiğinde, Twitter kullanım amaçlarını ölçen bir soruya verilen yanıtlarda anlamlı fark bulunmaktadır. Tablo 36 incelendiğinde, boş zamanları değerlendirmek için sorusunun yanıtlarında, hesaplanan α değeri 0,017 normal α değeri 0,05'ten küçük olduğu için Twitter'a erişim aracına göre anlamlı bir fark vardır. Bu anlamlı fark, bir oturumda akıllı telefon ve bilgisayar kullananlar arasındadır. Ortalamalara bakıldığında, akıllı telefon kullananların bu soruya diğerlerine göre olumlu daha olumlu yanıt vermişlerdir.

Tablo 37- Anova- Twitter'a Erişim Aracına Göre Siyasal Katılım Aktiviteleri Sıklığı

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	12,794	2	6,397	3,514	,034

Son dakika siyasal gelişmeleri takip etme	Within Groups	176,596	97	1,821		
	Total	189,390	99			
Twitter'da anlık olarak siyasi bir bilgiyi tartışma	Between Groups	17,771	2	8,885	4,170	,018
	Within Groups	204,553	96	2,131		
	Total	222,323	98			
Siyasi bir uygulamayı ekleme veya silme	Between Groups	10,120	2	5,060	3,490	,034
	Within Groups	140,630	97	1,450		
	Total	150,750	99			
Siyasi konularla ya da adaylarla ilgili videolar paylaşma	Between Groups	12,594	2	6,297	3,585	,031
	Within Groups	170,396	97	1,757		
	Total	182,990	99			

Katılımcıların Twitter'a erişim aracına göre anova analiz sonuçları değerlendirildiğinde, Twitter'da siyasal katılım aktiviteleri sıklığını ölçen dört soruya verilen yanıtlarda anlamlı fark bulunmaktadır. Tablo 37 incelendiğinde, son dakika siyasal gelişmeleri takip etme sorusunun yanıtlarında, hesaplanan α değeri 0,034 normal α değeri 0,05'ten küçük olduğu için Twitter'a erişim aracına göre anlamlı bir fark vardır. Bu anlamlı fark, bir oturumda akıllı telefon ve bilgisayar kullananlar arasındadır. Twitter'da anlık olarak siyasi bir bilgiyi tartışma sorusunun yanıtlarında, hesaplanan α değeri 0,018 normal α değeri 0,05'ten küçük olduğu için Twitter'a erişim aracına göre anlamlı bir fark vardır. Bu anlamlı fark, bir oturumda akıllı telefon ve bilgisayar kullananlar arasındadır. Siyasi bir uygulamayı ekleme veya silme sorusunun yanıtlarında, hesaplanan α değeri 0,034 normal α değeri 0,05'ten küçük olduğu için Twitter'a erişim aracına göre anlamlı bir fark vardır. Bu anlamlı fark, bir oturumda akıllı telefon ve bilgisayar kullananlar arasındadır. Siyasi konularla ya da adaylarla ilgili videolar paylaşma sorusunun yanıtlarında, hesaplanan α değeri 0,031 normal α değeri 0,05'ten küçük olduğu için Twitter'a erişim aracına göre anlamlı bir fark vardır. Bu anlamlı fark, bir oturumda akıllı telefon ve bilgisayar kullananlar arasındadır. Ortalamalara bakıldığında, akıllı telefon kullananlar bu sorulara diğerlerine göre olumlu daha olumlu yanıt vermişlerdir.

Sonuç

Yapılan analiz sonucunda, ankete katılanların %55'inin kadın olduğu, %61'inin 20-22 yaş aralığında olduğu, %78'inin bir oturumda Twitter kullanım süresinin 5dk.-30 dk. olduğu, %58'inin Twitter'a erişim aracının akıllı telefon olduğu görülmüştür. Twitter kullanım amaçlarına bakıldığında, katılımcıların Twitter'ı çoğunlukla olaylar ve kişiler hakkında bilgi sahibi olmak için ve eğlenmek ve rahatlamak için kullanmayı tercih ettikleri görülmüştür. Twitter'da siyasal katılım aktiviteleri sıklığına bakıldığında, en yüksek oranın son dakika siyasal gelişmeleri takip etme olduğu görülmüştür. Bu bölüme ait diğer soruların yanıtları, Twitter'da siyasal katılım oranlarının düşük olduğunu göstermektedir. Müzakereci demokrasi modeli bağlamında da olumlu bir sonuca ulaşamamıştır. Müzakerecinin niteliği ile ilgili olan, Twitter'da anlık olarak siyasi bir bilgiyi tartışma, siyasi bir içeriğe yorum yapma, Twitter direkt mesaj uygulamasında siyasi bir bilgiyi tartışma, siyasi bir belge paylaşma, siyasi bir link paylaşma, başkalarına siyasal konularda cevap yazma/davet gönderme, siyasi bir anket yapma veya ankete katılma, siyasi bir gruba (liste) katılma veya gruptan ayrılma sorularına verilen yanıtların çoğunlukla olumsuz olduğu görülmüştür.

T-testi ve anova analiz sonuçlarına göre, erkeklerin, bir politik aday ya da partiyi beğenme, Twitter'da anlık olarak siyasal bir bilgiyi tartışma, başkalarına siyasal konularda cevap yazma/davet gönderme aktivitelerini kadınlara oranla daha fazla gerçekleştirdikleri görülmüştür. Genel olarak, en fazla 23-25 yaş aralığındaki katılımcılar siyasal katılım aktivitelerini gerçekleştirmektedirler. Twitter'ı 3 saat ve üzeri kullananların çoğunlukla mesaj göndermek ve mesaj almak, eğlenmek ve rahatlamak, boş zamanları değerlendirmek, kişisel sunum ve profil bilgilerini paylaşmak için kullandıkları, siyasal katılım aktivitelerine ilgilerinin bulunmadığı görülmektedir. Katılımcıların büyük çoğunluğunun akıllı telefonu bulunduğu halde, Twitter'ı çoğunlukla boş zamanları değerlendirmek için kullandıkları görülmüştür. Akıllı telefon ile Twitter'a erişim sağlayanların siyasal katılım aktivitelerinin ise, çoğunlukla son dakika siyasal gelişmeleri takip etme, Twitter'da anlık olarak siyasal bir bilgiyi tartışma, siyasi bir uygulamayı ekleme veya silme, siyasi konularla ya da adaylarla ilgili videolar paylaşma olduğu görülmektedir. Sonuçlar değerlendirildiğinde, katılımcıların Twitter'da siyasal konulara ilgilerinin oldukça az olduğu görülmektedir. Buna göre, Twitter'ın demokratik katılımı arttırdığını söylemek, müzakereci demokrasinin böylece gelişeceğini umut etmek oldukça güçtür.

Kaynakça

- "Arap sonbaharı" (2013). *Milliyet*, 2 Ağustos. Erişim Adresi: <http://www.milliyet.com.tr/arap-sonbahari/dunya/detay/1744874/default.htm>.
- Arıcı, A. (2015). Yeni medya çağında siyasal iletişim: siyasi partilerin ve siyasi parti liderlerinin sosyal medya performansları üzerine araştırma. *Pazarlama ve Pazarlama Araştırmaları Dergisi*, 15, 49-67.
- Akdoğan, A. A. (2007). Habermas'ın sistem kuramı eleştirisi çerçevesinde yeni kamu işletmeciliği ve müzakereci demokrasi. *Amme İdaresi Dergisi*, 4, 21-44.

- Aydın, F. A. (2015). Kurumsal itibar açısından sosyal medyaya ilişkin bir değerlendirme. *Karadeniz Teknik Üniversitesi İletişim Araştırmaları Dergisi*, 9, 77-92.
- Aydın, S. (2017). Müzakereci Demokrasi Modeli'nin Kamusal Alanı: Nasıl Bir İletişim Özgürlüğü. *The Turkish Online Journal of Design, Art and Communication – TOJDAC*, 7, 139-149.
- Aziz, A. (2003). Siyasal iletişim. Nobel: Ankara.
- Balcı, Ş. ve Sarıtaş, H. (2015). Facebook ve siyasal katılım: 2014 yerel seçimleri araştırması. *Selçuk Üniversitesi Türkiyat Araştırmaları Dergisi*, 37, 511-535.
- Bayraktutan, G., Binark, M., Çomu, T., Doğu, B., İslamoğlu, G. ve Aydemir, A. T. (2012). Sosyal medyada 2011 genel seçimleri: nicel –nitel arayüzey incelemesi. *Selçuk İletişim*, 7 (3), 5-29.
- Binark, M. (2009). Yeni medya dolayimli iletişim ortamında olanakların ve ol(a)mayanların farkında olmalı, *Evrensel Kültür*, 216, 60-63.
- Binark, M., Karataş, Ş., Çomu, T., ve Koca, E. (2015). Türkiye’de twitter’da trol kültürü. *Toplum ve Bilim*, 135, 124-157.
- Bostancı, M. (2014). Siyasal iletişim 2.0. *Erciyes İletişim Dergisi*, 3(3), 84-96.
- “Bu eylem, gezi parkı eylemi değildir” (2013). *İhlas Haber Ajansı*, 1 Haziran. Erişim Adresi: <http://www.ihha.com.tr/haber-bu-eylem-gezi-parki-eylemi-degildir-279180/>.
- Çıldan, C., Ertemiz, M., Tumuçin, H. K., Küçük, E., ve Albayrak, D. (2012, Şubat). *Sosyal medyanın politik katılım ve hareketlerdeki rolü*. Akademik Bilişim Konferansı’nda yapılan sunum, Uşak.
- Dağıtmaç, M. (2015). Sosyal medya bizi neden kullanır?. İstanbul: Metamorfoz.
- Dahlgren, P. (2009). Media and political engagement: citizens, communication, and Democracy. Cambridge University Press: NY.
- Demir, G. (2011). Habermas ve foucault: müzakereci demokrasi ve yönetimsellik. *Akdeniz İ.İ.B.F. Dergisi*, (2), 48 – 71.
- Demirhan, K. (2017). Yeni medya’da siyasal iletişim sürecinin kavramsallaştırılmasında alternatif modeller: müzakereci ve agonistik demokrasi yaklaşımları. *Gümüşhane Üniversitesi İletişim Fakültesi Dergisi*, 5(1), 174-200.
- Eren, V. ve Aydın, A. (2014). Sosyal medyanın kamuoyu oluşturmadaki rolü ve muhtemel riskler. *KMÜ Sosyal ve Ekonomik Araştırmalar Dergisi*, 16 (1), 197-205.
- Eren, S. ve Özden Y. (2014) Temsili demokrasinin krizi ve bir ileri demokrasi talebi olarak gezi parkı eylemleri. *Birey ve Toplum*, 7, 161-196.
- Fuchs, C. (2016). Sosyal Medya: Eleştirel Bir Giriş. D. Saraçoğlu ve İ. Kalaycı (Çev.). İstanbul: Nota Bene.
- Genel, M. G. (2012). Siyasal iletişim kampanyalarında sosyal medyanın kullanımı: 12 haziran 2011 seçimleri “twitter” örneği. *TOJDAC*, 2(4), 23-31.
- Habermas, J. (1999). Demokrasinin üç normatif modeli. Demokrasi ve farklılık: siyasal düzenin sınırlarının tartışmaya açılması içinde. S. Benhabib (Ed.). Z. Gürata ve C. Gürsel (Çev.). İstanbul: Demokrasi Kitaplığı.
- Habermas, J. (2017). Kamusal alanın yapısal dönüşümü (14. Baskı). T. Bora ve M. Sancar (Çev.). İstanbul: İletişim Kurumu.
- Kaplan, M. (1992). Politika bilimine giriş. İstanbul: Bilgi Dağıtım.
- Karaçor, Süleyman (2009). Yeni iletişim teknolojileri, siyasal katılım, demokrasi. *Yönetim ve Ekonomi: Celal Bayar Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 16 (2), 121-131.
- Karagöz, K. (2013). Yeni medya çağında dönüşen toplumsal hareketler ve dijital aktivizm hareketleri. *İletişim Ve Diplomasi*, 1(1), 131-157.
- Kaypak, Ş. (2012). Yerel yönetimlerde katılımcı/müzakereci demokrasi sürecinde sivil toplum kuruluşlarının önemi. *Uluslararası Yönetim İktisat ve İşletme Dergisi*, 17, 171-196.
- Köseoglu, Y. ve Al, H. (2013). Bir siyasal propaganda aracı olarak sosyal medya. *Akademik İncelemeler Dergisi*, 8 (3), 103-125.
- Özkan, A. (2004). Siyasal iletişim: partiler, seçimler, stratejiler. İstanbul: Nesil.
- Satıcı, M. (2014). Modernitenin mirası ve krizi olarak demokrasi ve ötesi. *Felsefe ve Sosyal Bilimler Dergisi*, 18, 133-152.
- Şener, G., Emre, P. Ö. ve Akyıldız, F. (2015). Türkiye’de sosyal medyanın siyasi katılıma etkileri. *Folklor/Edebiyat*, 83, 75-98.
- Toprak, S. T. (2014). Sivil toplum kuruluşları ve sosyal medya bağlamında “renkli devrimler” ve “arap baharı” süreçlerinin karşılaştırmalı analizi. *Eskişehir Osmangazi Üniversitesi İİBF Dergisi*, 9 (3), 223-257.
- Tunç, H. (2008). Demokrasi türleri ve müzakereci demokrasi kavramı. *Gazi Üniversitesi Hukuk Fakültesi Dergisi*, 12 (1-2), 1113-1132.
- Türk Dil Kurumu (2017). Müzakere. Erişim Adresi: http://www.tdk.gov.tr/index.php?option=com_gts&kelime=M%C3%9CZAKERE
- “Wall street işgal hareketi büyüyor” (2011). *İhlas Haber Ajansı*, 6 Ekim. Erişim Tarihi: <http://www.ihha.com.tr/haber-wall-street-isgal-hareketi-buyuyor-196357/>.

- Young, I. M. (1999). İletişim ve öteki: müzakereci demokrasinin ötesinde. Demokrasi ve farklılık: siyasal düzenin sınırlarının tartışmaya açılması içinde. S. Benhabib (Yay. Haz.), Z. Gürata ve C. Gürsel (Çev.). İstanbul: Demokrasi Kitaplığı.
- Yükselbaba, Ü. (2008). Habermas'ın prosedüralist hukuk paradigması, haklar istemi ve hukuk devleti. *İstanbul Üniversitesi Hukuk Fakültesi Mecmuası*, 1, 221-252.

Türkiye’deki Ergenlerde Çokboyutlu Yaşam Doyumunun Yordayıcısı Olarak Ebeveyne Bağlanma

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Özet

Bu çalışmanın amacı ebeveyne bağlanma ile çokboyutlu yaşam doyumu arasındaki ilişkileri Türkiye’de lise öğrenimlerini sürdüren ergenler üzerinde incelemektir. Araştırmanın diğer amacı ebeveyne bağlanmanın çokboyutlu yaşam doyumunun alt boyutlarını (aile, arkadaş, çevre, okul, benlik) anlamlı şekilde yordayıp yordamadığını belirlemektir. Araştırmanın amacı doğrultusunda çalışma ilişkisel tarama modeline uygun olarak gerçekleştirilmiştir. Araştırmanın çalışma grubu 2016-2017 eğitim-öğretim yılında Denizli’de öğrenim görmekte olan ve araştırmaya gönüllü olarak katılan 470 lise öğrencisinden (237 kız %50.4 - 233 erkek %49.6) oluşmaktadır. Araştırmada Huebner (1994) tarafından geliştirilen ve Türkçeye uyarlama çalışması Çivitci (2007) tarafından yapılmış olan Çokboyutlu Öğrenci Yaşam Doyumu Ölçeği ile Raja, McGee ve Stanton (1992) tarafından geliştirilen ve Günaydın, Selçuk, Sümer ve Uysal (2005) tarafından Türkçeye uyarlanan Ebeveyne Bağlanma Envanteri kullanılmıştır. Bu çalışmada analizlerden önce verilerin normal dağılım gösterip göstermediği kontrol edilmiş ve veriler normal dağılım gösterdiği için parametrik testler kullanılmıştır. Araştırma sonuçlarına göre liseye devam eden ergenlerin çokboyutlu yaşam doyumlarının tüm alt boyutları (aile, arkadaş, çevre, okul, benlik) ile anne ve babaya bağlanma arasında pozitif yönde anlamlı ilişkiler bulunmuştur. Araştırma bulgusuna bağlı olarak liseye devam eden ergenlerin ebeveyne bağlanma düzeyi arttıkça yaşam doyumu düzeylerinin de arttığı söylenebilir. Araştırmanın diğer sonucuna göre ergenlerde anne ve babaya bağlanma, çokboyutlu yaşam doyumunun tüm alt boyutlarını (aile, arkadaş, çevre, okul, benlik) değişen düzeylerde anlamlı olarak yordamaktadır. Araştırma bulgusuna bağlı olarak liseye devam eden ergenlerde ebeveyne bağlanmanın, çokboyutlu yaşam doyumunun tüm alt boyutlarını değişen düzeylerde açıkladığı söylenebilir.

Anahtar Kelimeler: *Çokboyutlu yaşam doyumu, ebeveyne bağlanma, ergenler*

Usability Analysis Of The Mobile Instruction For Computer Programming: The Comparison Of The User Satisfaction Based On The Task Completion Time

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Abstract

Accessing information gains more importance than ever before. The developments made in this direction affect all segments of the society. Now people are in the effort to reach the right information faster and more effectively. Mobile application market is growing in an astonishing speed. There are many players in the mobile application market who develop applications. Among many alternative, users decide which application to use or not in few seconds after seeing the interface of the applications. The most important point in providing continuity in the rapidly growing mobile application world is developing useful applications. In an effort to increase the usability of the mobile application this study is designed to investigate whether the user satisfaction changes based on the task completion time for the mobile instruction which is designed to learn the Hypertext Markup Language. Participants of the study are selected from the students of the Department of Computer Education and Instructional Technologies. All participants have passed the English Proficiency exam. The adopted questioner was used to measure the user satisfaction. The study participants have completed the freely available mobile application designed to learn the Hypertext Markup Language. The application can run on Android and iOS mobile operating systems. The mobile application has several learning modules. Users have to complete each module in order to proceed to the next module after answering all questions correctly at the end of the each module. Findings of the study revealed that users who complete the activities on mobile application faster are more satisfied from using the mobile applications than the other users. Therefore, it is suggested that while developing mobile applications, time to complete the application must be taken into account to increase user satisfaction. The usability test must be completed before the release of the mobile applications. Therefore, developers of the mobile applications should pay attention to the task completion time to increase the sale rates in the mobile application market.

Keywords: *Usability testing, mobile application, user satisfaction, task completion time*

Introduction

With advancing technology, accessing information gains more importance every day. The developments made in this direction affect all segments of the society to a great extent. Now people are in the effort to reach the right information faster and more effectively. In the past, people who have had to visit the libraries to reach information, now can quickly access information from their computers through the development of the internet. Even this speed has begun to lose its validity to people over time. As a result, the mobile age began to show itself. People, today, have instant access to information with their mobile devices. There are about 5 billion mobile users worldwide for 2017 (Statista, 2018). This shows the tendency to mobile devices.

These developments brought with it a number of questions and problems. How impressive are mobile apps for end users? Can people use mobile applications comfortably? The availability of answers to these questions comes into play. Usability can be examined with various parameters such as efficiency, productivity, learnability, memorability, error, satisfaction, flexibility and attitude (Nielsen, 1994). Usability testing of mobile devices is an emerging area of research (Beck, et al., 2003).

The purpose of this study is to compare the user satisfaction rate based on the task completion time. Therefore, the research question of this study is; “Does the user satisfaction rate change based on the task completion time? There are numerous publications in the literature about the design phase or usability testing done on an existing application. Namlı (2010) conducted a study for the Turkey’s first mobile banking application. Results revealed that the availability of mobile applications will increase with the development of user-friendly interface components. One of the usability tests conducted for mobile applications in the literature was conducted on mobile web sites of Middle East Technical University, Koç University and Sabancı University by (Özen-Çinar, 2015). The aim of the research was to investigate usability issues of mobile websites of these universities. According to the results, it is seen that the websites of universities have higher participant satisfaction than mobile web sites. Designs are not mobile responsive, inconsistent navigation between main pages and sub-pages, small font sizes and user interface problems caused by uneven page structures are basic problems for mobile design.

Regarding the impact of the availability of mobile applications, the usability is found to be the most important element after the security for the user's acceptance of the application (Ryan & Gonsalves, 2005). Usability studies have been used for many years in the Human-Computer Interaction research for the purpose of improving the technology-based products and services and making them easy to use (Hallahan, 2001). In this context, when an application is being developed, the approaches of users who will use it should be foregrounded. Otherwise, users will not be able to use these applications. According to Norman and Draper's User Centered System Design (1986), the focus shifts from system to user in the design (Norman and Draper, 1986) because users decide to use or give up within few seconds of seeing an interface. This situation puts the importance of satisfaction in mobile applications. The completion time of tasks affects to user satisfaction (Çağıltay, 2011).

User Centered Design

The User Centered Design approach is an interactive system development approach that focuses on increasing the usability of system interfaces based on the needs of users. In User Centered Design, users are directly involved in the design process. The methods of this design were described by K.D. Easton in 1982 with the following scheme (Userspots, 2009).

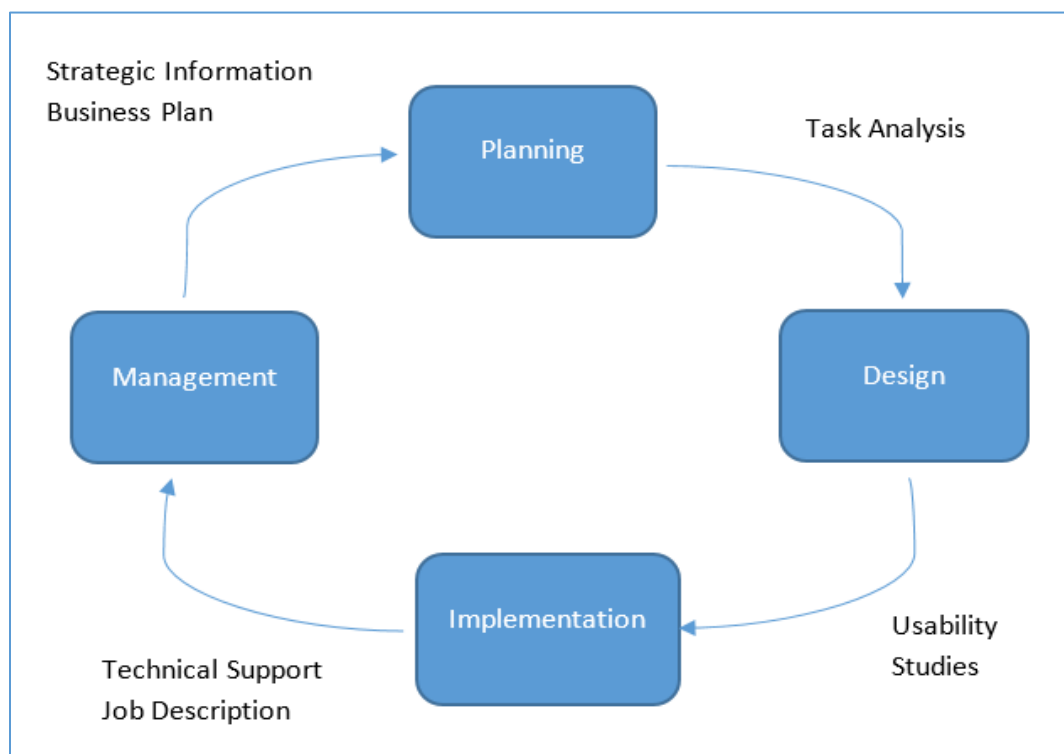


Figure 1: User centered design life cycle (Userspots, 2009).

According to the Figure-1, the user-oriented design consists of successive and recurring Planning, Design, Implementation and Management methods. Usability tests are also taking place between the design and implementation in this design model.

What is Usability?

Usability is defined as the ability to use tasks specified in an application easily and effectively in appropriate environmental conditions, after the necessary training and technical support is given by the users identified as the target audience (KAMIS, 2018). Effective use of a product, users' accuracy and completeness for specific purposes; efficient use is assessed by measuring the resources spent on accuracy and completeness of the goals achieved (ODTU, 2018). According to Nielsen, usability is mainly examined under five headings: learnability, efficiency, memorability, errors and satisfaction (Nielsen, 1994).

- Learnability means how easily the system can be learned.
- Efficiency means how efficiently the learned system can be used
- Memorability refers to the ability to easily remember the use of the system when it is used again after a

certain period of inactivity

- Errors indicate that the error rate of users is low and can be easily corrected when error is made.
- Satisfaction is the satisfaction of using the system of users and the measure of positive or negative thoughts

Usability Measurements

Tests are made before the product is marketed. User testing with real users is the most common and the most basic method of evaluation (Kılıç and Güngör, 2006). The persons representing the user's group are made to implement on the system. The user tests are carried out in human-computer interaction laboratories specially prepared for usability measurements. In these measurements, participants use a software (web site, game, educational software) while the movements of the pupils are being monitored and the environment is being recorded with the camera (ODTU, 2018).

The Study

Participants

Students of the Department of Computer Education and Instructional Technologies were selected as participants for this study. Since the mobile application is in English language, participants were selected among those who know English. Twelve students participated in the usability study. According to Nielsen (1994) the minimum number of users needed for usability testing should be five so the number of participants selected in this study is enough for the usability testing. Four participants are woman and the others are man. Their ages range between 22 and 24.

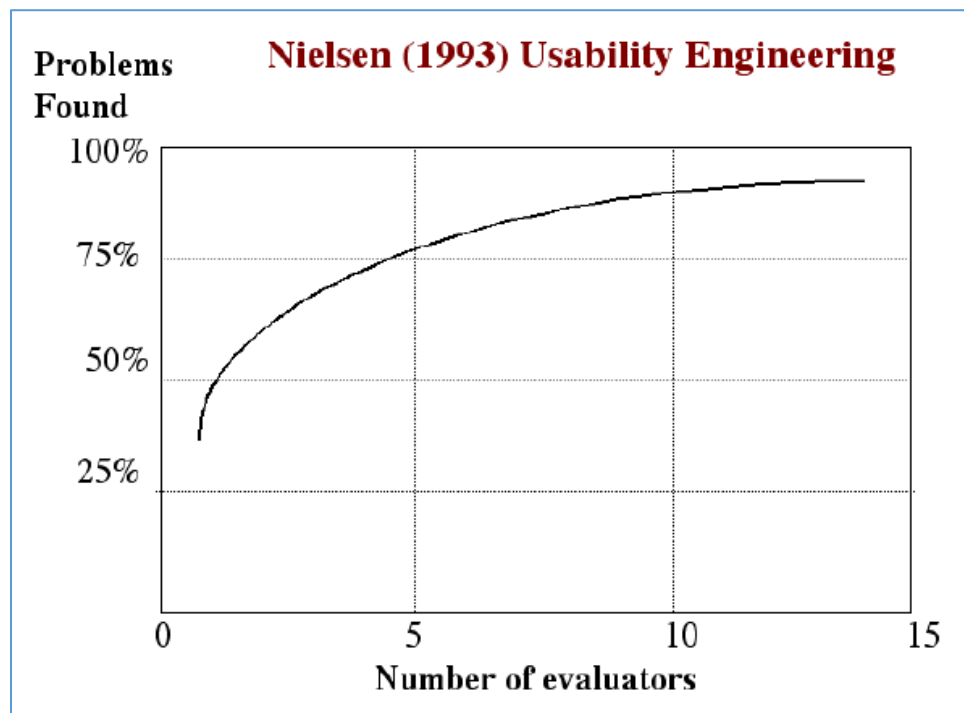


Figure 1: Number of problem found and the number of evaluators (Nielsen, 1994)

Measurements

The Website Analysis and Measurement Inventory (WAMMI) questionnaire was modified for the mobile application and it was used for the data collection. The questionnaire was created to assess the user satisfaction rate of the selected application because usability questionnaire is directly related to the end user, with easier and faster results when compared with laboratory evaluations, expert opinions and checklist use (Hartson, & Hix, 1988). In order to learn the background of users, questions regarding the demographic information were added to the questionnaire.

Steps of the Study

After the identification of the tasks that users will complete during the study, the study was completed in five steps. Initially users were trained to use the mobile application for the Hypertext Markup Language. Then time count was initiated after given users direction to start using the applications. Users were asked to use the mobile applications

(Figure 4, Figure 5). The time count was terminated for users who finish using the mobile application. Then the total time to complete the mobile application was calculated. At the end of the study, users were asked to complete the questioner measuring the user satisfaction rate. The steps of the study is presented in Figure-3.

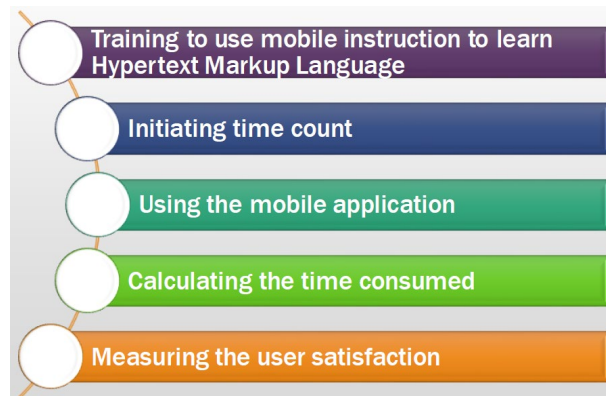


Figure 2: Steps of the study

Mobile Application

The mobile application freely available for the users to learn the Hypertext Markup Language was chosen for the study. The application can run on Android and iOS mobile operating systems. The mobile application has several learning modules. Users have to complete each module in order to proceed to the next module after answering all questions correctly at the end of the each module.

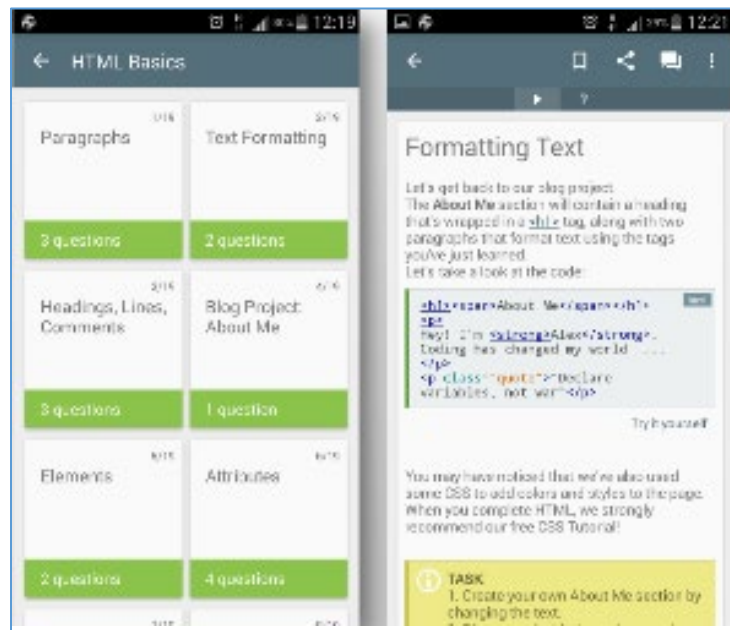


Figure 3: The sample interfaces of the mobile application

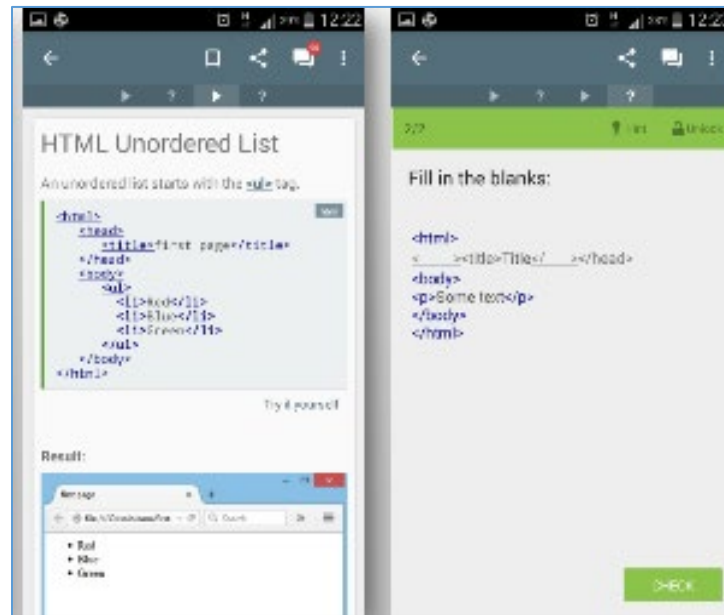


Figure 5: The sample interfaces of the mobile application

Analysis

The average users can complete the planned tasks in the study in five minutes. Based on the task completion time, participants of the study were divided in two groups. 8 participants completed the given tasks under five minutes while others finished the tasks in more than five minutes. The user satisfaction rate of the participants was compared using the Mann Whitney U-Test.

Findings

The user satisfaction rates of the participants were presented in Table 1. Results show that users are satisfied from using the mobile application to learn the Hypertext Markup Language. In order to compare the user satisfaction rates of the participants who complete the mobile application in less than 5 minutes and participants who complete the application in more than five minutes, the Mann-Whitney U Test was used. Results of the analysis indicated that user satisfaction rates of participants who complete the mobile application in less than five minutes are higher than the participants who complete application in more than five minutes ($U=0,0$, $p < 0,05$).

Table 1: The user satisfaction rate of participants

	Strongly Disagree	Disagree	Natural	Agree	Strongly Agree
	%	%	%	%	%
I can access the information easily in this mobile application	0	25	8,3	66,7	0
Mobile application seems to be logical for me	0	8,3	25	25	41,7
Application interfaces in the mobile application are attractive	0	25	16,7	58,3	0
I feel I have the control when using the mobile application	0	33,3	0	16,7	50
I have difficulty to find the location to go on the mobile application	25	41,7	0	33,3	0
It is easy to understand everything on this mobile application	0	16,7	0	66,7	16,7
I feel sufficient when using this mobile application	0	0	33,3	16,7	50
I did not have any difficulty when first using	0	33,3	0	33,3	33,3
Using the mobile application is difficult	50	16,7	16,7	16,7	0
I enjoy using the mobile application	0	33,3		66,7	0

Table 2: The comparison of the user satisfaction rate based on the task completion time

Task completion times	n	Mean Rate	sd	U	p
Less than 5 minutes	8	8,5	1	0,0	0,006
More than 5 minutes	4	2,5			

Conclusion

Accessing information gains more importance than ever before. The developments made in this direction affect all segments of the society. Now people are in the effort to reach the right information faster and more effectively. However, the most important point in providing continuity in the rapidly growing mobile application world is developing useful applications. In an effort to increase the usability of the mobile application, this study is designed to investigate whether the user satisfaction changes based on the task completion time for the mobile application which is designed to learn the Hypertext Markup Language. Findings of the study revealed that users who complete the activities on mobile application faster are more satisfied than the other users. Therefore, it is suggested that while developing mobile applications, time to complete the application must be taken into account to increase user satisfaction. It is important the pay attention to the fact that the usability test should be completed before the release of the mobile applications on market.

References

- Statista, (2018). Mobile phone users worldwide 2013-2019 Retrieved June 1, 2018, from <https://www.statista.com/statistics/274774/forecast-of-mobile-phone-users-worldwide/>
- Nielsen, J. (1994, April). Usability inspection methods. In *Conference companion on Human factors in computing systems* (pp. 413-414).
- Hallahan, K. (2001). Improving public relations web sites through usability research. *Public Relations Review*, 27(2), 223-239.
- Norman, D.A., Draper, S.W. (1986). *User centered system design: New perspectives on human-computer interaction*
- KAMİS, (2018). Kullanılabilirlik Nedir?. Retrieved June 1, 2018, from https://kamis.gov.tr/?page_id=19
- ODTU, (2018). İnsan-Bilgisayar Etkileşimi Araştırma ve Uygulama Laboratuvarı Retrieved June 1, 2018, from <https://hci.cc.metu.edu.tr/tr/kullanilabilirlik>
- Userspots (2009). Kullanıcı Odaklı Tasarım Metodları. Retrieved June 1, 2018, from <http://www.userspots.com/kullanici-odakli-tasarim-metodlari/>.
- Namlı, Ç. (2010). *Mobil uygulama kullanılabilirliğinin değerlendirilmesi* (Doctoral dissertation, Fen Bilimleri Enstitüsü).
- Çinar, N. Ö. (2015). *Usability evaluation of mobile and desktop websites: a study of comparing usability evaluation methodologies* (Doctoral dissertation, Middle East Technical University).
- Beck, E. T., Christiansen, M. K., Kjeldskov, J., Kolbe, N., & Stage, J. (2003, November). Experimental evaluation of techniques for usability testing of mobile systems in a laboratory setting. In *proceedings of Ozchi* (pp. 106-115).
- Ryan, C., & Gonsalves, A. (2005, January). The effect of context and application type on mobile usability: an empirical study. In *Proceedings of the Twenty-eighth Australasian conference on Computer Science-Volume 38* (pp. 115-124).
- Hartson, H. R., & Hix, D. (Eds.). (1988). *Advances in human-computer interaction* (Vol. 2). Intellect Books.
- Kılıç, E., & Güngör, Z. (2006). Web site tasarımlarında kullanılabilirlik değerlendirme yöntemlerinin önemi. *Akademik Bilişim Konferansı*.
- Nielsen, J. (1994). *Usability engineering*. Elsevier.
- Çağiltay, K. (2011). *İnsan bilgisayar etkileşimi ve kullanılabilirlik mühendisliği: Teoriden pratiğe*. ODTÜ Geliştirme Vakfı Yayıncılık.

Use Of Gaussian Processes For Demand Forecasting In Revenue Management

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The optimization of revenue management in airlines is primarily based on passenger demand model. Also, due to the uncertain demand problem of the airline fleet management and schedule planning modules, it is not possible to be fully effective and optimal operation. The rapid change in the external environment has increased the number of parameters in the demand model to a considerable extent, while making airline revenue management more complex. This situation requires intense efforts in the forecasting demand.. In this study, the Gaussian model indicate has the highest performance when it is compared with other demand forecasting models.

Use Of Google Drive And Whatsapp For The Follow-Up And Development Of The Final Master's Project Through M-Learning

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Abstract

Mobile Learning can be defined as the teaching-learning process that takes place at any place and time, thanks to the use of mobile devices with wireless connection. These tools allow us to access the required information through the network. In this study we analyse the influence of Google Drive and WhatsApp Application to investigate and develop the final Master's Project in students enrolled in the Master's Degree in Teacher Training in Compulsory Secondary and Upper Secondary School Education, Vocational Training and Language Teaching in the Campus of Ceuta. In this case the research has been applied to a group of six volunteer students. It is a descriptive method with an analysis developed from a qualitative approach. In order to obtain the research results, an outline for a half-structured interview was elaborated and validated by content validity. The interviews were individual and recorded for later transcription and ordering. The results show that students value the experience in a positive way, highlighting the possibility of asking and solving doubts through WhatsApp anywhere and anytime, not only with the teacher, but also with the opinion and participation of the rest of classmates, being able to see and solve the inadequate aspects that arose in the elaboration of the final Master's Project through the teacher's comments. As a conclusion we can argue that the experience was positive, adapted to the students' style and learning rhythm, receiving a positive feedback in less than 48 hours for writing the final Master's Project and solving the doubts along its creation.

Introduction

Technologies have permeated with great force in the lives of all citizens, although to a greater extent in the lives of the youngest people. Up to a point that we have begun to speak of "digital bottle" which is nothing more than the mixture of large doses of computer, video games, Internet and mobile (Castell, 2003), not conceiving our existence without search engines, email, WhatsApp or social networks (Del Barrio & Ruíz Fernández, 2014).

So much so, that we can say that we are witnessing one of the main changes that are taking place in society in recent years, due to the unbridled development of Information and Communication Technologies (ICT). These changes are taking place in all areas of society: communication, organization, work, fun, searching for information, way of relating, and, to a greater extent, in education (Raposo-Rivas & Salgado-Rodríguez, 2015).

Regarding education, now it is possible to bring cultures closer through the different tools of instantaneous communication, both synchronous and asynchronous, that the network offers us, with a very high flexibility for sending and receiving all kinds of information and multimedia elements in different formats (Leiva-Olivencia, Moreno-Martínez & Peñalva, 2016):

- Chat and / or video conference: Skype; WhatsApp; Hangouts; Line; Telegram
- Email: Hotmail; Gmail; Yahoo
- Social networks: Twitter; Facebook
- Cloud storage: Google Drive.

The present study has precisely been carried out with the objective of analyzing to what extent two of these tools, Google Drive and WhatsApp, can influence the follow-up and development of the final Master's project in students of the Master's Degree in Teacher Training in Compulsory Secondary and Upper Secondary School Education, Vocational Training and Language Teaching in the Campus of Ceuta.

Carrying out this study has been considered necessary to know the teaching and learning process, These two resources are mainly associated with the mobile learning methodology, understanding this as *"the learning that occurs from the mediation of mobile digital devices"* (Aznar-Díaz, Romero-Rodríguez & Rodríguez-García, 2018, p. 259).

Theoretical Framework

M-Learning

The Mobile Learning as a topic of research in educational technologies, had its beginning in the first decade of this century. Its main characteristic is ubiquity, that is, the teaching and learning process can be carried out at any time and place. At first it could be associated with any mobile technology, but if we focus on the educational field, three stand out: tablets or digital tablets, smartphones or smart mobile phones and phablets, a device resulting from the combination of the previous two (Brazuelo & Gallego, 2014).

In this line Sharples and others (2007) cited in Padrón (2013, p.127)) consider that Mobile Learning "is a combined experience on five main axes", which are (Table 1):

- Mobility in the physical space Movilidad de la tecnología
- Mobility in a conceptual space from a personal interest that evolves
- Mobility in the social space in the different social dimensions in which we move, and finally
- Learning dispersed over time, as a cumulative process that gathers a great variety of experiences in formal and informal contexts.

Table 1: Mobility characteristic of Mobile Learning

Mobility characteristic	Description
PHYSICAL SPACE	Learning is not linked to a specific physical space. Mobile technologies allow us to release moorings in the physical space.
MOBILE DEVICE	Portability of devices: Telephones, PDAs, laptops. Access to information and resources in any space and time through mobile digital networks: Wireless.
CONCEPTUAL SPACE	Learning starts from a personal interest and advances and is modified according to personal interests and curiosity.
SOCIAL CONTEXT	Learning occurs in the different social contexts in which we participate: family, work, school...
DISPERSION IN TIME	Learning is a cumulative process that gathers a great variety of experiences in formal and informal contexts.

Source: Padrón (2013, p. 128)

According to Romero-Rodríguez and Aznar-Díaz (2018) it is a matter of time before this methodology is used habitually in the classroom, taking into account the social reality with which we meet every day. Although they affirm that we must not forget that it is another resource that the teacher has for teaching, and therefore it must be completed with other tools or techniques.

With the development of ICT and its application in the educational field we can speak of a before and after in the teaching and learning process as evidenced by experiences carried out with Google Drive and WhatsApp.

Google Drive

Currently, there are many services offered by the Internet to work collaboratively online, although, we will focus on one of the tools that have been best valued by the Centre for Learning & Performance Technologies, which annually collects the opinion of international experts in the field of education about the best tools to be used in the teaching and learning process. We are addressing Google Drive (Castellanos-Sánchez & Martínez De la Muela, 2013).

Google Drive is a service for hosting files in the cloud that allows the development of text documents, spreadsheets, presentations and surveys editable by several people who share the document (Rodrigo-Cano, Iglesias-Onofrio & Ignacio Aguaded (2015). Gómez, Palomares & Pino (2010, p.2) claim that Google Drive is a tool that facilitates "the collaborative work of the teams, groups and people who come together to share, work and learn in a virtual common space and achieve the proposed objectives". As an example, we cite some research in this regard:

Álvarez Ferrón and Sánchez Cañizares (2014) carried out an investigation with 622 students (417 women and 205 men) from the IES Prince of Asturias in Lorca (Murcia). One of the objectives of this research was to verify to

what extent the applications contained in Google Drive can facilitate cooperative work in educational centers. As a method we used a questionnaire with 20 closed questions that was developed with the Forms application included in Google Drive. The data was collected online. The results show that 100% of the students who systematically use Google Drive consider it very useful as a tool to work cooperatively, since the doubts can be solved both by the teacher and by the classmates, leading to reciprocal learning. The results show that 100% of the students who systematically use Google Drive consider it very useful as a tool to work cooperatively, since the doubts can be solved both by the teacher and by the classmates, leading to reciprocal learning. Likewise, 59.71% of the participants consider that this method of work facilitates learning and the task to be carried out, thus influencing motivation.

Morales (2015) presents an experience with 94 students (40% of students of the School of Medicine and 60% of the School of Nutrition and Dietetics) on the use of Google Drive in the subject of Computing in the Faculty of Public Health of the School Higher Polytechnic of Chimborazo (Ecuador). The most outstanding activity was to make a student portfolio. A survey was designed using the Google Drive Forms tool and was applied through email and social networks to students. According to the results obtained, 91% of respondents prefer to use the Google Drive Platform to manage the portfolio. Likewise, 92% state that this tool should be used as an institutional policy in all subjects.

Martín Roda and Sassano (2015) state that Google Drive is an easy-to-use tool with basic knowledge in computer science. It allows you to work from anywhere and with any mobile device, saving information in an authoritative way. You can share files and work with them synchronously and asynchronously, increasing the activity among the students and thus improving the teaching-learning process. These statements coincide with the results of other studies such as that of Barrios and Casadei (2014).

On the other hand, Brescó and Verdú (2014), conducted a study to assess to what extent the tools Wikispace and Google Drive can contribute to the improvement of group projects in university students. The sample consisted of 124 students of the first year of the Primary Degree of the Faculty of Educational Sciences of the University of Lleida. The students did two group projects, one carried out with the Wikispaces tool and the second with the Google Drive document tool. After this experience the students came to the conclusion that Google Drive is a better tool to carry out group projects and to encourage communication between students.

Rowe, Bozalek and Frantz (2013) developed an experiment at the Western Cape University (South Africa) with the aim of encouraging interaction between teachers and students. For this, the teachers created a learning environment using Google Drive in which the students carried out activities to develop critical thinking. The results show that Google Drive is an innovative pedagogical tool that changed the way of thinking of students.

WhatsApp

"The wide diffusion of the use of smartphones or smartphones in our country has meant the modification of some of our ways of relationship and social communication" (Diez-Ros & Aguilar-Hernández, 2016, p. 344). Currently the most used device to access the Internet is the Smartphone (88.2%), placing itself ahead of the computer (78.2%). In relation to the first is instant messaging, mainly WhatsApp (90.9% of the population, 100% among young people from 14 to 19 years old), the element most commonly used to communicate with family and friends (Telefónica, 2016. Quoted in Alonso-Ferreiro and Fraga Varela, 2016). In addition, in recent years, it has become an innovative pedagogical resource, as the following investigations demonstrate:

Padrón (2013), carried out a study with 8 participants (4 urbanists, 2 lawyers, 1 architect and 1 administrator) with ages between 25 and 44 years, to analyse to what extent the didactic strategies based on WhatsApp can promote collaborative learning, both in the formal and informal processes, in the master's degree in urban transport at the Simón Bolívar University (Venezuela). The participants created a virtual collaborative group through which they proposed how to perform the tasks, what procedures were to be used, how the work would be distributed, as well as tutorials with the teacher to resolve some doubts. The results show that the use of WhatsApp in education, integrated as a training strategy, improves communication and the construction of knowledge.

Monguillot-Hernando, González-Arévalo & Guitert-Catasús (2017) show a research carried out at the Open University of Catalonia (UOC) with 3 Physical Education teachers from different educational centre in Barcelona, with the aim of knowing how the use of WhatsApp can promote virtual collaborative work among teachers. The results obtained show the importance of the use of WhatsApp "as a synchronous and asynchronous tool to be taken into account in the monitoring of collaborative learning situations" (p.56). The faculty has advised the use of WhatsApp to other teachers making them see that it is a tool that encourages collaboration, breaks with the professional isolation that involves being in a classroom, promoting, at the same time, the relationship and

interaction between teachers.

Methodology

Type of study

The type of study developed is descriptive, applying an analysis from a qualitative approach (Colás y Buendía, 1998).

Objective

The objective of the research is to assess whether the use of Google Drive and WhatsApp favors the follow-up and development of the final Master's works, being the premises marked by the m-learning method.

Subjects

The research has focused on students who are enrolled in the Master's Degree in Teacher Training in Compulsory Secondary and Upper Secondary School Education, Vocational Training and Language Teaching in the Campus of Ceuta in the academic year 2017/2018, mainly in the Final Work of Master (TFM).

The population is composed of 6 volunteer students, where 66.6% are women and 33.4% are men. The ages of these students are between 24 and 31 years old, being 24 years old (16.6%), 25 years old (50%), 26 years old (16.6%) and 31 years old (16.6%).

The speciality that are studied in the Master are Orientation (33.3%), Spanish Language and Literature (16.6%), Mathematics (16.6%), Drawing (16.6%) and Training and Labor Orientation (16.6%).

Instrument

The interview is ad hoc, created specifically to analyse the objective set out in the research. It is of semi-structured type and consists of 6 items that try to analyze if the procedure followed is adequate or not.

The instrument, to be validated, has gone through a content validity, through the contribution of 5 expert doctors in the subject addressed. The recommendations focused mainly on the elimination of certain items, as they were not considered adequate for the aspect that was to be analyzed. The recommendations were taken into account.

Process

The information collection procedure is carried out during the development of the TFM, after two months from the beginning of the meeting in which the work to be done by each of the members was arranged, to know the situation in which they were in relation to the experience developed.

In the interview we had, a recording was made, for its subsequent transcription and analysis. The predisposition of the students was always positive and collaborative.

For the analysis of the interview, we have selected key ideas in each of the questions, with the intention of obtaining similarities or differences between the opinions.

Results

At a general level, the opinions of the students regarding the use of Google Drive and WhatsApp for the development of the Final Master's Project are positive.

In relation to the question posed on whether it has supposed to know new resources for the process of teaching and learning, the students have been unanimous in confirming it, that the fact of developing the FMP following the m-learning method has made them see the resources they usually see every day in another way.

I have always used WhatsApp for leisure and entertainment issues, and now that we have developed the training process this way, I have seen it as another pedagogical resource. I liked this new perspective [Participant 1].

It's the first time I see Drive, before I always kept the documents on a pendrive. Thanks to the development of this method of work I have observed that in addition to storage, I can modify the document anywhere and at any time, and receive modifications from the teacher without having to send and receive continuously the Word document [Participant 3].

Regarding to whether this method of teaching has contributed to learning, students have stated that, rather than

contributing to learning, it has made the task much easier.

I would say that it has helped me to perform the task more easily. I give you an example, the other day I was going away for the weekend with my family, the time that I was waiting to embark and during the passage in boat, I had the chance to consult doubts by WhatsApp and to complete the work by means of Drive [Participant 2].

To me it has facilitated the learning, as much the professor as my companions, since by means of the WhatsApp group, when I have been a doubt, they answered in a little time any of them, solving the doubts [Participant 4]

Regarding the question of whether it favors teamwork, students agreed, but in those situations when work dealt with the same topic for all of them.

It has helped me personally, especially my colleagues who had to do the Didactic Unit, because they quickly solved my doubts. In this case, we have been able to work as a team [Participant 6]

If we talk about working as a team to develop a project, I personally think not, especially in my case, that developed a Plan of Attention to Diversity and was the only one, so I have not been able to receive much advice from my colleagues. If we see it through the perspective of helping each other, I think so, because at certain times, colleagues with similar FMP lines have helped each other a lot [Participant 4].

When asked if this method matched their learning, the students said no at the beginning of the implementation, but as they progressed they observed that there would be another way to learn and that it could fit in with their new way of learning. Learnin.

I have been used to listen to the teacher in class and take notes all my life. He did not make decisions, he only copied and studied by heart. With this new form, I see that I am the one who must set my pace and guide the development of my work to my needs. Personally, I like it a lot, and I think it can be useful for my classes tomorrow [Participant 5].

Well, if we see it through the perspective of what I've lived so far, it does not fit, because I'm not used to this way of learning. If we see it through the perspective of what I just learned and put into practice, I would say that it does fit with my way of learning, because it makes my work easier and adapts to my rhythm and learning style [Participant 4].

Finally, the assessment has been very positive on the part of all students, emphasizing that this type of experience should be promoted more frequently in the university environment.

My assessment is positive. On the one hand I value the performance of the teacher who has been pending at all times to resolve the doubts about WhatsApp, and on the other hand the help received from my colleagues [Participant 6].

My assessment? Very good, the truth is that I did not know that these things could help so much academic development, in addition to offering me another type of teaching that is not masterly. I intend to apply it tomorrow. [Participant 3].

Conclusions

The students who have completed the Final Master's Project have positively evaluated the teaching and learning process that has been developed following the guidelines set by the m-learning method.

They consider that it has supposed to them to see novel teaching and learning processes through new educational resources, which has facilitated the training development, coinciding with Álvarez Ferrón and Sánchez Cañizares (2014), facilitating the completion of the various tasks and promoting group work, being in line with what was established by Gómez, Palomares and Pino (2010, p.2).

At first they had objections when developing the educational action in the manner proposed, but as the activity progressed, they saw the advantages that it entailed. They emphasize the fact that they can do their work anywhere and at any time, coinciding with what was established by Martín Roda and Sassano (2015) and Padrón (2013) as well as raising questions in the group and being answered, not only by the teacher, but for the student, which

could solve doubts adequately, generating a reciprocal learning (Álvarez Ferrón and Sánchez Cañizares, 2014).

These students believe that it would be necessary, especially in a Master oriented to teacher training, to present innovative methodologies, to facilitate both the acquisition of content and models to apply tomorrow in school coinciding with Monguillot-Hernando, González-Arévalo and Guitert-Catasús (2017) that advise the use of WhatsApp among teachers, making them see that it is a tool that encourages collaboration, breaks with the professional isolation that is being in a classroom, and it improves the relationship and interaction between teachers.

REFERENCES

- Alonso-Ferreiro, A., & Fraga Varela, F. (2016). Autopercepción de la alfabetización comunicativa en la generación Abalar (Galicia). En Roig-Vila, R. (Ed.), *Tecnología, innovación e investigación en los procesos de enseñanza-aprendizaje* (50-58). Barcelona, España: Octaedro.
- Álvarez Ferrón, M., & Sánchez Cañizares, L. (2014). Conocimiento, valoración y utilización, por parte del alumnado, de google drive como herramienta de trabajo cooperativo. *Enseñanza & Teaching*, 32(2), 23-52. Recuperado de <http://revistas.usal.es/index.php/0212-5374/article/viewFile/et20143212352/12521>
- Aznar-Díaz, I., Romero-Rodríguez, J.M., & Rodríguez-García, A.M. (2018). La tecnología móvil de Realidad Virtual en educación: una revisión del estado de la literatura científica en España. *EDMETIC, Revista de Educación Mediática y TIC*, 7(1), 256-274, doi: <https://doi.org/10.21071/edmetic.v7i1.10139>
- Barrios I., & Casadei, L. (2014). Promoviendo el Uso de Google Drive como Herramienta de Trabajo Colaborativo en la Nube para Estudiantes de Ingeniería. *Revista de Tecnología de Información y Comunicación en Educación. Eduweb*, 8(1), 43-56. Recuperado de <http://servicio.bc.uc.edu.ve/educacion/eduweb/v8n1/art03.pdf>
- Brazuelo, F., & Gallego D.J. (2014). Estado del Mobile Learning en España. *Educación en Revista*, 4, 99-128.
- Brescó Baiges, E., & Verdú Surroca, N. (2014). Valoración del uso de las herramientas colaborativas wikispaces y google drive, en la educación superior. *EduTec. Revista Electrónica de Tecnología Educativa*, 49. Recuperado de <http://www.edutec.es/revista/index.php/edutec-e/article/view/39>
- Castell, P. (2003). Televisión, videojuegos y ordenador: uso y abuso. En: GRIDOPE (eds.). *Nuevas perspectivas en pediatría extrahospitalaria*. Barcelona. Curso de Pediatría Extrahospitalaria. 285-299
- Castellanos-Sánchez, A., y Martínez De la Muela, A. (2013). Trabajo en equipo con Google Drive en la universidad online. *Innovación Educativa*, 13(63), 75-94.
- Colás, B., y Buendía, L. (1998). *Investigación Educativa*. Sevilla: Ediciones Alfar.
- Del Barrio Fernández, A., & Ruiz Fernández, I. (2014). Los adolescentes y el uso de las redes sociales. *International Journal of Developmental and Educational Psychology. INFAD Revista de Psicología*, 3(1), 571-576.
- Díez-Ros, R., & Aguilar Hernández, B.M. (2016). Los grupos de WhatsApp escolares: una oportunidad para mejorar la comunicación familia-escuela. En Roig-Vila, R. (Ed.), *Tecnología, innovación e investigación en los procesos de enseñanza-aprendizaje* (343-351). Barcelona, España: Octaedro.
- Fundación Telefónica (2016). *La Sociedad de la Información en España 2015*. Fundación Telefónica
- Gómez, C., Palomares, R. y Pino, J. (2010). La utilización de herramientas colaborativas 2.0 en el ámbito de la documentación publicitaria. *DIM*, 18. Recuperado de <https://dl.dropboxusercontent.com/u/20875810/dim/revistaDIM18/revista18publicitaria.htm>
- Leiva-Olivencia, Moreno-Martínez & Peñalva (2016). El papel de las TIC en el desarrollo de la ciudadanía intercultural a través de la creación de comunidades virtuales para la digiculturalidad. En Roig-Vila, R. (Ed.), *Tecnología, innovación e investigación en los procesos de enseñanza-aprendizaje* (772-784). Barcelona, España: Octaedro.
- Martín Roda, E., & Sassano Luiz, S. (2015). Posibilidades de google drive para la docencia a distancia y en el aula. *Didáctica Geográfica*, 16, 203-220. Recuperado de <http://www.age-geografia.es/didacticageografica/index.php/didacticageografica/article/view/302>
- Monguillot-Hernando, M., González-Arévalo, C., y Guitert-Catasús, M. (2017). el WhatsApp como herramienta para la colaboración docente. *EmásF, Revista Digital de Educación Física*, 8(44), 56-62.
- Morales, E. R. (2015). Una experiencia personal: Google Drive para el portafolio virtual docente-estudiante en la docencia universitaria. *Revista Tecnológica-ESPOL*, 28(2). Recuperado de <http://www.rte.espol.edu.ec/index.php/tecnologica/article/view/315>

- Padrón, C.J. (2013). Estrategias Didácticas basada en Aplicaciones de Mensajería Instantánea WHATSAPP exclusivamente para Móviles (Mobile Learning) y el uso de la Herramienta para promover el Aprendizaje Colaborativo. *Revista de Tecnología de Información y Comunicación en Educación*, 7(2), 123-134.
- Raposo-Rivas, M., & Salgado-Rodríguez, A.B. (2015). Estudio sobre la intervención con Software educativo en un caso de TDAH. *Revista nacional e internacional de educación inclusiva*, 8(2), 1889-4208.
- Rodrigo-Cano, D., Iglesias-Onofrio, M., y Aguaded, I. (2015). Metodologías participativas en la nube: la “g-Google” vs. La “Generación X” en la Web 2.0. *Revista complutense de educación* 28(1), 223-237.
- Romero Rodríguez, J.M., & Aznar Díaz, I. (2018). Caminando hacia una ciudadanía digital: la atención a la diversidad desde un enfoque de mobile learning. En XV Congreso Internacional y XXXV Jornadas de Universidades y Educación Inclusiva (695-702). Granada, España: Editorial Universidad de Granada.
- Rowe, M., Bozalek, V., & Frantz, J. (2013). Using Google Drive to facilitate a blended approach to authentic learning. *British Journal of Educational Technology*, 44(4), 594-606.

Use Of Mobile Learning For The Application Of A Multidisciplinary Program In Health: The Case Of The Beatriz De Silva School

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Abstract

The use of mobile learning is justified in the relevance of learning today through resources and electronic devices, pursuing autonomy, portability, adaptation and learning innovation. Thus, the purpose of this paper is the study of the application of a methodology based on mobile learning to develop a program of healthy contents, from the perspective of the different areas that make up the curriculum in Spain. Specifically, this study was conducted at the Beatriz de Silva School in the educational stages of preschool, primary and secondary with the objective of promoting the styles and habits of healthy living with new technologies. In addition, as the awareness to reduce, the high index of sedentary and health problems derived from the scarce physical activity and bad eating habits. To carry out this study, we opted for the use of a quantitative research methodology, based on the statistical study of the data collected through an ad hoc questionnaire. The most significant results reflect a high degree of student motivation for learning through digital resources and certain deficiencies to develop a healthy lifestyle. In summary with this teaching methodology, the student becomes the main actor of their own learning, being able to manage their own process and evolution of it.

Keywords: *Mobile learning, innovation, ICT, health, children population.*

Introduction

ICT have come to society to simplify everyday tasks and make life easier, but to a certain extent they are affecting and complicating other fundamental aspects such as health (Echeburúa, & De Corral, 2010).

At the educational level, ICT are considered as tools that offer great possibilities, but in the field of health, they are not so well positioned, because they are closely related as one of the great causes of sedentary lifestyle, causing even problems arising in the academic performance (Puig, Llamas, & Portolés, 2015).

It is necessary that students in the early stages of education become aware of good healthy habits. The educational centres acquire a relevant role towards the promotion of an active life, promoting sports and physical activity as the best possible medicine for cardiovascular diseases. Also important in this promotion of healthy styles is the involvement and collaboration of families, as a prominent pillar within the Educational Community, giving rise to a triangulation of the teaching and learning process among teachers-students-families (Macías, Gordillo, & Camacho, 2012).

The absence of physical activity in today's society causes one of the greatest dangers, increasing the possibility of suffering from cardiovascular diseases, obesity or diabetes, among others. It is worrisome the amount of hours that young people today spend in front of new technologies, conditioning the time of physical activity or leisure and recreation games with people in their environment (Beltrán, 2011).

The adolescent population uses ICT in an abusive manner, devoting much of their free time to escape and interact with their peers through social networks and the Internet. This scenario leads to an increase in the rate of sedentary lifestyle, inactivity, even affecting even the eating habits, leading to changes in diet, promoting fast food, as a result of technological interaction (Pérez, Quiroga, Olivares, & Pérez, 2017).

Any action or activity carried out without control can cause an addiction and that is what is happening with new technologies in the hands of the youngest, as more active users who neglect other fundamental aspects such as health (Echeburúa, & De Corral, 2010). It is important to know the main sedentary behaviour of people in order to establish the best strategies to combat it and its problems derived (Cantallos et al., 2012).

In developed countries is where there is greater overweight and obesity. About 30% of the child population suffers from this type of problems, evidenced by the decrease in physical activity due to technological incidence, leading to future serious problems related to health (San Mauro et al, 2015).

For González, Gómez and Navarro (2016), obesity has become the great epidemic of the new century, being one of the causes of death in the world. In Spain, obesity is suffered by 62% of the population. Obesity has been increasing in recent years due to the change in life that has led to technological influence.

Following Fonseca, Maldonado, Pardo and Soto (2007), in their studies they allude to one of the recommendations of the World Health Organization (WHO), such as the promotion of active and healthy habits and lifestyles to prevent diseases. In order to lead a healthy life and prevent the risks caused by physical inactivity, it is essential to make humanity aware of the critical use of technology that surrounds us and indirectly affects our health, due to

the change in the way of living, working and interacting with the environment and the people around us (De Diego, Fernández, & Badanta, 2017).

According to Beltrán (2011), although it seems a contradiction, the use of ICT and videogames has been used to counteract the sedentary lifestyle and the passivity that has caused technological development in our society. In an era marked by the incidence and rapid technological expansion, in order to achieve an active and healthy lifestyle, we must trust in the potential of ICT and develop strategies and actions that result in a digital and active practice of activities focused on promoting of the health.

Today's education is conceived as a search towards the active learning of the learner, based on discovery and from different perspectives, all of this at the hand of technology, allowing to make more motivating and attractive activities and resources for students. That is why the development of technological equipment in schools has been increased and improved in recent years, as a result of the integration of ICT in our lives (Chacón et al., 2016).

Following the studies of Mora (2013), mobile learning or mobile learning has been favoured by the development of technologies in today's society. It is conceived as a new methodology focused on mobility, communication, learning in different contexts and the collaboration of students to carry out tasks or solve problems, in an active and participatory way, through mobile devices. Authors such as Moreno, Leiva and Matas (2016), consider mobile learning as an emerging methodology with a high incidence in education. Romero, Rodríguez-García and Aznar (2017), understand it as new environments that offer students great possibilities to develop knowledge, have a great source of resources as well as the promotion of digital competence and collaborative work. For Brazuelo and Gallego (2014), one of the characteristics of mobile learning is ubiquity, which means that at any time and place the learner can get in touch with the contents and build their own learning.

That is why we must resort to technology and take advantage of its potential to motivate and increase the practice of physical activity, in addition to the respect and care of our body (González, Gómez, & Navarro, 2016), being mobile learning an ideal methodology to achieve it.

The Study

Context

This research has been carried out in a very particular geographical setting such as the Autonomous City of Ceuta, a Spanish city located in the North of the African continent, separated from the Iberian Peninsula by the Strait of Gibraltar. Ceuta presents the peculiarity of being a multicultural city, in which 4 cultures coexist peacefully, such as Christian, Muslim, Hebrew and Hindu.

Specifically, this study has been carried out in an educational centre of the city, specifically in the Beatriz de Silva School, which acts as a teaching cooperative. This centre is located in the downtown area of the city, encompassing a population of students whose families have an average socioeconomic power.

The Beatriz de Silva School covers an approximate number of 700 students, divided into the first 3 educational stages proposed by the law in education, such as the preschool, primary and secondary stage, in turn each course has two educational lines. The teaching faculty that composes this teaching cooperative is composed of 40 education professionals. Table 1 shows the distribution of students and teachers in each educational stage.

Table 1: Demographic characteristics of the educational centre.

Educational stage	Teachers	Students
Preschool Education	10	150
Primary Education	17	340
Secondary Education	13	210

Source: Self-made.

Objectives

This research is based on the idea of applying a healthy program in the school population by means of two methodologies, a mobile learning and a traditional one.

From this main purpose derive the following specific objectives to finalize the study:

- To know the habits and lifestyles of the students of the Beatriz de Silva educational centre.
- To raise awareness in the educational community about the importance of following healthy habits.
- To know the deficiencies that students have in the field of health.
- To check the scope and effectiveness of each methodology used.

Methods

To carry out this study, we chose the choice of a quantitative method, focused on the statistical study of the data obtained. At the same time, several descriptive and correlative analyses have been carried out to better approximate and understand the current reality found in the educational centre in question.

Sample

The subjects that participated in this research covered a figure of 300 students, selecting 100 participants from each stage, following a simple random sampling. The resulting sample remaining as shown in table 2.

Table 2: Sample of participants.

Educational stage	Students
Preschool Education	100
Primary Education	100
Secondary Education	100

Source: Self-made.

Instrument

The measuring instrument used to carry out the information collection process has been the questionnaire. In particular, an ad hoc questionnaire has been prepared for this research, created specifically to meet the requirements of this study, covering various dimensions that allow obtaining the necessary results to fulfill the purposes of this study.

The questionnaire consists of 35 items divided into 4 dimensions as shown in table 3.

Table 3: Dimensions of the questionnaire.

Dimensions	Variables
Sociodemographic	6
Healthy habits	12
Harmful habits	12
Methodology used	5

Source: Self-made.

The items presented by this instrument have been drawn up in their vast majority to be answered following a Likert rating scale, between the values 1-4, with 1 being the lowest value and 4 being the highest.

To know the reliability and validity of the questionnaire, this has been submitted to evaluation by an expert judgment composed of 4 PhD of the University of Granada, who evaluated the instrument in a positive way. On the other hand, to know the reliability of it, the Cronbach's Alpha test was applied, reaching the values shown in Table 4.

Table 4: Cronbach's alpha.

Dimensions	Results
Sociodemographic	0,867
Healthy habits	0,859
Harmful habits	0,842
Methodology used	0,851

Source: Self-made.

These results obtained by applying the Cronbach's Alpha demonstrate a high internal consistency index in the different items that make up the questionnaire, giving rise to a fairly reliable instrument to develop such research.

Process

In order for the research process to be carried out satisfactorily, a plan was drawn up that covered each and every one of the phases that have been carried out during the course of the study.

In particular, the research was developed in 5 different stages, marked in a schedule of action so that each action was carried out effectively, not altering or conditioning the evolution of the study in question.

The first stage integrates all those actions that give origin and life to this investigation, such as the realization of documents and formal writings to obtain the authorization and necessary permits to carry out the study in an educational centre. Table 5 lists all the documents prepared for such purposes.

Table 5: Authorizations and necessary permits.

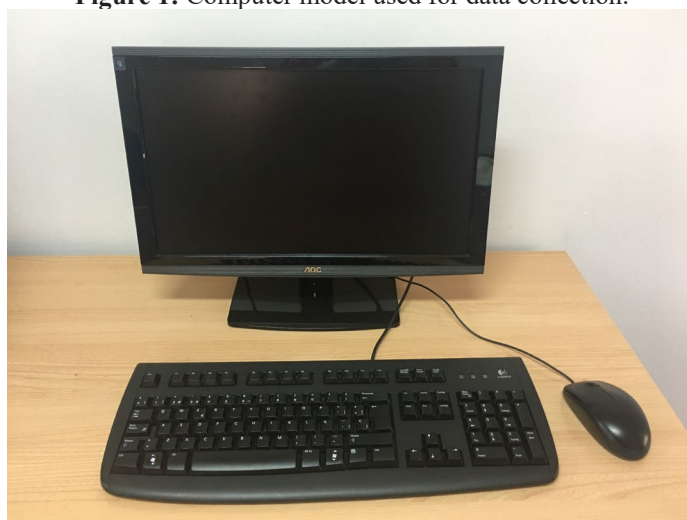
Issuance of requests to:	State
Management team of the educational center	Permission granted
Provincial Delegation of the Ministry of Education, Culture and Sports	
Ministry of Education	
Families of the students	

Source: Self-made.

These writings were made and sent digitally, through the official email of each institution. After several days, the positive responses of each of these organisms were obtained, not receiving any problem to carry out the research.

In the second stage, in order to grant officialise, formality and commitment on the part of researchers to the research, each institution involved and mentioned above was visited personally, explaining in situ the purposes and purposes of the study.

The third stage encompassed the realization of a schedule where dates and hours were established to collect the data, this planning was carried out jointly with the members of the School Management Team, establishing a schedule that did not disturb the normal course of the day school. Once the planning was done, a pre-test was carried out to obtain an initial assessment and mark the starting point. In order to promote the use of ICT, to preserve and educate the students about the respect and care of the environment and to obtain an increase in the motivation of the study participants when filling out the questionnaire, it was carried out through of "all in one" model computers donated by the educational centre, as shown in figure 1.

Figure 1: Computer model used for data collection.

Source: Self-made.

In the fourth stage, the previously planned 4-month application of a teaching methodology based on mobile learning was produced, but only in certain groups of students, from an autonomous, participatory, social, communicative, portable and in new environments of learning, thanks to the use of said methodology, through devices such as the one shown in figure 2.

Figure 2: Mobile device used for mobile learning.

Source: Self-made.

The rest of the students remain under a traditional teaching methodology, covering the development of various contents related to healthy habits and lifestyles, as shown in the following table 6.

Table 6: Developed contents.

Physical activity
Alimentation
Postural hygiene
Corporal hygiene
Control of ICT

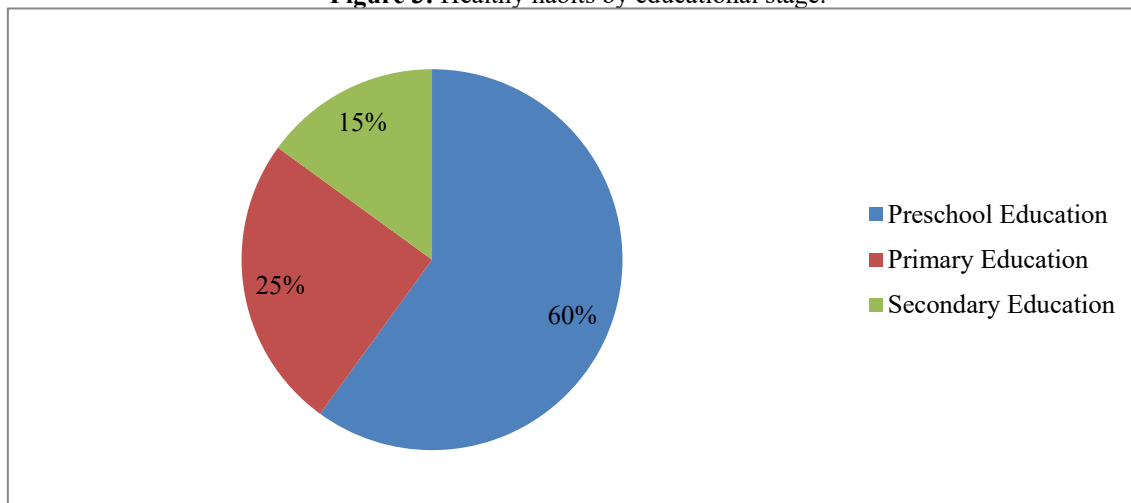
Source: Self-made.

In the fifth and final stage, the second data collection process was carried out that allowed to compare the data obtained initially with those obtained after the application of a program of contents related to health.

Findings

After the statistical analysis of the different variables that make up this research, the most relevant results obtained after the quantitative study are presented below.

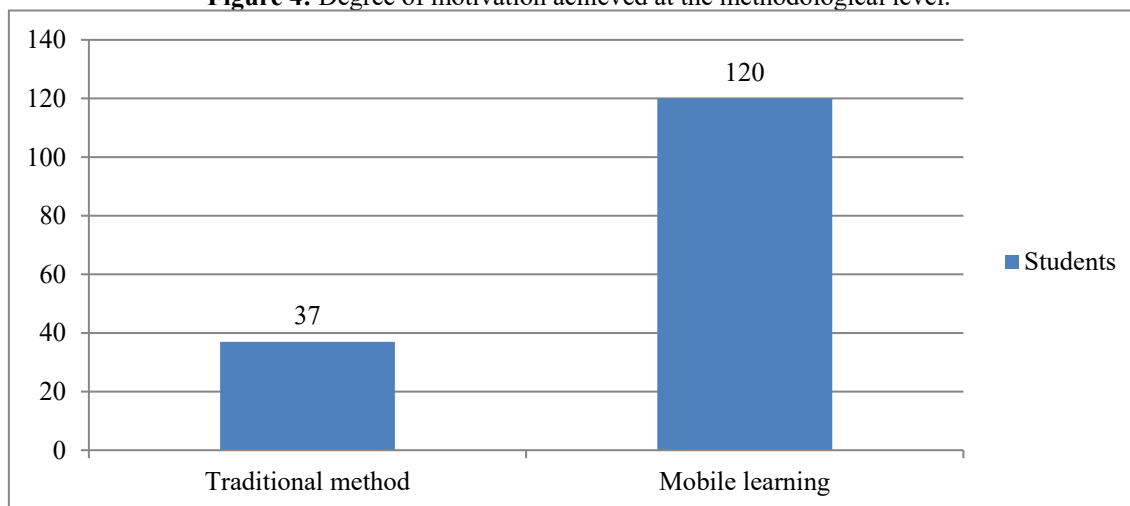
As shown in figure 3, after analysing the data collected from both teaching methods, it is determined that the educational stage that follows healthier living habits than the rest is Preschool Education, with 60% of the subjects who follow such healthy styles, followed by 25% of students belonging to the stage of Primary Education, until reaching a lower 15% of the sample that represents the students of more advanced ages, corresponding to the stage of Secondary Education, who follow some habits of healthy life to a lesser extent than the rest.

Figure 3: Healthy habits by educational stage.

Source: Self-made.

Of the two teaching methods applied in this research, as reflected in figure 4, those students who have developed the contents related to health from a digital and innovative perspective through mobile learning, have expressed greater predisposition and motivation in the accomplishment of the learning tasks. It is worth noting the overwhelming difference between the two methodologies, highlighting the dynamising supremacy of mobile learning that has managed to motivate a total of 120 students, compared to the traditional one that has only promoted 37 students.

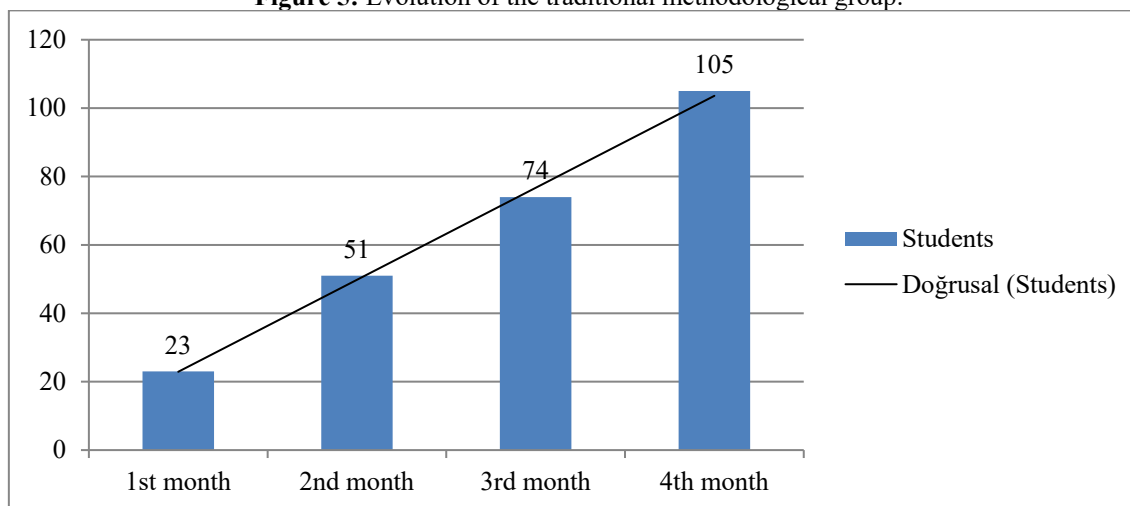
Figure 4: Degree of motivation achieved at the methodological level.



Source: Self-made.

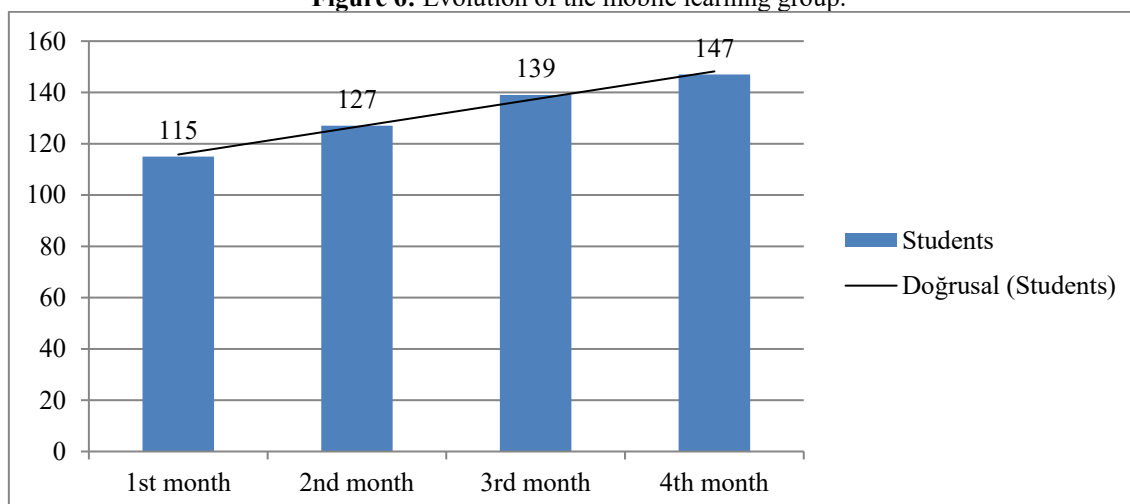
As shown in figure 5, the evolution of students in the acquisition of healthy habits in a range of 4 months, is notable for its increasing character, increasing each month the number of students who have consolidated an active and healthy life, arriving to the figure of 105 students in the 4th month of study.

Figure 5: Evolution of the traditional methodological group.



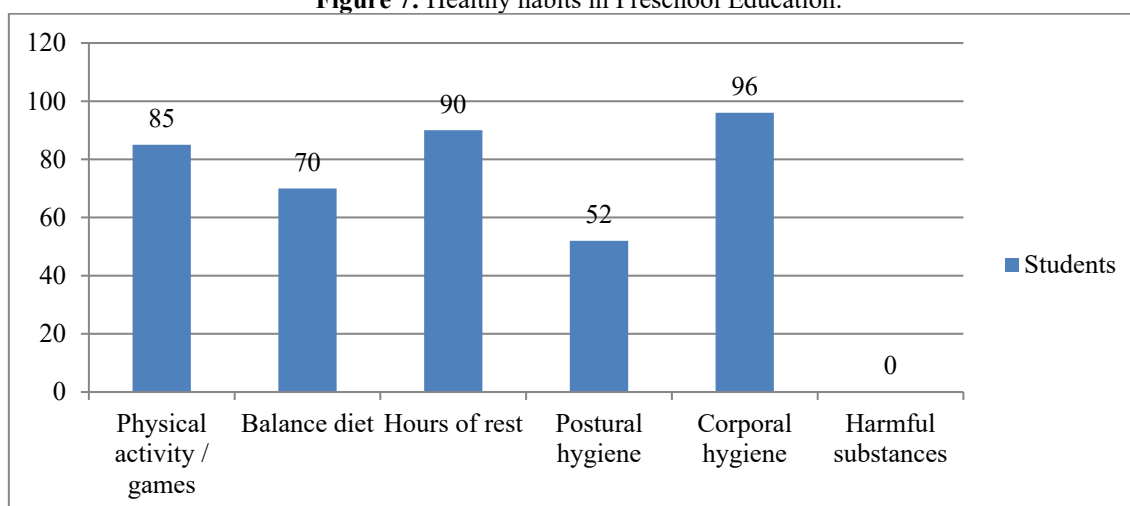
Source: Self-made.

Therefore, figure 6 shows the evolution of the group that has developed an innovative methodology, focused on the use of mobile devices, which show a less pronounced growth between each month, but the number of students that have improved they have learned and implanted in their lives the healthy lifestyles developed in the contents taught.

Figure 6: Evolution of the mobile learning group.

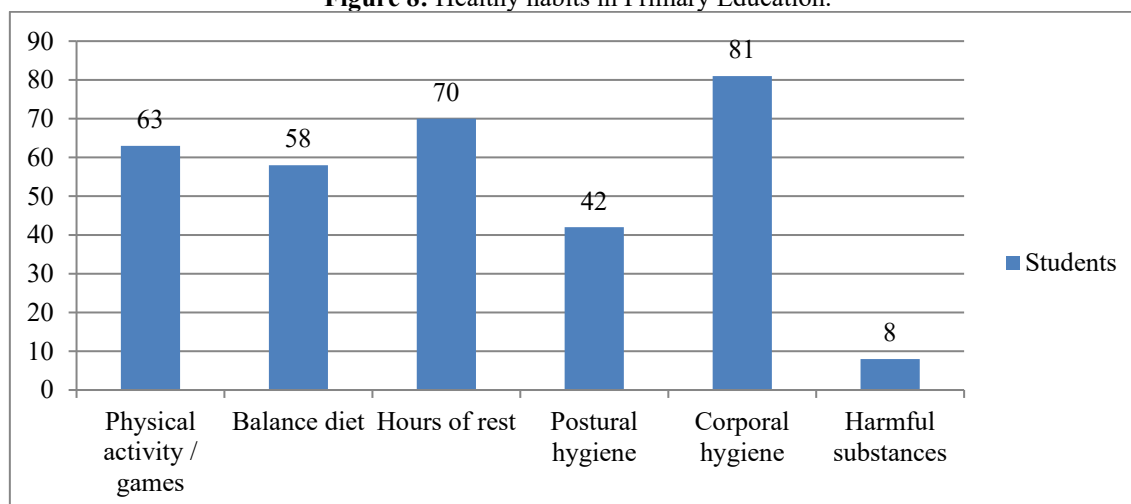
Source: Self-made.

In the stage of Preschool Education, as reflected in figure 7, there are peaks in each of the items related to healthy life, with a lower number of 52 students not following appropriate postural hygiene, which may lead to a future problems related to the child's health and normal development and growth.

Figure 7: Healthy habits in Preschool Education.

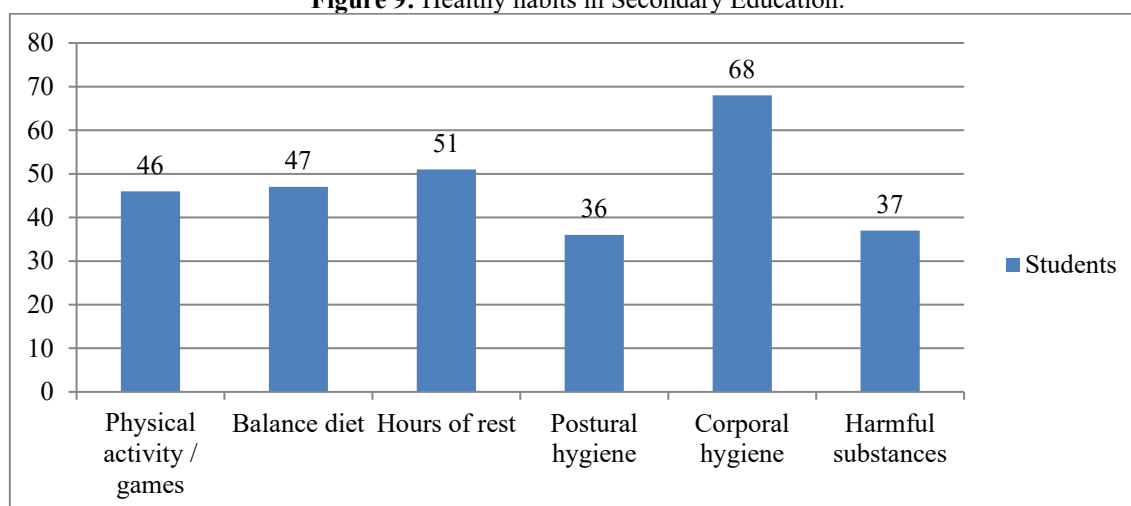
Source: Self-made.

Regarding the Primary Education stage, figure 8 shows that the data obtained are still high, although in a smaller proportion than the previous educational stage. The figure related to postural hygiene is still in decline, highlighting the beginning of the consumption of substances harmful to health.

Figure 8: Healthy habits in Primary Education.

Source: Self-made.

In figure 9, the results are more worrying, with a decrease in all the items, except the one related to the consumption of harmful substances that, as happened in the previous stage, as the student grows, this increases the consumption of harmful products to health.

Figure 9: Healthy habits in Secondary Education.

Source: Self-made.

Conclusions

After carrying out this research, significant and relevant information has been obtained about the reality of health in an educational centre. The results achieved have allowed us to clarify that the first two educational stages (Preschool and Primary Education) are those with the highest levels of healthy life, but it is from the Secondary Education stage, that is, in adolescence, when a Considered descent of healthy habits and styles in the students.

At the methodological level, the use of a methodology based on mobile learning has led to greater motivation, participation and enthusiasm in the learning process of students, thus increasing the incidence of the healthy content program, compared to the traditional method, which only has promoted a few groups of schoolchildren.

With respect to the evolution in the improvement and transformation of the attitude of the students towards an active and healthy life, in a period of 4 months, the mobile learning method has managed to capture and modify the behaviour of a greater number of students. In this short period of time, the students has worked, understood and assimilated the importance and need to follow some guidelines and recommendations to have a good state of health.

Therefore, it is concluded that this innovative method used in an educational centre for the promotion of healthy

habits and styles, through the application of a healthy content program through mobile devices, has been positive and enriching for the students, same time that has served for the promotion of the TIC and the work of the digital competence of the students for a healthy end in a transversal way.

References

- Beltrán, J.I. (2011). Active video games, conventional video games and physical activity in high school teenagers. *Espiral. Cuadernos del profesorado*, 4(7), 23-27.
- Brazuelo, F., & Gallego, D. (2014). State of Mobile Learning in Spain. *Educar em Revista*, 4, 99-128.
- Cantallops, J., Ponseti, F.J., Vidal, J., Borràs, P.A., & Palou, P. (2012). Adolescence, physical inactivity and overweight: analysis based on socio-personal variables of the parents and the type of sport practiced by the children. *Retos. Nuevas tendencias en Educación Física, Deporte y Recreación*, 21, 5-8.
- Chacón, R., Castro, M., Zurita, F., Espejo, T., & Martínez, A. (2016). Active video games as an ICT resource in the Physical Education classroom: study based on digital leisure parameters. *Digital Education Review*, 29, 112-123.
- De Diego, R., Fernández, E., & Badanta, B. (2017). Use of ICT to promote healthy lifestyles in children and adolescents: the case of overweight. *Revista Española de Comunicación en Salud (RECS)*, 8(1), 79-91.
- Echeburúa, E., & De Corral, P. (2010). Addiction to new technologies and social networks in young people: a new challenge. *Adicciones*, 22(2), 91-95.
- Fonseca, M. E., Maldonado, A., Pardo, L., & Soto, M. F. (2007). Adolescence, lifestyles and promotion of healthy habits in the school setting. *Umbral científico*, 11, 44-57.
- González, C. S., Gómez, N., & Navarro, V. (2016). Educational intervention program for the treatment of childhood obesity based on active videogames. *Revista da FAEEBA-Educação e Contemporaneidade*, 25(47), 155-172.
- Macías, A. I., Gordillo, L. G., & Camacho, E. J. (2012). Eating habits of school-age children and the role of health education. *Revista chilena de nutrición*, 39(3), 40-43.
- Mora, F. (2013). Mobile learning and some of its benefits. *Revista Electrónica Calidad en la Educación Superior*, 4(1), 47-67.
- Moreno, N.M., Leiva, J.J., & Matas, A. (2016). Mobile learning, Gamification and Augmented Reality for language teaching-learning. *IJERI: International Journal of Educational Research and Innovation*, (6), 16-34.
- Pérez, M. J., Quiroga, A. B., Olivares, P., & Pérez, J. (2017). Abusive use of Information and Communication Technologies: intervention experience in Addiction Prevention in San Luis. *Virtualidad, Educación y Ciencia*, 8(14), 182-188.
- Puig, B., Llamas, F., & Portolés, A. (2015). Relationship between information and communications technology with the academic and practicing physical activity in Primary Education. *Didáctica, innovación y multimedia*, 32, 1-10.
- Romero, J.M., Rodríguez-García, A.M. & Aznar, I. (2017). Una aproximación al establecimiento de indicadores de calidad para la evaluación de buenas prácticas docentes en mobile learning. En J. Ruiz-Palmero., J. Sánchez-Rodríguez y E. Sánchez-Rivas (Eds.), *Innovación docente y uso de las TIC en educación* (pp. 1-9). Málaga, Spain: UMA Editorial.
- San Mauro, I., Megías, A., García, B., Bodega, P., Rodríguez, P., Grande, G., Micó, V., Romero, E., García, N., Fajardo, D., & Garicano, E. (2015). Influence of healthy habits in the weight status of children and adolescents of school age. *Nutrición Hospitalaria*, 31(5), 1996-2005.

Use Of Web 2.0 Tools Running A Wiki For Contents Creation Through Cooperative Groups

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Abstract

Web 2.0 has generated a change in people's attitudes ranging from static to dynamic thanks to the web tools that allow users to share, collaborate and participate, generating contents in a cooperative way. This research aims to identify whether the Wiki tool is suitable for contents creation, both theoretical and practical, following the philosophy of cooperative groups, in students enrolled in the Master's Degree in Teacher Training in Compulsory Secondary and Upper Secondary School Education, Vocational Training and Language Teaching in the Campus of Ceuta (n = 73). The method is descriptive and correlational, carrying out an analysis from a mixed approach (quantitative and qualitative). Two instruments were created to obtain the data: a questionnaire to evaluate the Wiki application as a valid tool for the teaching-learning process (post); and a debate outline for the discussion groups consisting of eight groups of 8 members, except one formed by 9. The quantitative results showed the application favoured the class group participation, the inquiry, collaboration and learning and in fact it offers new perspectives for the teaching process. The lack of time to properly develop the activity stands out as a negative aspect. At a qualitative level the results showed that students were reluctant to apply a new educational methodology, but as the classes progressed, they valued the action positively, considering the possibility of applying them when they were teachers. As an improvement proposal they suggested to create smaller groups to produce contents through the Wiki. We can conclude the Wiki application can be a valid tool for contents creation, as long as it is applied in smaller groups.

Introduction

There is no consensus when it comes to establishing the moment of the birth of the Web 2.0 term, for some authors (De Haro, 2010), the term was first coined by Dacy Dinucci to indicate the changes that were taking place at an aesthetic and design level various websites. For others (Martín, 2011, Palomo, Ruiz & Sánchez, 2008), the term appears in the mouths of Tim O'Reilly and Dale Dougherty, in 2004, referring to user communities, which could modify various applications thanks to the social collaboration.

It is in 2006, when the term Web 2.0, from Time magazine, which publishes it on its cover, reaches its peak. In this magazine reference is made to the paradigm shift of the web, which goes from being a content website to a web of people (Castellanos, et al., 2011).

When we define Web 2.0 we should consider two aspects. On the one hand, we can consider it as a series of tools that allow network members to share, collaborate and participate in the different contents that are generated in different Web (Chernoll, 2009; Casamayor, 2008); or, as a social philosophy, focused on the attitude of people, where webs, previously static, become dynamic due to the contributions of the community (Unturbe and Arenas, 2010, Zamarrazo and Amorós, 2011).

If something characterizes Web 2.0, it is because it is interactive (Zamarro and Amorós, 2011), dynamic, open (Unturbe and Arenas, 2010), collaborative, participative (De Haro, 2010), intuitive, simple (Castellanos, et al., 2011), modifiable (Martin, 2011) and free (Palomo, Ruiz and Sánchez, 2008). All these aspects make that the use of Web 2.0 has generated so much expectation and caused so much use by the community that accesses the Internet. At an educational level, the introduction of Web 2.0 in the teaching and learning processes have caused changes in the role of teachers and students. Teachers become guides of training, while students are responsible for their learning, marking the actions that really motivate them in their learning (Cela et al., 2010).

In addition, it generates new methods and learning styles (Dominguez and Llorente, 2009), being an example, the possibility of creating online spaces with large amounts of information sources thanks to the contribution of both teachers and students (Marqués, 2007).

The emergence of Web 2.0 implied the development of new resources, including the Wiki application, considered one of the most well known academic tools among the 2.0 (Barberá, 2009), which modified the way to obtain information, since it does not stay only in the reception of it, but you can modify it and edit it according to your

knowledge, favoring collective learning (Araujo, 2017).

The term wiki is based on the term "wikiwiki", which is Hawaiian, and refers to speed or informality (Villaroel, 2007; Mora, 2012; Sanz, Gil and Marzal, 2007). The first wiki was created by Cunningham in 1995 with the intention of sharing non-profit knowledge, being the impulse of new wiki with the same philosophy (Mur, 2015). We can define it as an instrument of collective participation and construction of knowledge, formed by tools for publication, shared editing and analysis of hypertext documents that allows users to access, through a web browser, create, edit, delete or modify a certain text, quickly, Interactive and simple, without having to do it in the same physical and temporal space, in a shared digital space, asynchronously (Gómez and Álvarez, 2011, Espinosa, 2014, Giménez and González, 2009, Vela, Medina and Rodríguez, 2017; Mora, 2012). This tool offers, for both formal and informal education, collaboration and mutual commitment to learning (Barberá, 2009).

When evaluating Wikis, they offer many advantages that make it a powerful tool for the social field and for the educational field. Wikis allows you to include many digital add-ons, users can edit and develop content, favors collaboration (Araujo, 2017, Giménez and González, 2009, Mur, 2015), offers temporal and spatial flexibility, allows you to work asynchronously or synchronously, they can be private or semi-private (Gómez and Álvarez, 2011; Giménez and González, 2009; Villaroel, 2007), freeze a document when it is finalized (Concepción, 2008), it is accessible, intuitive and friendly (Mora, 2012); favors the attention to diversity, controlled learning environments, allows to follow the whole process of elaboration (Espinosa, 2014; Giménez and González, 2009), retrieves information quickly and easily (García, 2016), offers a variety of templates for his creation; allows to manage permissions at user and page level; is free; does not require complex computer skills (Mora, 2012); it is flexible; improves the interaction between pairs and favors the involvement in learning (Vela, Medina and Rodríguez, 2017).

Although, as in all the resources that we can find, they also have disadvantages, which we must know to minimize their effect as much as possible. What we can find is the difficulty of evaluating individual work (Araujo, 2017); the contents presented can not be directly contrasted; depends on the internet connection; the modifications made do not ensure that they are of better quality (Giménez and González, 2009); Teachers may not know how to give enough support to encourage participation (Gómez, 2017); loss of information, either by mistake or by malpractice, in the modifications made by users (Mora, 2012); the lack of motivation can damage its didactic application (Vela, Medina and Rodríguez, 2017).

At an educational level, and focusing on the perspective of the students, those who have developed the digital competence, are those who value the resource positively and see useful purpose. On the other hand, those who have not developed it, value it negatively, and do not see functionality in their daily work (Giménez and González, 2009).

It is important that students have a participatory spirit, and are themselves responsible for their learning, in a coordinated manner, as this will allow for better results in the use of the Wiki resource (Sanz, Gil and Marzal, 2007).

At a methodological level, the Wiki favors and enhances collaborative work (Gómez and Álvarez, 2011), allowing both teachers and students to work closely and jointly on a specific topic, although it must be accompanied by a clear objective. This collaborative learning requires coordination, commitment and effort on the part of all the members of a group (Araujo, 2017; Mora, 2012), as well as establishing the problem to be addressed and providing solutions among all (Barberá, 2009), planning in detail all the actions to be developed (Giménez and González, 2009).

If we want its use for the teaching and learning process to be successful, we must contextualize the activity, determine the objectives, establish the work plan, select the human and technical resources, indicate the evaluation system (Giménez and González, 2009). This fact should be applicable to any educational action that is developed, its use not being exclusive for the Wiki resource.

The student must be an active part of the teaching and learning process (Mora, 2012), generating skills at the negotiation level, to jointly generate knowledge (Gómez, 2017), while the teacher must become a guide and guidance of learning, positioning itself within the constructivist paradigm (Vela, Medina and Rodríguez, 2017; Mora, 2012), offering an alternative to the resources used in the traditional methodology (Gómez and Álvarez, 2011). Moving from being a classic tutor to an e-tutor (Mur, 2015).

Before starting to use it, we must train students in its use, especially in basic operations, to familiarize with the tool (Araujo, 2017), either through practical explanation or tutorial (Espinosa, 2014), thus avoiding demotivation due to lack of knowledge in its management.

When evaluating the academic development of students through the Wiki resource, it can be developed in various ways, either through self-assessments or co-evaluations (Gómez and Álvarez, 2011), or any evaluation procedure or technique. The important thing is to have planned the development of the activity, in addition to establishing clear qualification criteria on the final grade of the subject in which we are developing (Giménez and González, 2009). In addition, it is necessary to monitor the activity of the students on a constant basis (Gómez, 2017), so that they are aware that their work is being valued.

The use of the Wiki resource is ideal for teaching the writing process, as it promotes reflection, review, publication and observation of the results, becoming an interactive writing book (Araujo, 2017).

Methodology

Type of study

The study we have developed is descriptive and correlational, applying data analysis from a quantitative and qualitative approach (Colás and Buendía, 1998).

Objective

The objective of this research is to identify if the Wiki tool is suitable for the creation of contents, both theoretical and practical, following the philosophy of the cooperative groups, in the students enrolled in the Master's Degree in Compulsory Secondary Education, Baccalaureate, Vocational Training and Language Teaching in the Campus of Ceuta.

Subjects

For the research we have selected the entire population that form the student body enrolled in the Master of Training in Teaching Compulsory Secondary Education, Baccalaureate, Vocational Training and Language Teaching in the Campus of Ceuta in the academic year 2017/2018 in the subject of Educational Processes and Contexts.

The population is made up of 73 subjects, where there are more women (45.2%) than men (54.8%), where the students have an age range between 21 and 25 years (52.1%) mainly, followed by the interval between 26 and 30 years old (30.1%). There are also, but in a better proportion, students aged between 31 and 35 years old (9.6%) and over 35 years old (8.2%).

The specialties with which they are studying the Master are mainly Training and Labor Guidance (13.7%), Economy (13.7%) and Foreign Language (13.7%), followed by Educational Guidance (9.6%), Sanitary Processes (8.2%), Mathematics (8.2%), Biology and Geology (6.8%), Social Sciences (6.8%), Drawing (6.8%), Spanish Language and Literature (4, 2%), Physics and Chemistry (4.2%), ICT (2.7%) and Physical Education (1.4%).

The religion professed by the student enrolled is mainly the Christian religion (49.3%), followed by the Muslim religion (12.3%) and another, in which students have placed Buddhism (4.1%). There is a high percentage that does not follow any religion (34.2%).

Instrument

The questionnaire prepared is ad hoc, created specifically to analyse the objective set out in the investigation. The instrument consists of 9 items, distributed in a field, called "Use of the Wiki application in the teaching and learning process", composed of 5 items, in addition to sociodemographic data, formed by the items sex, age, specialty and religion who professes.

In order to be validated, the instrument has gone through a validity of content, through the contribution of 5 doctors, experts in the subject treated. The recommendations focused mainly on the modification of the wording of certain items, aspects that we took into account.

For reliability, we apply the coefficient of internal consistency of Cronbach's Alpha, through a pilot test applied to 35 trained during the 2016/2017 academic year. The average value of Cronbach's Alpha is 0.768; considered to be acceptable to be higher than 0.70 (George and Mallery, 2003).

The script was prepared ad hoc, composed of 3 questions, focused on the evaluation of experience, positive and negative aspects found and proposals for improvement in their application within the teaching and learning process.

The instrument was subjected to content validity by the same experts as in the questionnaire, who recommended grouping items, and modifying the approach to certain issues, which we had in mind.

Process

The data collection procedure is carried out once the Wiki application has been used during the teaching period Processes and Educational Contexts, in the month of December of the year 2017, without informing the students that a study was going to be carried out.

At the end of the day, they were told that they should complete a questionnaire, in addition to holding a discussion group with two people prepared in this regard.

Before filling out the questionnaire, the rules were explained to complete it, as well as giving them only 10 minutes to complete it. At all times the students presented good predisposition for its preparation.

Regarding the discussion group, the data collection period ranged between 15 and 20 minutes, depending on the group. All conversations were transcribed for further analysis. The predisposition shown was positive.

For the analysis of the questionnaire data, we made use of the IBM SPSS Statics 20 program, while for the discussion groups, we selected key ideas.

Results

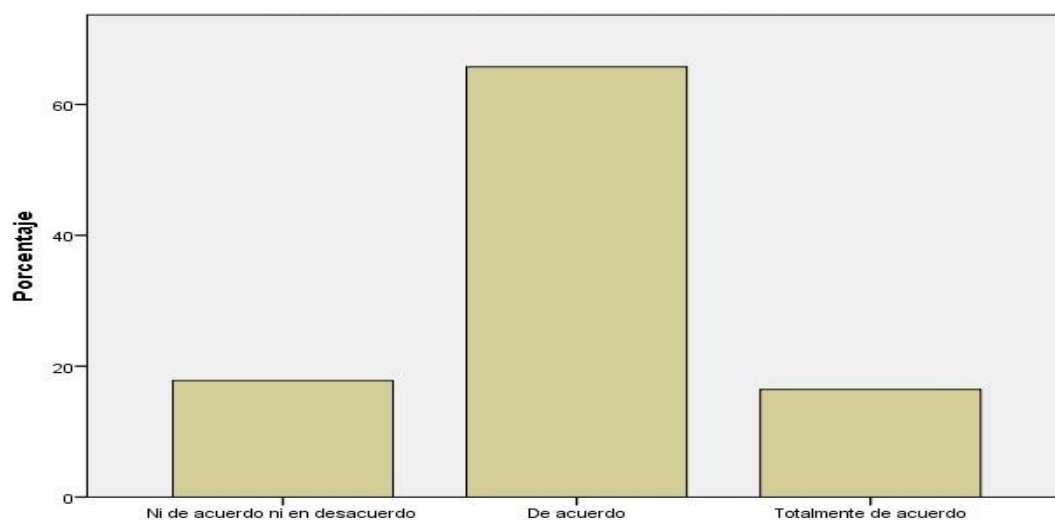
Descriptive analysis.

In general terms, they show that the assessment of students in relation to the use of the Wiki application is positive, so much so that there are items that are not included in the data that we present below because they were not selected by the respondents.

Regarding whether the use of the Wiki resource provides meaningful learning, the majority of students agree (65.8%), while the rest are either not in favor or against (17.8%) or totally agreement (16.4%), noting that the use of the Wiki application has involved the acquisition of significant learning for students.

Table 1.Provides meaningful learning

		Frequency	Percentage	Valid percentage	Accumulated percentage
Valid	Neither agree nor disagree	13	17,8	17,8	17,8
	Agree	48	65,8	65,8	83,6
	Totally agree	12	16,4	16,4	100,0
	Total	73	100,0	100,0	

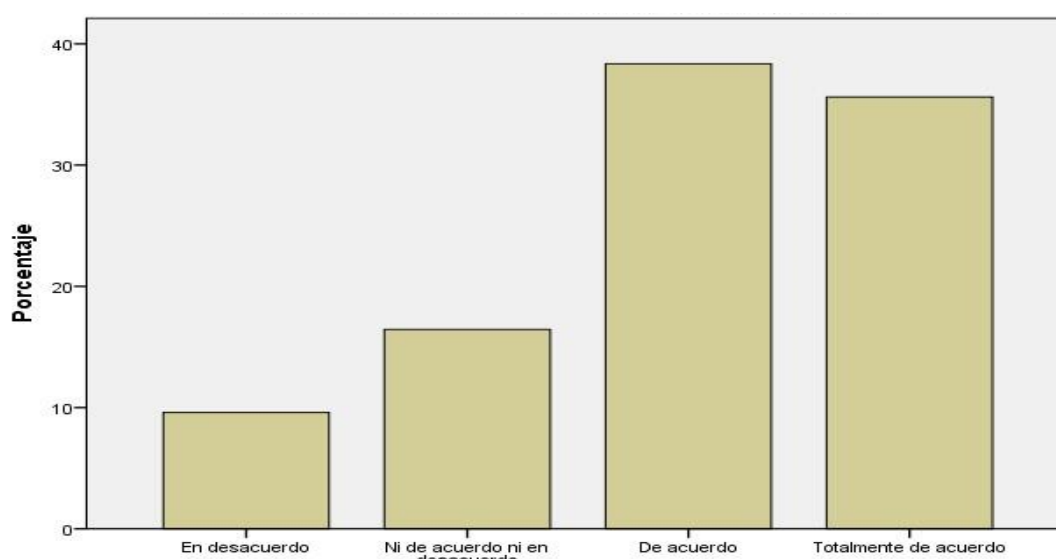


Graph 1. Significant learning in the use of the Wiki resource

As regard to whether it encourages collaborative learning, the majority considers that it is, in full agreement (35.6%) and in agreement (38.4%), while a minority is neither in favor nor against (16.4%) or disagree (9.6%). This shows that the formand values this resource as a tool that can encourage collaborative learning.

Table 2. Encourage collaborative learning

		Frequency	Percentage	Valid percentage	Accumulated percentage
Valid	In disagreement	7	9,6	9,6	9,6
	Neither agree nor disagree	12	16,4	16,4	26,0
	Agree	28	38,4	38,4	64,4
	Totally agree	26	35,6	35,6	100,0
	Total	73	100,0	100,0	



Graph 2. Collaborative learning in the use of the Wiki resource

Focusing on the issue itself encourages educational innovation, a high percentage considers it to be totally in agreement (46.6%) or in agreement (39.7%), while a small part of the respondents either do not agree or disagree (11%) or disagree (2.7%). For these students, the Wiki resource encourages educational innovation.

Table 3. Encourages educational innovation

		Frequency	Percentage	Valid percentage	Accumulated percentage
Valid	In disagreement	2	2,7	2,7	2,7
	Neither agree nor disagree	8	11,0	11,0	13,7
	Agree	29	39,7	39,7	53,4
	Totally agree	34	46,6	46,6	100,0
	Total	73	100,0	100,0	

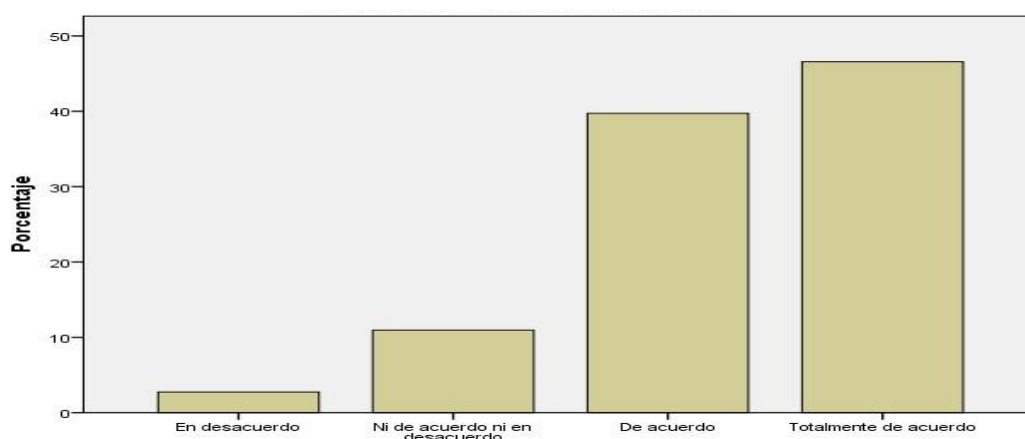
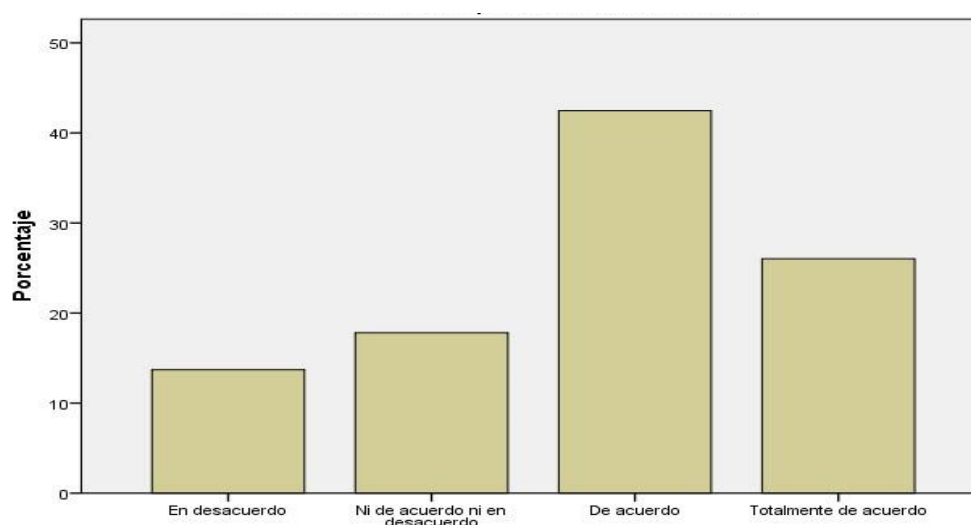


Figure 3. Promotion of educational innovation through the use of the Wiki application

Regarding the question of whether it favors the involvement of the students, a high percentage considers it to be in agreement (42.5%) or totally in agreement (26%), while a minority is neither in favor nor against (17.8%) or in disagreement (13.7%). Therefore, the formand considers that the use of the Wiki resource favors the involvement in the training process.

Table 4. Encourages the involvement of students

		Frecuenc y	Percentag e	Valid percentage	Accumulat ed percentage
Valid	In disagreement	10	13,7	13,7	13,7
	Neither agree nor disagree	13	17,8	17,8	31,5
	Agree	31	42,5	42,5	74,0
	Totally agree	19	26,0	26,0	100,0
	Total	73	100,0	100,0	



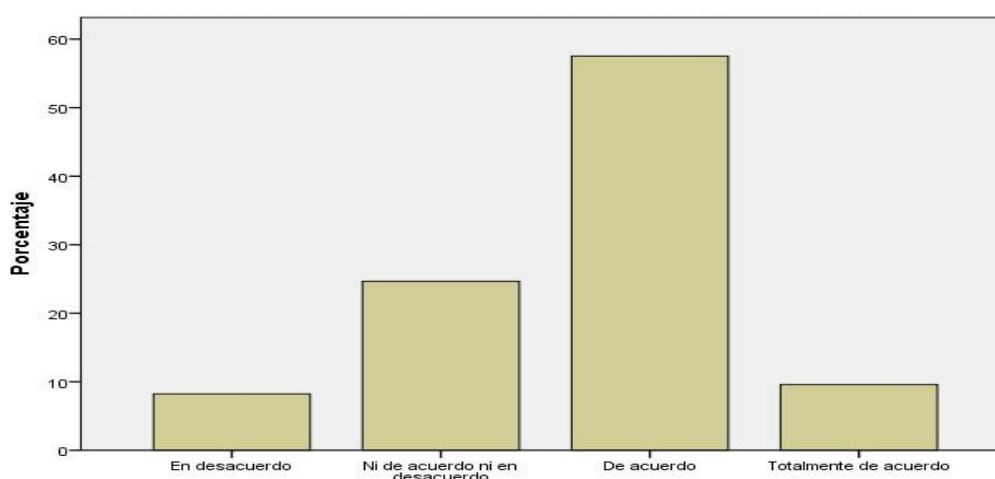
Graph 4. Involvement of students in the use of Wiki

If the use of the Wiki resource supposes more advantages than disadvantages in the teaching practice, the trend is not as high as in previous questions, even though the evaluation is still positive, observing that 57.5% agree, 24.7

% neither agree nor disagree; while 9.6% strongly agree and 8.2% disagree. For the student, this resource may have positive aspects, although with some drawbacks.

Table 5. It supposes more advantages than disadvantages in the teaching practice

		Frequency	Percentage	Valid percentage	Accumulated percentage
Valid	In disagreement	6	8,2	8,2	8,2
	Neither agree nor disagree	18	24,7	24,7	32,9
	Agree	42	57,5	57,5	90,4
	Totally agree	7	9,6	9,6	100,0
	Total	73	100,0	100,0	



Graph 5. Advantages in the use of the Wiki resource in the teaching and learning proces

Analysis group discussion data

Regarding the evaluation of experience, 87.5% have positively highlighted the experience, given that they are offered another different reality in the teaching and learning process. 12.5% have valued it negatively, because they feel more comfortable in the traditional method, which is what they have always been used to.

This has been very complicated for us. It is the first time we have experienced this way of being taught, and above all, the first time we work with Wiki. We prefer the traditional manner, we are more comfortable [Group 1]

We are delighted with the proposal. At the beginning we recognized that we were reluctant to develop the activity, but as it has progressed, we have felt more comfortable, and what is more important, we have learned to have fun [Group 7]

Regarding the fact that they made reference to the positive and negative aspects, 87.5% highlighted mainly positive aspects, enhancing the possibility of seeing another methodology different from the one considered classic and favoring socialization among peers. 12.5% observe as negative aspects the shortage of time to carry out the activity.

We see many positive aspects in the activity itself. Mainly, we do not get bored and we are entertained, talking with colleagues about actions to be developed in the activities, something that is done to be grateful at this time of the afternoon [Group 5]

We have been overwhelmed drowned the whole class, first because there is very little time to do the activity; second because we are many and it is difficult to agree; and third because we do not master the subject, and so it is more difficult to develop the activity [Group 1]

Finally, when they have been asked to establish proposals for improvement, 62.5% of the groups have agreed to indicate that for future classes, tasks related to Wiki resources will be carried out in smaller groups, and not so numerous, the rest of the groups consider that the activity is fine as it is presented.

It has been a bit complicated, in fact, to get so many people in agreement with the preparation of the requested documents. Also, some of us have worked more than others, and that is not fair [Group 3]

Conclusions

Students enrolled in the Master's Degree in Teacher Training in Compulsory Secondary Education, Baccalaureate, Vocational Training and Language Teaching in the Campus of Ceuta positively assess the Wiki resource in general. The students consider that they generate significant learning; encourages collaborative learning, coinciding with what was established by Gómez and Álvarez (2011); promotes educational innovation; favors the involvement of students, as established by Araujo (2017), where a shared effort is required by all students; and it offers more advantages than inconvenience, as is reflected in the theoretical framework of this research, where the positive aspects are much greater than the negative ones.

The fact of applying it in class, and knowing the students' assessment of its application, also shows that their ratings are positive, being happy with the proposal, although at the beginning it was more difficult due to lack of knowledge rather than motivation, and a small amount of training was necessary. its use, coinciding with Araujo (2017), which defends that the students must familiarize themselves with the resource.

They value positively the fact of using another methodology different from the traditional one, offering an alternative to traditional resources, as marked by Gómez and Álvarez (2011).

They also consider that it promotes socialization among peers, coinciding with Barberá (2009), and Giménez and González (2009), where they consider that solutions must be provided among all, reaching agreement in a consensual manner.

As proposals for improvement, they assessed the need to develop the Wiki resource in smaller groups, and the need to have more time for the development of the activity.

The fact of using the Wiki resource with future teachers is motivating for them in the development of the teaching and learning process, in addition to offering new tools for the development of teaching. It is important to generate small groups, since large groups can harm the normal development of the classroom.

As future lines of research, the influence of gender and specialties on the use and evaluation of the Wiki resource can be considered in the students who take the Master's Degree in Compulsory Secondary Education, Baccalaureate, Vocational Training and Language Teaching national.

References

- Araujo, J.C. (2017). Propuesta de utilización de wikis para el desarrollo de la expresión escrita mediante el trabajo colaborativo. *IKASTORRATZA. e-Revista de Didáctica*, 18, 80-105.
- Barberá, E. (2009). Filosofía wiki: el compromiso de las soluciones. *Red U – Revista de Docencia Universitaria. Número monográfico IV. Número especial dedicado a Wiki y educación superior en España (en coedición con Revista de Educación a Distancia – RED)*.
- Casamayor, G. (coord.) (2008). *La formación on-line. Una mirada integral sobre el e-learning, b-learning...* Barcelona: Editorial Grao.
- Castellanos, J., Martín, E., Pérez, D., Santacruz, L. P., y Serrano, L M. (2011). *Las TIC en la educación*. Madrid: Ediciones Anaya Multimedia.
- Cela, K., Fuerte, W., Alonso, C., y Sánchez, F. (2010). Evaluación de herramientas web 2.0, estilos de aprendizaje y su aplicación en el ámbito educativo. *Revista Estilos de Aprendizaje*, 5(5), 1-22.
- Chenoll, A. (2009). Web 2.0 y estilos de aprendizaje. Tú eliges cómo quieres aprender. *Biblioteca virtual redELE*, 11, 70-78.
- Colás, B., y Buendía, L. (1998). *Investigación Educativa*. Sevilla: Ediciones Alfar.
- Concepción, C.M. (2008). Wiki, internet y repositorios documentales. *Acimed*, 18(6), 1-3.
- De Haro, J. J. (2010). *Redes sociales para la educación*. Madrid: Ediciones Anaya Multimedia.
- Domínguez, G., y Llorente, M. C. (2009). La educación social y la Web 2.0: Nuevos espacios de innovación e interacción social en el espacio europeo de educación superior. *Pixel-Bit. Revista de Medios y Educación*, 35, 105-114.
- Espinosa, I. (2014). El gato de Dalí. Escritura cooperativa con wiki. *Foro de Profesores de E/LE*, (10), 75-82.
- García, M.D. (2016). El uso de blogs y wikis en la formación del traductor. *Revista tradumática*, (14), 147-155.
- George, D., y Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference 11.0 update (4th ed.)*. Boston: Allyn & Bacon
- Giménez, A., y González, A. (2009). Un modelo de implementación de una wiki para la formación jurídica. *Red U - Revista de Docencia Universitaria. Número monográfico IV. Número especial dedicado a Wiki y*

- educación superior en España (en coedición con Revista de Educación a Distancia –RED)
- Gómez, V. (2017). ¿Cómo se involucran los estudiantes de pedagogía en una experiencia de blogging internacional en wikispaces? *Digital Education Review*, (31), 1-19.
- Gómez, M.C., Álvarez, J.D. (Ed.). (2011). *El trabajo colaborativo como indicador de calidad del espacio europeo de educación superior. Volumen I*. Alicante: Editorial Marfil.
- Marqués, P. (2007). La Web 2.0 y sus aplicaciones didácticas. *Didáctica, Innovación y Multimedia*.
- Martín, J.P. (2011). *Servicios Google como herramienta educativa*. Madrid: Ediciones Anaya Multimedia.
- Mora, F. (2012). Posibilidades educativas de la wiki. *Tecnología en Marcha*, 25 (3), 113-118.
- Mur, L. (2015). El aprendizaje de la historia con Wiki en Educación Secundaria. *Enseñanza de las ciencias sociales*, 14, 39-47.
- Palomo, R., Ruiz, J., y Sánchez, J. (2006). Las TIC como agentes de innovación educativa. *Junta de Andalucía. Consejería de Educación. Dirección General de Innovación Educativa y Formación del Profesorado*
- Sanz, J., Gil, J.M., y Marzal, A. (2007). El Wiki de la orientación y el asesoramiento vocacional. *REOP*, 18 (2), 255-271.
- Unturbe, A.; Arenas, M. C. (2010). *Internet como recurso educativo*. Madrid: Ediciones Anaya Multimedia.
- Vela, S.E., Medina, C., y Rodríguez, J.A. (2017). Impacto del uso e incorporación de una Wiki en el aprendizaje de la Biología. *EDUTEC. Revista Electrónica de Tecnología Educativa*, (59), 1-20.
- Villaroel, J. (2007). Usos didácticos del wiki en educación secundaria. *Ikastorratza, e-Revista de Didáctica*, 1, 1-7.
- Zamarrazo, J. M.; Amorós, L. (2011). *Las nuevas Tecnologías de la enseñanza de las Ciencias*. Sevilla: Editorial MAD.

Using Area Estimation to Assess Equity among Diverse Populations

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Abstract

Introducing students to the study of interesting “real-world” applications of mathematics is an important part of the educational experience. This session draws on applications from mathematics, science, and economics. Students can explore ways to utilize the concept of equity and to apply this concept to different aspects of society. Actual data are used to measure how wealth and resources are shared in different populations. This session provides a method to quantify and explore what it means to “share the wealth.” Data analysis, economics, and the area under a curve are all used. Student exercise worksheets will be provided.

Using Mobile Digital Resources –Mdr Model- To Remove Barriers In Education: Some Mequity Research Project Findings

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Abstract

The objective of the Project “Improving Higher Education Quality in Jordan using Mobile Technologies for Better Integration of Disadvantaged Groups to Socio-economic Diversity” (mEQUITY) is to improve the teaching-learning process by fulfilling with the MDR Model the needs of the different recipients, as well as the adaptation of digital educational resources for mobile devices. mEQUITY is mean to promote the elimination of barriers and prejudices found in the integration of technologies for improving the education of people at risk of exclusion, especially people with disabilities. It is intended that all students, regardless of their circumstances and personal abilities, can benefit from better instruction and that teachers view technology as a resource with many possibilities. Results of the mEQUITY research project on the evaluation of a series of elements of quality such as utility/usability, usefulness and efficiency in the development and adaptation of a mobile application system with augmented reality are presented.

Üniversite Öğrencilerinin Bilgisayarca Düşünme Becerilerinin Belirlenmesi

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Özet

Günümüzde tüm dünyada uygulanmaya başlanan ve Millî Eğitim Bakanlığının da ilköğretim müfredatına eklediği kodlama eğitimi 21. Yüzyılın en önemli becerileri arasında gösterilmektedir. Bu beceri ile ilgili önemli bir konu da bilgisayarca düşünme (computational thinking) olarak belirtilmektedir. Bilgisayarca düşünme, güncel yaşamda karşılaşılan problemlerin çözümünde bilgisayarları üretim aracı olarak kullanabilmek için gerekli olan bilgi, beceri ve tutumlara sahip olmak şeklinde tanımlanmaktadır. Bilgisayarca düşünme aynı zamanda bilgisayarların insan beyninin bir uzantısıymış gibi kullanabilme yeteneği olarak da tanımlanmaktadır. Bilgisayarca düşünme ile insanların zekâsı ile bilgisayarların işlem yeteneklerini birleştirerek gelişen dünyada daha başarılı bireyler yetiştirmek amaçlanmaktadır. Bilgisayarca düşünme, teknoloji ile düşünce birleşimini güçlendiren bir problem çözme yaklaşımıdır. Bilgisayarca düşünme, insanlar için problem çözme demektir. Belli bir bakış açısına göre bir problemi çözerken çözümleri düşünmeden önce problemin ne olduğunu anlamak gerekmektedir. Aksi takdirde bulunan çözümler kullanışsız olacaktır. Dijital çağın gerekliliklerini karşılamaya dönük bireylerin sahip olmaları gereken önemli olan bu beceriye dönük, alan yazında sınırlı araştırma bulunmaktadır. Bu çalışmada üniversite öğrencilerinin bilgisayarca düşünme beceri seviyeleri ve çeşitli demografik değişkenler ve özellikle de önceki bilgisayar ve programcılık eğitimleriyle ilişkisi ortaya çıkarılmaya çalışılmıştır. Araştırma kapsamında öğrencilerin bilgisayarca düşünme becerileri Korkmaz, Çakır ve Özden (2017) tarafından geliştirilmiş olan “Bilgisayarca Düşünme Becerileri Ölçeği” kullanılarak toplanmıştır. Araştırma sonucunda öğrencilerin bilgisayarca düşünme becerileri orta düzeyde bulunmuştur. En yüksek puan ortalaması yaratıcılık en düşük puan ortalaması ise problem çözme altboyutundadır. Daha önceden programlama dersi almanın algoritmik düşünme alt boyutunda istatistiksel olarak yüksek bir puan elde edilmesine yol açtığı söylenebilir. Yaratıcı düşünme alt boyutunda ise tersi bir durum söz konusudur. Kodlama eğitimi ilkokuldan üniversiteye kadar tüm kademelere yayılmaya çalışıldığı günümüzde, elde edilen sonuçların özellikle karar alıcılar açısından önemli olacağı düşünülmektedir.

Anahtar Kelimeler: *Bilgisayarca düşünme, algoritmik düşünce, programlama eğitimi.*

Üniversite Öğrencilerinin Sosyal Medya Bağımlılığı ile Sosyal Destek Arasındaki İlişkinin İncelenmesi

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Özet

Bu çalışma, üniversite öğrencilerinin sosyal medya bağımlılığı ile sosyal destek arasındaki ilişkiyi incelemek amacıyla yapılmıştır. Araştırmanın çalışma grubu, 2017-2018 eğitim-öğretim yılında bir devlet üniversitesinin eğitim fakültesi'nde öğrenim gören lisans öğrencileri oluşturmıştır. Bu betimletici araştırma genel tarama modeli gerçekleştirilmiştir. Katılımcılar 428 (263 kız, 165 erkek) üniversite öğrencisinden oluşmaktadır. Veri toplama sürecinde Sosyal Medya Bağımlılığı Ölçeği-Öğrenci Formu ve Çok Boyutlu Algılanan Sosyal Destek Ölçeği kullanılmıştır. Çalışmada sosyal medya bağımlılığı ile sosyal destek arasında düşük düzeyde negative bir ilişki bulunmuştur. Çalışmanın sonuçları ilgili literatür ışığında tartışılmıştır.

Keywords: *Sosyal medya bağımlılığı, sosyal destek, üniversite öğrencisi.*

Giriş

İnternet, çağımızın en önemli iletişim aracı olarak kabul edilmektedir. İnternet aracılığı ile bireyler sosyal paylaşım siteleri aracılığıyla yeni insanlarla tanışıp arkadaşlıklar kurabilmekte, sanal mağazalardan alışveriş yapabilmekte, ihtiyaç duyulan bilgi ve kaynaklara kolaylıkla ulaşabilmektedir.

Türkiye İstatistik Kurumu verilerine göre 2013 ile 2017 yılları arasında hanelerin internete erişim oranı yüzde 49.1'den yüzde 80.7'ye yükseldiği görülmektedir. Hane halklarının evde internet kullanım oranının ise yüzde 80.7'ye yükseldiği kaydedildi. Yine aynı verilere göre Türkiye'de internet kullanan bireylerin oranı %66.8 olduğu belirtilmektedir. 16-24 yaş grubunda internet kullanım oranı % 87.2'dir. Bu oranın kızlarda (%91.5), erkeklere (%82.9) göre daha yüksek olduğu görülmektedir (TÜİK, 2017). Bu verilere göre, internet kullanım oranının lise ve üniversite öğrencilerinde diğer yaş gruplarına göre daha yüksek olduğu anlaşılmaktadır.

İnternetin ortaya çıkış amacı bilgiye güvenli, hızlı, ucuz ulaşmak ve iletişimi kolaylaştırmak olmasına rağmen günümüzde birey ve toplum üzerinde önemli değişimlere neden olan bir araç haline gelmiştir. İnternet kullanımının sanal bir ortam üzerinden zaman ve mekândan bağımsız gerçekleşiyor olması, kişilerarası iletişim biçimlerinin değişmesine yol açmakta, internet teknolojisinin bir uzantısı olan sosyal medya kişiler arasındaki iletişim kanallarını değiştirmektedir. Türkiye'de ve dünyada sosyal medya kullanımı giderek artmakta, özellikle gençler/öğrenciler yoğun bir şekilde ilgi göstermektedir (Şahin, 2018).

Aşırı, problemli ve patolojik kullanımlar bireylerin kişisel, sosyal, mesleki ve eğitsel sorunlar yaşamasına yol açmaktadır (Griffiths Kuss ve Demetrovics, 2014). Sorunlu internet kullanımının sınıflandırılmasını çevreleyen kavramsal karışıklığa bağlı olarak sorunlu sosyal ağ kullanımı ya da internet bağımlılığı tanımlanması konusunda araştırmacılar arasında görüş birliği bulunmamaktadır (Wegmann, Stodt ve Brand, 2015).

İnsanlar bağımlılığın genellikle uyuşturucu ya da alkol gibi maddeleri içerdiğini düşünürler. Kontrol edilemeyen alışkanlık veya uygulamalar da bağımlılık olarak tanımlanır (Harris, Nagy ve Vardaxis, 2014). Bu anlamda, gelişen teknolojilere bağlı olarak ortaya çıkan aşırı internet kullanım davranışlarını betimlemek için teknolojik bağımlılık kavramı da kullanılmaya başlanmıştır (Kuss ve Griffiths, 2012; Turel ve Seronko, 2012).

Sosyal medya bağımlılığı bir çeşit internet bağımlılığı olarak değerlendirilmektedir (Kuss ve Griffiths, 2012). Bireylerin sosyal medyada aşırı zaman geçirmeleri ve her şeyden anında haberdar olma ya da bilgilenme istekleri kontrol kaybı, iletişim kaybına ve zaman kaybı neden olabilmekte; kişiyi bu eylemlere zorlayan davranışlar sosyal medya bağımlılığı olarak açıklanabilmektedir (Şahin ve Yağcı, 2017).

İnternet ya da sosyal medya bağımlılığına ilişkin çalışmalara göz attığımızda, ele alınan değişkenlerden birinin de sosyal destek olduğu görülmektedir. İnsanların çevrelerinde güvenebilecekleri, onlara değer veren, onlarla ilgilenen kişilerin varlıkları sosyal destek anlamına gelmektedir (Durak Batıgün ve Kılıç, 2011). Sosyal desteğin olmadığı durumlarda çeşitli fiziksel ve psikolojik sıkıntıların olduğu belirtilmektedir (Holahan ve Moos, 1982).

Sosyal destek ile internet ya da sosyal medya kullanımı arasındaki ilişkilere baktığımızda, bazı çalışmalarda iki değişken arasında anlamlı bir ilişki olmadığı belirtilirken (Miller, 2008), bazılarında bir ilişkiden söz edilmektedir (Yeh, Ko, Wu ve ark., 2008; Karasu, Bayır ve Çam, 2017). Ayrıca özellikle erkeklerde sanal sosyal desteğin internet bağımlılığını doğrudan yordadığı belirtilmektedir (Durak Batıgün ve Kılıç, 2011).

Yukarıda açıklanan gerekçelerle bu araştırmanın amacı, üniversite öğrencilerinin sosyal medya bağımlılığı ile sosyal destek arasındaki ilişkinin belirlenmesidir.

Yöntem

Araştırma Grubu

Bu çalışmada verileri elde etmek için kolayda örnekleme yöntemi uygulanmıştır. Kolayda örnekleme yöntemi; bir bölge söz konusu olmadığı durumlarda, araştırmacının yakın çevresinde bulunana, ulaşılması kolay, araştırmaya katılmaya gönüllü bireyler ile çalıştığı örnekleme türüdür (Erkuş, 2011).

Araştırma grubu, 2017-2018 eğitim-öğretim yılı içerisinde Kırşehir Ahi Evran Üniversitesi'nde öğrenim gören toplam 428 öğrenciden oluşmaktadır. Öğrencilerin 263'ü (61.4 %) kız ve 165'i (38.6 %) erkek öğrencidir. Araştırma grubundaki öğrencilerin 113'ü (26.4%) birinci sınıfta, 116'i (27.1%) ikinci sınıfta, 102'i (23.8) üçüncü sınıf ve 97'si (22.7%) dördüncü sınıf öğrencisidir.

Veri Toplama Araçları

Araştırmada veriler "Kişisel Bilgi Formu", "Sosyal Medya Bağımlılığı Ölçeği: Öğrenci Formu (SMBÖ-ÖF)" ve "Çok Boyutlu Algılanan Sosyal Destek Ölçeği (ÇBASDÖ)" aracılığıyla toplanmıştır. Form ve ölçeklerle ilgili açıklayıcı bilgiler aşağıda verilmiştir:

Kişisel Bilgi Formu: Öğrencilerin cinsiyeti, sınıfı ve internet kullanım süreleri gibi özelliklerini belirlemeye yönelik sorulardan oluşan bir formdur.

Sosyal Medya Bağımlılığı Ölçeği- Yetişkin Formu (SMBÖ-YF): Ölçek, ortaokul, lise ve üniversite öğrencilerinin sosyal medya bağımlılığını belirlemeye dönük olarak Şahin (2018) tarafından geliştirilmiştir. Gerçekleştirilen açımlayıcı ve doğrulayıcı analizler sonucunda SMBÖ-ÖF'nun beşli Likert tipi, 4 alt boyut (sanal tolerans, sanal iletişim, sanal problem ve sanal bilgilenme) ve 29 betimlemeden oluşan bir yapıya sahip olduğu belirlenmiştir. Ölçeğin geçerlik ve güvenirlik çalışmaları kapsamında uzman görüşü, açımlayıcı faktör analizi (AFA), doğrulayıcı faktör analizi (DFA), madde toplam korelasyonları, alt ve üst grup ortalama farkları, iç tutarlılık katsayısı ve test-tekrar test korelasyon katsayıları hesaplanmış ve AFA ile DFA sonucunda ölçeğin toplam varyansın %53.16'sını açıklayan 4 faktörlü faktörlü bir yapıya sahip olduğu belirlenmiştir. Ölçeğin KMO katsayısı .96; Barlet anlamlılık değeri $\chi^2=12680.88$ ($p=.00$) düzeyinde anlamlı bulunmuştur. Tüm ölçek için iç tutarlılık katsayısı (Cronbach Alpha katsayısı) .93 olarak bulunmuş; alt faktörler için ise, iç tutarlılık katsayıları ise .81 ile .86 arasında değerler aldığı görülmüştür (Şahin, 2018).

Çok Boyutlu Algılanan Sosyal Destek Ölçeği (ÇBASDÖ): Orijinal formu Amerika Birleşik Devletleri'nde Zimet ve diğerleri (Zimet, 1988) tarafından geliştirilmiş olup, Türkçe'ye uyarlanması, geçerlilik ve güvenirlik çalışması Çakır ve Palabıykoğlu (Çakır ve Palabıykoğlu, 1997); Eker, Arkar, Yıldız tarafından yapılmıştır. ÇBASDÖ'nin üç farklı alt boyutu mevcut olup ölçek 12 sorudan oluşmaktadır. Ölçeğin alt boyutu maddeleri; aile, arkadaş ve özel insan maddeleridir. Likert tipi ölçek 1'den 7'ye kadar puanlanmaktadır. Ölçek alt boyutları en düşük 4, en yüksek 28 puan, ölçeğin toplam puanı en düşük 12, en yüksek 84 alınabilmektedir. Elde edilen puanın yüksek olması algılanan sosyal desteğin yüksek olduğunu göstermektedir. Yapı geçerliliği için yapılan faktör analizi sonucunda iç tutarlılıkta cronbach α katsayıları tüm ölçek için 0.89, ölçek alt boyut cronbach α katsayıları ise aile 0,85, arkadaş 0,88 ve özel insan desteği boyutu için 0,92 olarak saptanmıştır (Eker, Arkar ve Yıldız, 2001).

Verilerin Toplanması ve Analizi

Araştırma kapsamında veriler araştırmacılar tarafından, 2017-2018 eğitim-öğretim yılı bahar döneminde toplanmıştır. Araştırmada Kırşehir Ahi Evran Üniversitesi Eğitim Fakültesinin farklı bölümlerinde okuyan öğrencilere çalışma ile ilgili açıklama yapılmış ve çalışmaya katılmaya gönüllü olan öğrencilerden ölçme araçlarını doldurmaları istenmiştir. Uygulama sonrası ilgili bilgi formlar araştırmacılar tarafından tek tek kontrol edilmiş ve eksik doldurulduğu tespit edilen formlar değerlendirmeye alınmamıştır.

Araştırmadan elde edilen verilerin istatistiksel çözümlenmeleri SPSS 23 programı kullanılarak yapılmıştır. Verilerin analizinde değişkenlerin birbiri ile ilişkisi Pearson momentler çarpımı korelasyonu kullanılarak incelenmiştir

Bulgular

Öğrencilerin sosyal medya kullanım sürelerine ilişkin bulgular Tablo 1’de verilmiştir.

Tablo 1. Sosyal Medya Kullanım Sürelerine İlişkin Özellikler

Sosyal medya kullanım süresi (günde)	N (428)	%
0-2	208	48,5
3-5	136	31,8
6-8	64	14,9
9-11	11	2,7
12 ve üstü	7	1,6
Belirtmeyen	3	0,7

Tablo 1’de görülebileceği gibi öğrencilerin %48,5’i sosyal medyayı düşük düzeyde, %31,8’i orta düzeyde, sadece %5’i bağımlılık sınırları içerisinde kullandığı anlaşılmaktadır.

Eğitim fakültesi öğrencilerinin sosyal medya bağımlılığı ile sosyal destek arasındaki ilişki pearson momentler çarpımı korelasyonu ile incelenmiştir. Yapılan korelasyon analizi bulguları Tablo 2’de verilmiştir.

Tablo 2. Üniversite Öğrencilerinin Sosyal Medya Bağımlılığı ile Sosyal Destek Arasındaki İlişkilere İlişkin Betimsel İstatistikler

Değişkenler	Aile	Arkadaş	Özel insan	ÇBASDÖ toplam
Sanal tolerans	-.14*	-.11*	-.08*	-.18*
Sanal iletişim	-.06*	-.15*	-.11*	-.15*
Sanal problem	-.09*	-.14*	-.12*	-.17*
Sanal bilgilendirme	-.04*	-.26*	-.13*	-.09*
SMBÖ-Toplam	-.12*	-.21*	-.09*	-.16*

*p < .05

Tablo 2 incelendiğinde, toplam puanda sosyal medya bağımlılığı ile sosyal destek arasında düşük düzeyde negative ($r = -.16$, $p < .05$) gözlenmiştir. Diğer taraftan sosyal medya bağımlılığı ölçeği alt boyutlarından sanal tolerans ile sosyal destek ölçeği alt boyutlarından aile ($r = -.14$, $p < .05$), arkadaş ($r = -.11$, $p < .05$) ve özel insan ($r = -.08$, $p < .05$) arasında; sanal iletişim ile aile ($r = -.06$, $p < .05$), arkadaş ($r = -.15$, $p < .05$) ve özel insan ($r = -.11$, $p < .05$) arasında; sanal problem ile aile ($r = -.09$, $p < .05$), arkadaş ($r = -.14$, $p < .05$) ve özel insan ($r = -.12$, $p < .05$) arasında; sanal bilgilendirme ile aile ($r = -.04$, $p < .05$), arkadaş ($r = -.26$, $p < .05$) ve özel insan ($r = -.13$, $p < .05$) arasında düşük düzeyde negative ilişkiler tespit edilmiştir.

Tartışma

Sosyal medya günümüzde milyonlarca genç tarafından farklı amaçlar doğrultusunda kullanılmaktadır. Araştırmacılar internet kullanıcıların büyük çoğunluğunun özellikle 18-24 yaş aralığındaki genç yetişkinlerden oluştuğunu vurgulamaktadır (TUİK, 2017). Üniversitedeki öğrencilerin de büyük çoğunluğu bu yaş aralığında yer almaktadır (Boyd, 2010; Cheung, Chiu ve Lee, 2011; Durak Batıgün ve Kılıç, 2011; Glynn, Hugo ve Hoffman, 2012; Mason ve Rennie, 2008).

Araştırmada öğrencilerin büyük çoğunluğunun (%95) sosyal medyayı bağımlılık sayılabilecek oranların altında kullandığı tespit edilmiştir. Yang ve Tung (2007), haftanın 8,5 ile 21,5 saatini çevrimiçi geçiren bireyler bağımlı olarak değerlendirmektedir.

Çalışmanın diğer bir sonucuna göre, öğrencilerinin sosyal medya bağımlılığı ile sosyal destek arasında düşük düzeyde negatif yönde ilişki olduğu belirlenmiştir. Yine bu çalışmada sosyal medya bağımlılığı alt boyutları sanal tolerans, sanal iletişim, sanal problem ve sanal bilgilendirme ile sosyal destek alt boyutları olan aile, arkadaş ve özel insan arasında düşük düzeyde negative yönde ilişkiler bulunmuştur. Çalışmadan elde edilen sonuçlara göre aileden algılanan sosyal destek arttıkça sosyal medya bağımlılığının azaldığı söylenebilir. Başka bir deyişle, sosyal medya bağımlılığı azaldıkça aileden algılanan sosyal destek artmaktadır.

Alanyazında sosyal destek ile sosyal medya bağımlılığı arasındaki ilişkiyi inceleyen bir çalışmaya rastlanmamıştır. Ancak Karasu, Bayır ve Çam (2017), Batıgün ve Kılıç (2011) yaptıkları araştırmada internet bağımlılığı yüksek olan grubun algıladığı sosyal desteğin daha düşük olduğunu belirlemişlerdir. Bu araştırma bulguları çalışmada elde edilen bulgularla paralellik göstermektedir.

Sonuç ve Öneriler

Genel olarak, sosyal medya bağımlılığı ile algılanan sosyal destek arasındaki ilişkiyi inceleyen bu çalışmada bazı sınırlılıklar bulunmaktadır. Çalışma bir devlet üniversitesinin eğitim fakültesinde öğrenim görmekte olan öğrenciler ve tarama yöntemi ile sınırlıdır. Araştırmada verileri araştırmada kullanılan ölçeklerle elde edilen bilgilerle sınırlıdır.

Çalışmanın sonuçları ve sınırlılıkları doğrultusunda alanyazın için şu öneriler geliştirilebilir. Daha sonraki araştırmalarda, farklı üniversitelerde ya da birden fazla bölümlerdeki daha kalabalık örneklem gruplarıyla çalışmalar yapılabilir. Bu çalışma, rastgele seçilmiş öğrenci grubu üzerinde gerçekleştirilmiştir. Özellikle sosyal medya bağımlılık düzeyi yüksek öğrencilerin belirlendiği örneklem grupları ile araştırmalar planlanabilir. Üniversite öğrencilerinin öğrenim dönemlerinde ve meslek hayatlarında teknoloji kullanımı açısından izlendiği boyutsal çalışmalar gerçekleştirilebilir. Sosyal medya bağımlılığını okul öncesi, ilkökul, lise ve üniversite öğrencilerini kapsayan projeler geliştirilebilir ve yaygınlaştırılmalıdır.

Ayrıca gençlere yönelik sosyal medya bağımlılığını destekleyen ve koruyucu önlemleri kapsayan bilinçlendirici çalışmalar önerilmektedir. Benzer şekilde bilinçli sosyal medya kullanımı hakkında öğretmenleri, ebeveynleri ve ergenlere yönelik eğitimler verilebilir.

Kaynakça

- Batıgün, A.D., Kılıç, N. (2011). İnternet bağımlılığı ile kişilik özellikleri, sosyal destek, psikolojik belirtiler ve bazı sosyo-demografik değişkenler arasındaki ilişkiler. *Türk Psikoloji Dergisi*, 26(67), 1-10.
- Boyd, D. (2010). Social network sites as networked publics: Affordances, dynamics, and implications. In: Zizi Papacharissi (Ed.), *Networked Self: Identity, Community, and Culture on Social Network Sites* (pp. 39-58). New York, NY: Routledge.
- Cheung, C.M.K., Chiu, P. & Lee M.K.O. (2011). Online social networks: Why do students use Facebook? *Computers in Human Behavior*, 27, 1337-43.
- Eker, D., Arkar, H. ve Yıldız, H. (2001). Çok boyutlu algılanan sosyal destek ölçeği'nin gözden geçirilmiş formunun faktör yapısı, geçerlik ve güvenirliği. *Türk Psikiyatri Dergisi*, 12(1), 17-25.
- Erkuş, A. (2011). Psikolojik ölçme ve ölçek geliştirme. *Basılmamış Ders Notları*.
- Glynn, C.J., Huge, M.E. & Hoffman, L.H. (2012). All the news that's fit to post: A profile of news use on social networking sites. *Computers in Human Behavior*, 28, 113-19.
- Griffiths, M.D., Kuss, D.J. ve Demetrovics, Z. (2014). Social networking addiction: An overview of preliminary findings. *Behavioral Addictions Criteria, Evidence, and Treatment*, 119-141.
- Harris, P., Nagy, S., & Vardaxis, N. (2014). Mosby's dictionary of medicine, nursing and health professions-Australian & New Zealand Edition. Elsevier Health Sciences.
- Hojat, M. (1982). Loneliness as a function of selected personality variables. *Journal of Clinical Psychology*, 38, 137-141.
- Karasu, F., Bayır, B. ve H. H. Çam (2017). Üniversite öğrencilerinin internet bağımlılığı ile sosyal destek arasındaki ilişkinin incelenmesi. *Sosyal Bilimler Dergisi*, 7(14), 374-378.
- Kuss, D. ve Griffiths, M. (2012). Internet gaming addiction: a systematic review of empirical research. *International Journal of Mental Health Addiction*, 10, 278-296.
- Miller, S. M. (2008). The effect of frequency and type of internet use on perceived social support and sense of well-being in individuals with spinal cord injury. *Rehabilitation Counseling Bulletin*, 51(3), 148-158.
- Şahin, C. ve Yağcı, M. (2017). Sosyal medya bağımlılığı ölçeği-yetişkin formu: Geçerlik ve güvenirlik çalışması. *Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi*, 18(1), 523-538.
- Şahin, C. (2018). Social media addiction scale - student form: The reliability and validity study. *The Turkish Online Journal of Educational Technology*, 17(1), 169-182.
- Türkiye İstatistik Kurumu (TÜİK) (2017). Hane Halkı Bilişim Teknolojileri Kullanımı Araştırması. <http://www.tuik.gov.tr>
- Turel, O. ve Serenko, A. (2012). The benefits and dangers of enjoyment with social networking websites. *European Journal of Information Systems*, 21, 512-528.
- Wegmann E. Stodt B. ve Brand M. (2015). Addictive use of social networking sites can be explained by the interaction of internet use expectancies, internet literacy, and psychopathological symptoms. *Journal of Behavioral Addictions*, 4(3), 155-162.
- Yang, S., and Tung, C. (2007). Comparison of Internet addicts and non-addicts in Taiwanese high schools. *Computers in Human Behavior*, 23, 79-96.
- Yeh, Y.C., Ko, H.C., Wu, J.Y.W. & Cheng, C.P. (2008). Gender differences in relationships of actual and virtual social support to internet addiction mediated through depressive symptoms among college students in Taiwan. *Cyberpsychology, Behavior and Social Networking*, 11, 485-87.

Üstün Zekâlı Öğrencilere Göre İdeal Öğretmen Kimdir?

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Özet

Toplumların geçmişten günümüze dek gelişimi incelendiğinde, toplumlara yön verip çağa damga vuranların ve geleceği şekillendirme noktasında umut vaat edenlerin genellikle liderlik, yaratıcılık, üretkenlik gibi niteliklere sahip üstün zekâlı bireyler olduğu görülmektedir. Üstün zekâlı bireyler, toplum içinde aktif azınlık adı verilen ülkelerin gelişmesi ve uygarlıkların ilerlemesinde kıymetli bir güç kaynağı teşkil eden özel bir gruptur. Bu bağlamda eğitim sistemi içerisinde üstün zekâlı bireylerin özel ve önemli bir yer tuttuğu ifade edilebilir. Üstün zekâlıların eğitimi bu bireylerin birbirinden farklı ve kendilerine özgü özellikleri dikkate alınarak esnek bir eğitim süreci şeklinde desenlenmelidir. Üstün zekâlı bireylerin sahip oldukları özelliklerine paralel, potansiyellerini destekleyen ve geliştirmeye aracılık eden bir eğitim almaları onlara sağlanan bir ayrıcalık değil onların haklarıdır. Bu süreçte ise öğretmenler kilit bir noktadadır. Çünkü öğretmenlerin üstün zekâlı öğrencilere yaklaşımları, sunacakları öğrenme ortamları, karma bir sınıfta üstün zekâlı olan ve olmayan öğrencilere bir arada gerçekleştireceği uygulamalar gibi pek çok faktör üstün zekâlı çocukların eğitimlerinin etkililiğini ve niteliğini etkileyecektir. Öğretmenler üstün zekâlı öğrencilerin eğitimi için bu denli önemli bir noktada olduğu için atılması gereken ilk adım üstün zekâlı öğrencilerin nasıl öğretmenler arzuladıklarının bilinmesidir. Buradan hareketle gerçekleştirilen bu araştırmada, üstün zekâlı öğrencilere göre ideal öğretmen prototipi araştırılmış ve bunun için üstün zekâlı öğrencilerden, velilerden ve öğretmenlerden görüş alınmıştır. Nitel araştırma yöntemi fenomenoloji deseni ile gerçekleştirilen araştırmaya 10 üstün zekâlı öğrenci, 7 veli ve 2 BİLSEM öğretmeni katılmıştır. Katılımcılarla gerçekleştirilen yarı yapılandırılmış görüşmeler içerik analizi ile çözümlenmiştir. Ulaşılan bulgular; üstün zekâlı çocuklar tarafından sıklıkla dile getirilen ideal öğretmen özelliğinin eğlenceli ders anlatımı olduğunu göstermiştir. Ayrıca üstün zekâlı öğrenciler; farklı zekâ tiplerine uygun öğretim yapan, genç, öğrencilerin fikirlerine önem veren, öğrencilerine rehberlik eden, üstün zekâlı çocukların akranlarından olgun olduğunu bilip bu şekilde davranan, projeler ile ders işleyen, öğrencilere bağırmayan ve bir başarısızlık durumunda sert tepkiler verip ‘bir de üstün zekâlı olacaksınız...’ şeklinde öğrencileri eleştirmeyen nitelikte öğretmenler istediklerini ifade etmişlerdir. Öğrencilerin velileri ise çocuklarının kendilerini sevip kendilerine ilgi gösteren öğretmenlerini sevdiklerini ifade ederek çocuklarının eğlenceli ders anlatan, deney ve projeler yaptıran, başarısı baskısı yapmayan öğretmenler arzu ettiklerini de belirtmişlerdir. Öğretmenlerle gerçekleştirilen görüşmelerden elde edilen bulgulara göre ise üstünlerin teorik ders anlatımından sıkıldıkları, uygulamaya yönelik etkinlikler gerçekleştirmek istedikleri bu nedenle de bu şekilde ve esprili ders anlatan öğretmenleri ideal öğretmen olarak algıladıkları ifade edilebilir. Bununla birlikte üstünler ilgi ve yeteneklerine göre desenlenmiş bir ders ortamı oluşturabilen öğretmenleri ideal olarak algılamaktadır. Görüşmelerden elde edilen tüm veriler göz önüne alındığında üstün zekâlı çocuklara göre ideal öğretmen prototipinin eğlenceli ders anlatma, öğrencilere rehberlik etme, başarı baskısı yapmama, pratiğe yönelik etkinlikler gerçekleştirme, öğrencilerini seven ve öğrencileri ile ilgilenen öğretmen şeklinde olduğu ortaya çıkarılmıştır. Buna göre üstün zekâlı öğrencilerin hem örgün eğitim kurumlarındaki öğretmenlerinin hem de BİLSEM öğretmenlerinin bu verilere göre yetiştirilmesi ve de hizmetiçi eğitimlerinde bu noktaların üzerinde durulması önerilebilir.

Validity And Reliability Study Of Exercise Imagery Inventory For Individuals Doing Exercise

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Abstract

Imagery, one of the widely-used applications in sports psychology, is used in sports and exercise environments. The aim of this study is to test the validity and reliability of the Turkish version of the Exercise Imagery Inventory, which was developed by Giacobbi et al. (2010) with the aim of measuring the level of imagery of individuals in exercise environments. For this purpose "Exercise Imaging Inventory" was applied to 407 individuals doing exercise (age $X: 22.12 \pm 2.52$). Exercise Imaging Inventory consists of 22 items in five subscales: Appearance-Health (8 items), Exercise Feelings (4 items), Exercise Technique (4 items), Exercise Routines (3 items) and Exercise Self-efficacy (3 items). Exercise Imagery Inventory is assessed using 7-point Likert-type questionnaire. In order to test the structural validity of the scale, principal components factor analysis (varimax rotation) was carried out. Five factor structures were determined in accordance with the original inventory with the results of principal component factor analysis, and the items explain 88.33% of the inventory. Reliability of the inventory was examined by Cronbach's alpha internal consistency coefficient. Internal consistency coefficients calculated for Exercise Imagery Inventory are 0.98 for Appearance-Health, 0.97 for Exercise Feelings, 0.96 for Exercise Technique, 0.73 for Exercise Routines and 0.95 for the Exercise Self-efficacy. According to the analysis results, it can be said that the Turkish version of the Exercise Imagery Inventory can be used to determine Exercise Imagery levels of individuals doing exercise.

Keywords: *Motivational Self Talk, Mental Toughness, friend support, Athlete*

Introduction

Mental toughness seems to be one of the most important psychological structures related with a good sports performance and mental imagery has importance in many fields of life like developing language skill, improving motivation, learning motor skills and increasing sportive performance (Feltz & Landers, 1983; Gammage, Hall, & Rodgers, 2000; Paivio, 1985; Rodgers, Hall, & Buckolz, 1991). Authors have recently proposed that mental imagery is also important for exercise behaviors (Gammage et al., 2000; Hall, 1995; Hausenblas, Hall, Rodgers, & Munroe, 1999). Hall (1995) has proposed that imagery could have a motivational and cognitive function similar with using an exercise tool.

Based on this opinion, training individuals have been found to use imagery due to basic internal causes including energy, appearance and technique (Gammage et al., 2000; Hausenblas et al., 1999; Hausenblas & Symons, 2002). Energy imagery is defined as mental images related with elevated energy and feelings of coping with stress. Appearance imagery is related with a thinner, fit and healthy appearance. Finally, technique imagery is related with straight posture and form of the body.

While energy and appearance imagery are related with motivation, technique imagery has a cognitive function. Hall (1995) has proposed that imagery could influence participation in exercise through the expectations about self-competence and its outcomes. Namely, use of imagery of individuals who do exercise enable them to image as if they have reached their target (for example, a better appearance, a better technique) and this increases the likelihood of maintaining exercise due to its effects on self-efficacy. Self-efficacy-related cognitions and also beliefs about this have been found to increase as exercise imagery increases (Hausenblas et al. 1999; Rodgers & Gauvin, 1998; Rodgers, Hall, Blanchard, & Munroe, 2001).

Researchers have reported that individuals who do sports more use more energy, appearance and technique imagery compared to individuals who do sports less (Gammage et al. 2000; Hausenblas et al. 1999). Consequently, exercise imagery has been found to be positively related with exercise dependence symptoms, consistently with the suggestions of Hall (1995) (Hausenblas & Symons Downs, 2002; Rodgers et al. 2001). Further studies are required for detecting whether the interventions which aim at changing imagery patterns are effective on risky individuals for exercise dependence and for evaluating the frequency and nature of imagery use. No studies have been encountered in literature investigating exercise imagery in Turkish population. In brief, exercise imagery is positively related with exercise motivation, self-efficacy, exercise dependence symptoms and exercise frequency. Based on these preliminary findings, a strong justification is present for performing a constant exercise imagery study. Because this may help our opinion about achieving and maintaining physical activity behavior. In addition, exercise imagery may be used as an interventinal tool for improving exercise behavior through increasing

motivation and self-efficacy for regular physical activity. This is important given that 40% of adults in USA do not do exercise in their spare time (USDHHS, 2000) and 50% of these sedentary adults abort exercise program until 6 months (Dishman, 2001).

Our knowledge about exercise imagery may not be sufficient to explain the reasons for how individuals use exercise imagery, content of imagery and the purpose for using imagery. Under the light of these data, the aim of the present study is to adapt Exercise Imagery Inventory to Turkish culture.

Method

Reliability and validity of Exercise Imagery Inventory were tested on a total of 407 (Xage: 22.12 ± 2.52) participants (247 females with Xage: 22.72 ± 3.10 and 160 males with Xage: 21.72 ± 1.97) who were doing exercise as groups or individually at the universities and private training centers during 2014-2015. Mean duration of exercise was $71,42 \pm 48,71$ months for the participants who do different exercises (fitness, step-aerobic, pilates, zumba etc.).

<i>Gender</i>	<i>N</i>	<i>%</i>
<i>Female</i>	<i>247</i>	<i>60,7</i>
<i>Male</i>	<i>160</i>	<i>39,3</i>
<i>Total</i>	<i>407</i>	<i>100,0</i>

<i>Exercise type</i>	<i>N</i>	<i>%</i>
<i>Team</i>	<i>231</i>	<i>56,8</i>
<i>Individual</i>	<i>176</i>	<i>43,2</i>
<i>Total</i>	<i>407</i>	<i>100,0</i>

Data collection tools

Personal data form

The form was created by the researchers for collecting data about demographic characteristics of the participants like gender, age, exercise type.

Exercise Imagery Scale

Exercise Imaging Inventory was developed by Giacobbi et al. (2010) with the aim of measuring the level of imagery of individuals in exercise environments. Exercise Imagery Inventory is assessed using 7-point Likert-type questionnaire, it consists of 22 items in five subscales.

Translation and data collection

Standard translate-retranslate method which was recommended by Brislin (1986) was used for translation. The scale was translated to Turkish from English first and from Turkish to English thereafter. English scale was translated to Turkish by one specialist in English and two specialists in sports field. The items were compared with each other and the items which had the same translation were detected. The items with the same and different translation were translated to English again by the same specialists. Re-translated items were compared with original items, differences and errors were detected. The English translation was compared –with the original scale and the closest translations formed the final version of the scale. The scale was applied with face-to-face interviews by the researcher and took about five minutes.

Data analysis

In order to test the structural validity of the scale, principal components factor analysis (varimax rotation) was carried out. Reliability of the inventory was examined by Cronbach's alpha internal consistency coefficient. Analyses were done with SPSS 22.0 package program.

Results

Validity of Exercise Imagery Scale

Principal components factor analysis (varimax rotation) was carried out to test structural validity. In principal components analysis, KMO test was used to test whether partial correlations are small, distribution is sufficient for factor analysis and found as 0.88 for all participants. Barlett test was used to test whether factor analysis is proper for variables and found as 12429.817 ($p < 0.05$) for all participants.

Factor loads, variances and self-values of subscales obtained with principal components factor analysis varimax rotation performed for detecting factor structure of exercise imagery scale are presented Table 1.

Table 1: Factor analysis results of Exercise Imagery Scale

Subscales	Items	Factor loads	Self-efficacyr	% Variance	% Cumulative
Factor 1 Exercise health	h2	,94	9,241	42,003	42,003
	h4	,94			
	h1	,93			
	h3	,93			
	h8	,92			
	h6	,92			
	h7	,92			
	h5	,86			
Factor 2 Exercise feeling	f3	,91	4,616	20,983	62,986
	f2	,90			
	f1	,89			
	f4	,89			
Factor 3 Exercise technique	t1	,88	2,811	12,779	75,765
	t3	,88			
	t4	,88			
	t2	,87			
Factor 4 Exercise routines	r2	,94	1,680	7,638	83,403
	r1	,93			
	r3	,91			
Factor 5 Exercise self-efficacy	s3	,79	1,085	4,931	88,335
	s2	,79			
	s1	,78			

Five factor structures were determined as the result of factor analysis. Structure of five factors determined as the result of principle component factor analysis explains 88.35% of “Exercise Imagery Scale”. Factor loads vary between 0.78-0.94. Eight items under factor 1 constitutes exercise health, 4 items under factor 2 constitute exercise feeling, 4 items under factor 3 constitutes exercise technique, 3 items under factor 4 constitute exercise routines and 3 items under factor 5 constitute self-efficacy subscales.

Reliability of Exercise Imagery Scale

Cronbach alpha value was tested for determination of reliability of “Exercise Imagery Scale” which is a Likert type scale. Item prediction power of the items in subscales of the scale, Cronbach alpha reliability coefficient of the subscale when item is deleted and multiple correlation values for all participants are presented in the table below.

Table 2: Analysis of each item related with exercise health subscale of Exercise Imagery Scale

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Total if Item Deleted	Item-Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
h1	32,85	186,893	,938	,912	,980
h2	32,71	186,527	,948	,929	,979
h3	32,81	186,610	,941	,908	,979
h4	32,77	185,609	,951	,911	,979
h5	33,14	192,086	,833	,706	,985
h6	32,96	186,991	,933	,892	,980
h7	32,95	187,554	,930	,908	,980
h8	32,91	187,193	,941	,908	,979

Cronbach's Alpha= 0,983

Cronbach alpha internal consistency coefficient of exercise health subscale was found as 0.98. When Cronbach alpha coefficient obtained when each item is deleted is evaluated, reliability coefficient is seen to decrease. Total correlation coefficient of subscales in exercise health subscale were found between 0.83 (item h5) and 0.95(item h2).

Table 3: Analysis of each item related with exercise technique subscale of Exercise Imagery Scale

	Scale Mean Item Deleted	ifScale Variance Item Deleted	ifCorrected Total Correlation	Item-Squared Correlation	MultipleCronbach's Alpha if Item Deleted
t1	13,52	32,196	,920	,850	,957
t2	13,40	32,452	,918	,850	,957
t3	13,43	32,753	,921	,853	,957
t4	13,54	31,673	,917	,847	,958

Cronbach's Alpha= 0,968

Cronbach alpha internal consistency coefficient of exercise technique subscale was found as 0.97. When Cronbach alpha coefficient obtained when each item is deleted is evaluated, reliability coefficient is seen to decrease. Total correlation coefficient of subscales in exercise technique subscale were found between 0.91 (item t4) and 0.92 (item t3).

Table 4: Analysis of each item related with exercise feeling subscale of Exercise Imagery Scale

	Scale Mean Item Deleted	ifScale Variance Item Deleted	ifCorrected Total Correlation	Item-Squared Correlation	MultipleCronbach's Alpha if Item Deleted
f1	13,85	34,826	,910	,839	,954
f2	14,00	34,660	,929	,868	,949
f3	13,95	34,458	,930	,865	,948
f4	14,06	35,652	,880	,779	,963

Cronbach's Alpha= ,965

Cronbach alpha internal consistency coefficient of exercise feeling subscale was found as 0.97. When Cronbach alpha coefficient obtained when each item is deleted is evaluated, reliability coefficient is seen to decrease. Total correlation coefficient of subscales in exercise feeling subscale were found between 0.88 (item f4) and 0.93 (item f3).

Table 5: Analysis of each item related with exercise self-efficacy subscale of Exercise Imagery Scale

	Scale Mean Item Deleted	ifScale Variance Item Deleted	ifCorrected Total Correlation	Item-Squared Correlation	MultipleCronbach's Alpha if Item Deleted
ö1	9,75	29,390	,676	,745	,583
ö2	9,49	28,551	,722	,760	,543
ö3	9,33	15,493	,508	,267	,926

Cronbach's Alpha= 0,727

Cronbach alpha internal consistency coefficient of exercise feeling subscale was found as 0.73. When Cronbach alpha coefficient obtained when se3 item is deleted is evaluated, reliability coefficient is seen to increase and it is seen to decrease when other items are deleted. Total correlation coefficient of subscales in exercise feeling subscale were found between 0.51 (item se4) and 0.72 (item se3).

Table 6: Analysis of each item related with exercise routines subscale of Exercise Imagery Scale

	Scale Mean Item Deleted	ifScale Variance Item Deleted	ifCorrected Total Correlation	Item-Squared Correlation	MultipleCronbach's Alpha if Item Deleted
r1	9,08	15,289	,882	,794	,927
r2	9,03	14,938	,916	,841	,900
r3	8,92	15,259	,866	,759	,939

Cronbach's Alpha=0,947

Cronbach alpha internal consistency coefficient of exercise feeling subscale was found as 0.97. When Cronbach alpha coefficient obtained when se3 item is deleted is evaluated, reliability coefficient is seen to decrease. Total correlation coefficient of subscales in exercise feeling subscale were found between 0.87 (item r3) and 0.92 (item r2).

Conclusions

This research was conducted with the aim of presenting some empirical evidence about reliability and validity of Exercise Imagery Scale which was developed by Giacobbi et al. Internal consistency reliability coefficients were between 0.69 and 0.83 for subscales of Exercise Imagery Scale, test-retest reliability coefficients were found

between 0.73 and 0.98. Internal consistency reliability coefficients obtained for each of five subscales are between 0.80 and 1.00 which is stated as quite reliable by Alpar (2001). Internal consistency reliability coefficients of Exercise Imagery Scale which is composed of 22 items and 5 factors were found between 0.65 and 0.80 in the study of Giacobbi et al. (2010). As stated by DeVellis (2016), internal consistency coefficient's being between 0.65 and .80 indicates sufficient values.

Turkish form of Exercise Imagery Scale of which final version was formed under the light of translate-retranslate method and expert opinions was applied to exercise participants. Basic components analysis was done for testing structural validity of the scale. Five factor structures were detected for Exercise Imagery Scale. Structure of five factors determined as the result of basic component factor analysis explains 88.35% of "Exercise Imagery Scale". Factor loads vary between 0.78-0.94. Eight items under factor 1 constitutes exercise health, 4 items under factor 2 constitute exercise feeling, 4 items under factor 3 constitutes exercise technique, 3 items under factor 4 constitute exercise routines and 3 items under factor 5 constitute self-efficacy subscales. Alpar (2001) states that .45 and above factor load is acceptable. Erefe (2002) and Özgüven (1999) report that item factor load up to .30 is acceptable. So the values obtained in this study may be stated to be consistent with criteria.

In conclusion, it may be stated that Exercise Imagery Scale could be used reliably and valid for measuring exercise imagery levels of the participants under the light of the results obtained from reliability and validity study of Turkish form of the scale. The results of the present study should be evaluated considering some limitations. For example, structural validity and internal consistency coefficients of only validity and reliability were analyzed. Additional researches are required for obtaining more detailed information about psychometric features of the scale. Testing the scale in different groups is also required. It is suggested that performing criteria validity of the scale, analyzing the relationship between different concepts and making factor analysis separately for males and females in future studies would contribute to reliability and validity of the scale. The relationships between the above mentioned variables could be understood better in future longitudinal and/or cross-sectional studies.

References

- Alpar R. (2001). Spor Bilimlerinde Uygulamalı İstatistik. Nobel Yayın Dağıtım, Ankara.
- Brislin, R.W. The wording and translation of re- search instruments. In: Lonner WJ, Berry JW, eds. *Field Methods in Educational Research*. 1st ed. Newbury Park, CA: Sage Publications; 1986. p.137-64.
- DeVellis, R. F. (2016). *Scale development: Theory and applications* (Vol. 26). Sage publications.
- Erefe İ. (2002). *Veri toplama araçlarının niteliği*. İ Erefe (ed), *Hemşirelikte Araştırma*, İstanbul: Odak Ofset, s.169-188.
- Felz, D. L., & Landers, D. M. (1983). The effects of mental practice on motor skill learning and performance: A meta-analysis. *Journal of Sport Psychology*, 5, 25–57.
- Gammage, K. L., Hall, C. R., & Rodgers, W. M. (2000). More about exercise imagery. *The Sport Psychologist*, 14, 348–359.
- Giacobbi Jr, P. R., Tuccitto, D. E., Buman, M. P., & Munroe-Chandler, K. (2010). A measurement and conceptual investigation of exercise imagery establishing construct validity. *Research quarterly for exercise and sport*, 81(4), 485-493.
- Giacobbi Jr, P., Hausenblas, H., Fallon, E., & Hall, C. (2003). Even more about exercise imagery: A grounded theory of exercise imagery. *Journal of Applied Sport Psychology*, 15(2), 160-175.
- Hall, C. R. (1995). The motivational function of mental imagery for participation in sport and exercise. In J. Annett, B. Cripps, & H. Steinberg (Eds.), *Exercise addiction: Motivation for participation in sport and exercise* (pp. 15–21). Leicester, UK: British Psychological Society.
- Hausenblas, H. A., & Downs, D. S. (2002). How much is too much? The development and validation of the exercise dependence scale. *Psychology and health*, 17(4), 387-404.
- Hausenblas, H. A., Hall, C. R., Rodgers, W. M., & Munroe, K. J. (1999). Exercise imagery: Its nature and measurement. *Journal of Applied Sport Psychology*, 11, 171–180.
- Özgüven İ.E. (1999). *Psikolojik Testler*. Üçüncü baskı, Ankara: PDREM Yayınları, s.35-48.
- Paivio, A. (1985). Cognitive and motivational functions of imagery in human performance. *Canadian Journal of Applied Sport Sciences*, 10, 22s–28s.
- Rodgers, W. M., & Gauvin, L. (1998). Heterogeneity of incentives for physical activity and self-efficacy in high active and moderately active women exercisers. *Journal of Applied Social Psychology*, 28, 1016–1029.
- Rodgers, W. M., Hall, C. R., Blanchard, C. M., & Munroe, K. J. (2001). Prediction of obligatory exercise by exercise-related imagery. *Psychology of Addictive Behaviors*, 15, 152–154.
- Rodgers, W., Hall, C., & Buckolz, E. (1991). The effect of an imagery training program on imagery ability, imagery use, and figure skating performance. *Journal of Applied Sport Psychology*, 3, 109– 125.
- U.S. Department of Health and Human Services (2000). *Physical activities and health: A report of the surgeon general*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.

Views of the Elementary School Teacher Candidates About the Visual Arts Instruction Course

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Abstract

In our country, visual arts instruction which has an important role of contributing to one's artistic development and awareness, is in the curriculum as from elementary school. Visual arts instruction is given by the classroom teachers in elementary schools, therefore classroom teachers have to be knowledgeable and experienced in it. For this reason, "Visual Arts Instruction" course takes place as a compulsory course in the departments of elementary education bachelor's degree programmes. Through this course, it is aimed that classroom teacher candidates acquire certain knowledge and skills on the visual arts instruction. Hence, it is important to determine the opinions of the classroom teacher candidates about this course. In this study, it is aimed to determine the views and thoughts of the classroom teacher candidates about the visual arts instruction course. Case study design which is a qualitative research is used as the method of this research. The 3rd and 4th year students in Elementary Education Programme of the Primary Education Department of a public university are the study group of this research.

The research sample includes 8 teacher candidates which divides as 6 female and 2 male students. The research data was collected with an interview form which was developed by the researchers. The interview form which contains 3 questions, was lastly formed according to the views of 2 field specialists and 2 classroom teachers. The acquired data was analyzed with content analysis. The concept codes were determined through analysis and the themes were created by pairing up the related codes. As a result of analyzing the themes and codes, the views and expectations of the teacher candidates about the content of the visual arts instruction course were put forward and the conclusions and suggestions were presented.

KeyWords: *Classroom teacher candidates, visual arts instruction course, qualitative research, content analysis.*

Virtual Laboratories Concepts And Tools

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Abstract

While some fields of knowledge do not in fact require practical learning or scientific research in the laboratory, this is unfortunately not the case for a very large number of disciplines, most of which are science and applied sciences. The questions that arise are how to recreate, in a virtual campus context, a generic laboratory concept for carrying out the research and practical learning inherent in different scientific or technological disciplines, taking into account certain barriers such as impossibility of direct physical manipulation and limitations of the possibilities of sensory observation (sight and touch especially, but also hearing), among others. How to exploit the infrastructure of broadband networks to facilitate access, presentation and exchange of information between researchers in a scientific field and between learners engaged in this particular type of distance learning activity?

Visualising Sprego Inequality Problems With 2d Representations

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Abstract

In K-12 ICT education it is a common practice to solve spreadsheet problems by browsing various problem specific functions. This approach leads students to utilize methods that only require slow thinking on a low abstraction level, and therefore does not lead to long-lasting knowledge and reliable decisions. The Sprego (Spreadsheet Lego) methodology focuses on solving real world problems by building up step-by-step algorithms. This allows and encourages students to deconstruct problems into smaller subtasks using high mathability approaches and solutions. The coding process is based on the functional language of spreadsheets with a reasonably small function-base, strictly restricted to general purpose spreadsheet functions. Beyond that Sprego emphasizes the connection between this approach and common programming principles. Previous research has proved that this methodology not only develops the students' algorithmic and computational thinking skills, but does so in a more effective way than working with the built-in, problem specific functions in distinct spreadsheet management interfaces.

To support the learning processes with Sprego, various unplugged and semi-unplugged tools have been developed and introduced in education. In our previous work we presented our 2D HTML5 application designed to provide visual representations for the most common Sprego implemented spreadsheet problems and their composite formulas: conditional counting and linear search. We designed the software to include game-like experiences with visually engaging presentations based on real-world examples that stimulate multiple sensory organs. We introduced our application to students and teachers alike and both groups found it helpful and supportive in teaching with the Sprego methodology.

In our current work we made several adjustments and amendments to our software, based on feedback received. We also introduced a visual representation of the generalization of the conditional counting problem, applying composite array formulas. The generalization is presented in a new example-problem, which is based on inequality borrowed from a real-world situation which pupils are familiar with, namely the various restrictions (weight, height, age, etc.) in place in amusement parks. Using Sprego to solve this inequity problem is based on the algorithm of conditional equality problems. The extension of the Sprego 2D application is in accordance with our practice of including real-world spreadsheet problems in our teaching methods. Beyond this, it further supports schema-construction, applying the algorithm introduced in the first version of the application. This approach facilitates learning with Sprego, and spreadsheets in general, and prepares students for further studies in traditional programming and database environments.

Introduction

Our Sprego project focuses on developing the algorithmic, computational thinking, and high-mathability computer problem solving skills of elementary and high school students. Generally, these skills only emerge in the context of programming education (Soloway, 1993; NAT, 2012; Kerettanerv, 2013); however, we have found that treating these problems as birotical software-related problems serves our purposes and covers a large chunk of the curriculum (NAT, 2012; Kerettanerv, 2013). Beyond its educational goals, using birotical applications is part of our everyday life and work; these are programmes which cannot be avoided.

Recognizing the necessity of birotical applications, software companies promote their products as user-friendly, with interfaces and tools including wizards and various help tools. Applying this approach results mainly in unplanned sequences of commands carried out by untraceable series of mouse activities, which only require slow thinking on a low abstraction level (Panko, 2013). Consequently, most birotical documents are error-filled, which wastefully uses up both human and computer resources (Ben-Ari, 1999; Panko & Port, 2013; Panko, 2015; EuSpRIG, 2018).

In addition to the software companies' user-friendly slogans, the frame curricula for Informatics in Hungary – in both primary and secondary education (NAT, 2012; Kerettanerv, 2013) – mainly focuses on the tools used, while the textbooks mainly cover non-practice-based topics (Anderson, 2017; Csernoch, 2017). This approach covers

only one level of the three knowledge levels defined in the IEEE&ACM report (2013).

- familiarity: “The student understands what a concept is or what it means. This level of mastery concerns a basic awareness of a concept as opposed to expecting real facility with its application. It provides an answer to the question ‘What do you know about this?’.”
- usage: “The student is able to use or apply a concept in a concrete way. Using a concept may include, for example, appropriately using a specific concept in a program, using a particular proof technique, or performing a particular analysis. It provides an answer to the question ‘What do you know how to do?’.”
- assessment: The student is able to consider a concept from multiple viewpoints and/or justify the selection of a particular approach to solve a problem. This level of mastery implies more than using a concept; it involves the ability to select an appropriate approach from understood alternatives. It provides an answer to the question ‘Why would you do that?’.”

The definition of the three levels of knowledge is in complete accordance with the well-known concept-based problem-solving method developed by Pólya (1954). The only difference is that while Pólya envisaged four steps, emphasizing the importance of planning – the second step –, this report, which deals with computer related levels, merges the understanding and the planning steps (Csernoch & Biró, 2015a).

In general, the user-friendly classical methods ignore the first level of mastery – familiarity –, and also make the third level – assessment – inaccessible (IEEE&ACM, 2013). We concluded that both the user-friendly approaches and most of the textbooks are restricted only to the second level – usage (Csernoch, 2017). These low-mathability approaches in spreadsheets recommend browsing around and using numerous problem-specific functions (Csernoch & Biró, 2018), whose number in MS Excel was close to 600 at the time the present paper was written (Microsoft, 2018a). Furthermore, in the Hungarian spreadsheet textbooks we analyzed almost 200 problem specific functions were mentioned (Csernoch et al., 2014). It is unreasonable to expect students to memorize all the names of the functions, their lists of arguments, and (sometimes non-conventional) syntactic rules (Csernoch, 2014). It was for these reasons that it was found necessary to introduce a novel teaching approach – Sprego: Spreadsheet Lego – for end-user spreadsheet management (Csernoch, 2014). As with all novel methods (Anderson, 2017), we found that there are teachers who, despite being aware of more effective methodologies than the ones they use in practice, prefer to stick to their “good old” approaches. This attitude to novel approaches can, on the one hand, be explained by the sunk-cost fallacy (Kahneman, 2011), and on the other hand, by teachers’ belief in the fixed nature of the sciences (Chen et al., 2015).

Sprego

Our research team focuses on the development of the algorithmic and computational thinking skills used in birotical interfaces. This novel approach uses methodologies that support the learning processes by focusing on high mathability (Pólya, 1954; Baranyi & Gilanyi, 2013; Biró & Csernoch, 2015a, 2015b) concept-based problem-solving methods. Among these methods Sprego (Csernoch, 2014) is developed to teach end-user spreadsheet management and functional programming (Wakeling, 2007; Sestoft, 2011). In Sprego, instead of using a high number of problem specific functions, the focus is on a low number of general purpose functions, and algorithm and schema construction (Skemp, 1971; Merriënboer & Sweller, 2005; Csernoch et al., 2014, 2015). One further priority of Sprego is the application of authentic content, which plays a crucial role in motivating students and in applying the four levels of concept-based problem-solving (Pólya, 1954) and the three levels of knowledge (IEEE&ACM, 2013) in real-world problem-solving environments (Csernoch, 2009; Csernoch & Biró, 2015a, 2015b, 2015c; Csapó, 2017a; Csernoch & Dani, 2017). Using concept-based problem-solving approaches to build algorithms, and composite and array formulas to code the algorithms is intended to develop the students’ algorithmic and computational thinking skills (Wing, 2006). The method was designed (based on the general functions and programming concepts it uses) so as to be able to work in all well-known spreadsheet management environments, and therefore it is software and version independent.

Because the primary goals of Sprego are to develop fundamental skills, to aid the construction of algorithms, and to make the understanding and problem-solving processes more effective, we use unplugged and semi-unplugged tools (Bell & Newton, 2013; Biró & Csernoch, 2017a, 2017b). Within this framework, we developed a 2D graphical educational software for the Sprego methodology to provide visual context and graphical tools for the Sprego problems. Our application was published in 2017 and dealt with two problems: (1) conditional counting and (2) linear search (Csapó & Sebestyén, 2017).

Motivation

We have found that one of the major problems with user-friendly teaching approaches is that they focus on interfaces and tools, instead of the problems themselves. These surface-approach methods, beyond the excellently communicated and marketed “user-friendly” slogans, is well-represented by the decontextualized material used in help tools and coursebooks (Angeli, 2013; Csernoch, 2017). In general, we can conclude that in the user-friendly “usage-focused” methodologies tools receive most attention, and the primary objective is to use these tools;

consequently, they belong to the category of low-mathability computer problem-solving approaches (Baranyi & Gilanyi, 2013; Panko, 2013; Biró & Csernoch, 2015a, 2015b). As a result, the knowledge gained in such environments – if knowledge is developed at all – cannot be transferred to other problems or other interfaces. If the interface or/and the topic changes, or students have to apply their knowledge to solve a problem in a real-world setting, they are not able to do so (Csapó, 2003). Consequently, students cannot use these unconnected pieces of information (knowledge fragments) in other school subjects, nor outside of school.

With our high-mathability approach, we focus on real-world problems whose contents are interesting and motivating. Beyond developing the fundamental skills, our further goal is to create long lasting and transferable knowledge which students can use in various settings. This explains why we focus on building schemata which can be called upon by the use of fast thinking (Kahneman, 2011). To build up schemata, beyond the application of the minimalized number of Sprego functions, our method is to present a great number of similar problems in different authentic and motivating contexts, and make students recall the suitable algorithm(s) and apply and/or modify them to the actual problem (Skemp, 1971).

Completed Problems

Prior to our current work, our 2D graphical representation application contained two spreadsheet problems (Csapó & Sebestyén, 2017). Because Sprego makes intensive use of multilevel functions and the Russian matryoshka dolls as our unplugged tools in order to demonstrate the connection between the domains and ranges of the functions, the avatars in our application are digital matryoshka dolls.

The first problem is based on conditional counting with a three-level array formula, and the second is a linear search problem with a two-level composite formula.

The structure of the Sprego application is the following:

- By launching the application, the problems are listed in the main menu. On this page the users can select the problem they would like to deal with.
- After selecting the problem, the users must decide on the initial settings of the problem. These selections provide the input data for the variables set up in the application. For example, on this opening page we can select the color of our avatar.
- Furthermore, the software includes options to select the language of the interface and the formulas (currently English and Hungarian languages are supported), and a button is provided to turn on/off the sound effects.
- To start the animation of the selected problem we must click on the Start button. After that, the presentation page appears on the screen and the animation starts automatically.

The presentation page is divided into two panels:

- The left panel contains the real-world setting and the animation which plays the representation based on this real-world situation.
- The right side of the screen is reserved for the formula-evaluator, which is similar to those that can be found in spreadsheet interfaces (Csernoch, 2014). Using the formula-evaluator the students can follow the steps of the evaluation process in parallel with the animation.

Conditional counting: the equality problem

One of the tasks presented in our previous paper (Csapó & Sebestyén, 2017) is a conditional counting problem, where the program counts the number of dolls which match the condition (the selected color). The question for the problem is that “*How many dolls have the selected color?*”.

The steps of the algorithm are the following. (Note that the steps described here are based on our previous publication and are modified in our current work which includes the revised version of the presentation based on the feedback our team received.)

The users select a color on the opening page and the program switches to the animation page. On the animation page both the play (left) and the evaluation (right) panel start automatically. In the play panel the dolls are dancing around a campfire, while the evaluation panel follows the play (Figure 1).

1. At the top of the animation area there is a check-point (marked with a pile of rocks), where the program tests the color of the passing dolls by asking yes/no questions. The question for each doll is whether the color of the passing doll is the same as the color of the doll selected in the menu. The results of the tests can be either True or False logical values, which are displayed in the evaluation panel. In the play panel, if the doll's color does not match the selected color, the dancing doll is faded. In the other case, when the two colors match, the doll keeps her original opacity.
2. In the second round, the role of the check-point changes: here the True answers must be marked. Since we display two panels on the screen, we use two markers in parallel. In the play panel the True dolls are moved into an inner circle (Figure 1), while in the evaluation panel they are marked with 1s, as occurs in the formula.

3. The final step is the counting itself. The program counts the number of dolls in the smaller circle by adding the 1s of the vector consisting of 1s and Falses, displayed in the evaluation panel.



Figure 1: A campfire setting with our avatar dolls in the play panel (left side) and with the evaluation panel (right side). In the scene presented here a conditional counting problem with checking equality was solved.

The modification of the equality problem

In the first version of the 2D Sprego educational application, the first two steps were merged. The program automatically changed the dolls' markers to 1s before the True logical values were displayed. However, during the testing period we found that separating the two steps makes the students understand the algorithm more effectively, the solution more general, and more easily transferable to other problems and interfaces.

Linear search

The second problem completed in the first version of the 2D Sprego application was linear search.

A street scene is set up, where the postwoman must deliver a letter to the selected doll living in the corresponding house, so she has to know in which house the doll lives. The exact question is "In which house does the doll live?".

The algorithm involves the following steps:

As in the conditional counting problem, the users must select a doll from nine different colors offered in the menu. The arrangement of the animation page is the same as in the case of the conditional counting problem: the left side contains the play panel, while the right side shows the evaluation panel. However, the set-up is different. The problem is placed in a street scene: nine houses with nine dolls are displayed and a postwoman stands at the beginning of the street.

1. The postwoman goes from doll to doll and checks their color. Every checked doll gets an index starting at 1, then 2, etc., which is their record number, shared by the doll and the house. These numbers are displayed on the evaluation panel (Figure 2).
2. When the postwoman finds the selected doll, both she and the animation stop for a moment to emphasize the separation of the steps. In the following step, the selected doll, based on its record number, is matched with the corresponding house in the vector of the houses, and the letter is delivered.



Figure 2: A street setting with our avatar dolls and their houses in the animation panel (left side) and with the evaluation panel (right side). In the scene presented here a linear search problem was solved.

The modification of the linear search problem

Compared to the first version of the linear search problem representation we included several modifications to help students better understand and separate the distinct steps of the algorithm. Adjustments were made in the timing of the steps, and supportive new graphical elements and animations were added to the formula-evaluator.

Novel Features: A Conditional Inequality Problem

Background

In the first version of our 2D representational program a conditional counting problem was presented, as discussed in the “*Conditional counting: the equality problem*” subsection (Csapó & Sebestyén, 2017), where the equality of values was checked. In traditional user-friendly approaches, using and/or browsing built-in spreadsheet functions, handling equality, inequality, and inequality with constants and variables require different and non-conventional syntax (Csernoch, 2014):

- =COUNTIF(A1:A4,10), equality with constant (Microsoft, 2018b),
- =COUNTIF(A1:A4,D1), equality with variable (Microsoft, 2018b),
- =COUNTIF(A1:A4,"<3"), inequality with constant (Microsoft, 2018b),
- =COUNTIF(A1:A4,"<"&D1), inequality with variable (Microsoft, 2018b).

Similar conditional built-in functions make things even more complicated when the order of the arguments varies according to the number of conditions (one condition or more, *IF() or *IFS() functions, respectively) (Figure 3):

- COUNTIF(range, criteria) (Microsoft, 2018b),
- COUNTIFS(criteria_range1, criteria1,...) (Microsoft, 2018c),
- SUMIF(range, criteria, [sum_range]) (Microsoft, 2018d),
- SUMIFS(sum_range, criteria_range1, criteria1) (Microsoft, 2018e),
- AVERAGEIF(range, criteria, [average_range],...) (Microsoft, 2018f),
- AVERAGEIFS(average_range, criteria_range1, criteria1,...) (Microsoft, 2018g).

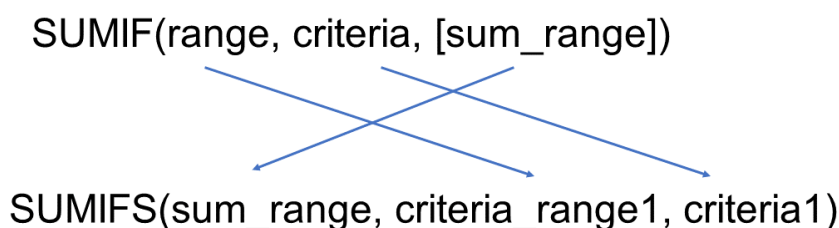


Figure 3: The changes in the order of arguments in the SUMIF() and SUMIFS() built-in functions (Csernoch, 2014).

To avoid this discrepancy, Sprego would serve our interest. With Sprego, the same algorithm and the same syntax are used regardless of the logical operator and whether it is a constant and/or variable which contains the values we wish to compare (Csernoch, 2014; Csernoch & Biró, 2015a, Csernoch, 2017). With the generalized and conventional form of handling yes/no questions we can provide sufficient background to build schemata and recall them.

Design

To represent the algorithm of an inequality problem, and following from the logic and contexts of the previous presentations, we selected a real-world problem, familiar to students. Our choice fell upon an amusement park, where there are attractions which can only be used if certain conditions in terms of weight, height, or age limits are met. We created an amusement park design with a roller coaster in the background and a Ferris wheel with 8 cabins. In addition, we modified our avatar dolls to match the requirements of the real-world set-up. For the selection of dolls based on height and weight we created dolls of different shapes and heights as the avatars of the amusement park (Figure 4).

Furthermore, we wanted to introduce variables and inequality logical operators, so in the menu the users must select the desired height value and the operator associated with it. The selected height limit is stored in a variable and presented both on the play and evaluation panels of the animation page.

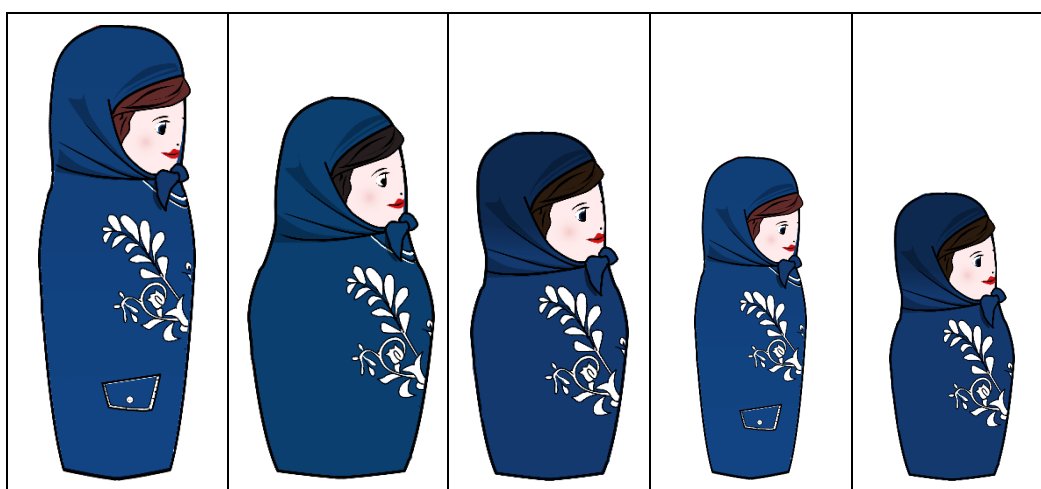


Figure 4: The modified blue dolls of different heights and shapes.

How many dolls are shorter/higher than the selected limit?

The new problem we included is based on the following question: “How many dolls can sit on the Ferris wheel?” (Figure 5). This new problem is based on the inequality of a chosen height-limit-value stored in a variable and the height-value of each doll avatar.

The steps are the following:

1. Similarly to the equality problem, the first step of the algorithm is to ask yes/no questions – for example: «*dolls' height > selected height limit?*». The outputs of the yes/no questions are True or False values for each item in the vector. The True and False values are displayed on the evaluation panel, while in the play panel the False dolls lose their original opacity and become dimmed in the queue.
2. In the following step a marker must be selected. Here, the IF() function is called. The True dolls receive 1s and can sit on the Ferris wheel, while the False dolls must leave the scene with their False values.
3. In the last step of the algorithm, we sum up the 1s and Falses stored in the output vector of the IF() function, which means that we sum up the 1s and ignore the Falses. With this final step we can answer the question of how many dolls can sit on the Ferris wheel.



Figure 5: An amusement park setting where a conditional counting problem with inequality and a variable was solved. In the scene presented here the play panel is on the left side, while the evaluation panel is on the right side. In the screenshot the IF() function marks the True values with 1, while the False values are left to the default forms.

We can apply the same algorithm if we want to set up any other restriction in the different attractions of the amusement park. In this case, the measuring tool has to be changed to a different type of scale. This option offers the possibility of expanding our application with further representations on novel inequality problems in the future.

Development

The development process of our new problem presentation started with a revision of the existing conditional counting problem. Since the algorithm behind the two problems is identical, it was logical to first establish a frame for these algorithm representations on which our novel problem can be built. Deriving from the first version, the software was developed using the Construct 2 event-action based visual programming engine (Scirra, 2018a), and as such this process also serves as an example of how educational applications can be developed using visual programming IDEs (Integrated Development Environments).

The implementation of the inequality problem brought with it the need to refactor several aspects of the previous code in order to keep the existing functionality running uninterruptedly while also expanding the possibilities of the codebase. This step mainly affected the design and code behind the evaluation panel. During the development of the animation of the amusement park setting we kept in mind the need to design the code in such a way that it allows rapid modifications at several stages of the presentation in case the need arises after feedback has been received from students and teachers.

Developing with Construct 2 comes with several advantages, including the rapid implementation process and the ease of constructing 2D environments using the built-in tools. However, developers working with this IDE have to take its limitations into account. Given the design of the underlying engine, we had to resort to some workarounds while implementing specific features. Because Construct 2 does not include out-of-the-box advanced tools for creating paths for objects to follow, we had to set up several checkpoints on the layout (Figure 6). Our algorithm examines the state of each doll in order to determine the next checkpoint it has to reach. In the following step, it calculates the dolls' movement angle based on these data.



Figure 6: The movement checkpoints placed on the layout to manage the movement system of the dolls.

Another stage of the development process that slowed down the implementation was the automatic resizing of the dolls. When the avatars first appear on the left side of the play panel they have to change their displayed image size to match the observable distance between them and the closest point of the amusement park (the scale) without users noticing this. To achieve this, our application constantly changes the size of each doll in advance of being measured on the scale. Their scaling rate is calculated based on their current Y position relative to the Y position of the scale. The dolls' sizes reach their maximum values (which were randomly selected in given intervals at the beginning of the presentation) when they reach the level of the scale on the Y-axis, and they keep their size until their height is re-evaluated by the IF() function (when they pass through the gate).

The dolls whose height makes them suitable for sitting on the Ferris wheel must be resized again while they walk towards their cabin. In addition, their size must be changed by a different scale ratio than before. We developed an algorithm that calculates the height of the moving dolls based on the Y coordinates of their start (at the gate) and end (at the cabin) positions, the distance of which is the difference between these two values (the travel distance on the Y-axis) and the current Y coordinate of the dolls. Using these coordinates and calculated data, the algorithm resizes the moving dolls seamlessly based on their current Y position. At the end of their movement (when they arrive at their cabins) the dolls will have a preferred, smaller size compared to the original, symbolizing the observable distance between the gate and the Ferris wheel.

Following on from our practice while developing the first version, we also focused on optimizing the application to make it run seamlessly on older or slower devices, as well. Optimizations include minimizing the GPU fill-rate as well as lowering the CPU consumption of by the objects present on the screen.

The new version of the Sprego Application is available to download for free on Google Play (Csapó & Sebestyén, 2018) for Android devices with built in WebKit support (Android 5 or newer versions). Given the nature of the Construct 2 engine, our application is also available in HTML5 format, currently integrated into the Sprego Virtual Collaboration Space (Csapó, 2017b).

Since the release of the first Sprego application version, the beta edition of its successor engine, Construct 3 has been released (Scirra, 2018b). Nowadays, Construct 3 can be considered a stable option to develop applications. Therefore, we plan to port our code to the new version of the engine in the near future. This can bring several enhancements to our workflow and to the end-user experience in terms of more convenient and professional development tools and a more efficient runtime.

Conclusion

The Sprego methodology to teach spreadsheet-management and to prepare students for further studies in programming and/or database-management in ICT education is already used in several high-schools and is a more effective method than traditional surface-approach low-mathability practices. It focuses on problem-solving and schema-construction to develop the students' algorithmic and computational-thinking skills while creating long-lasting knowledge. This methodology is supported with various unplugged or semi-unplugged tools to make the understanding of the algorithms easier. Among these tools we created an educational application to visually represent the most common Sprego problems the students encounter. In this paper we described a novel presentation of an inequality problem set in the context of an amusement park. We designed our new representation

based on the already implemented conditional counting algorithm, focusing on an authentic context that the students are familiar with.

Previously we have received positive feedback and experiences regarding the effectiveness of our application as used in classes. In the near future, we plan to conduct tests to statistically measure the effectiveness of using the application in Sprego classes.

Regarding the development roadmap of the application we aim to expand the available problems with further conditional summing algorithm representations. To help students of different nationalities working with Sprego to understand our application better and use it more effectively we plan to include more languages in addition to the two options currently available. Furthermore, we plan to switch to the new version of the underlying engine, Construct 3, to complete these development goals.

Acknowledgement

This work was supported by the construction EFOP-3.6.3-VEKOP-16-2017-00002. The project was supported by the European Union, co-financed by the European Social Fund.

References

- Anderson, D. L. (2017). Improving information technology curriculum learning outcomes. *Informing Science: the International Journal of an Emerging Transdiscipline*, (20(2017), pp.119–131).
- Angeli, C. (2013). Teaching Spreadsheets: A TPACK Perspective. *Improving Computer Science Education*, Routledge.
- Baranyi, P. & Gilanyi, A. (2013). Mathability: emulating and enhancing human mathematical capabilities. *4th IEEE International Conference on Cognitive Infocommunications*, (pp.555–558).
- Bell, T. & Newton, H. (2013). Unplugging Computer Science. *Improving Computer Science Education*, Routledge.
- Ben-Ari, M. (1999). Bricolage Forever!. *PPIG 1999. 11th Annual Workshop. 5–7 January, 1999*. University of Leeds: Computer-Based Learning Unit, UK. Retrieved December 01, 2016 from <http://www.ppig.org/papers/11th-benari.pdf>.
- Biró, P. & Csernoch, M. (2015a). The mathability of computer problem solving approaches. *6th IEEE International Conference on Cognitive Infocommunications*, (pp.111–114). DOI=<http://doi.org/10.1109/CogInfoCom.2015.7390574>.
- Biró, P. & Csernoch, M. (2015b). The mathability of spreadsheet tools. *6th IEEE International Conference on Cognitive Infocommunications*, (pp.105–110). DOI=<http://doi.org/10.1109/CogInfoCom.2015.7390573>.
- Biró, P. & Csernoch, M. (2017a). Unplugged tools for building algorithms with Sprego. *International Conference on Education and New Development*, Lisbon, Portugal, June 2017.
- Biró, P. & Csernoch, M. (2017b). Semi-unplugged tools for building algorithms with Sprego. *International Conference on New Horizons in Education*, Berlin, 2017.
- Chen, J. A., Morris, D. B., & Mansour, N. (2015). Science Teachers' Beliefs. Perceptions of Efficacy and the Nature of Scientific Knowledge and Knowing. *International Handbook of Research on Teachers' Beliefs*, (pp.370–386).
- Csapó, B. (2003). *The development of abilities and developing them in schools. In Hungarian: A képességek fejlődése és iskolai fejlesztése*. Budapest, Akadémiai Kiadó.
- Csapó, G. & Sebestyén, K. (2017). Educational Software for the Sprego Method. *The Turkish Online Journal of Educational Technology*, (INTE 2017 October, pp.986-999). Retrieved July 22, 2018 from http://www.tojet.net/special/2017_10_1.pdf. ISSN 2146-7242.
- Csapó, G. & Sebestyén, K. (2018). Sprego - Spreadsheet Lego. Retrieved May 30, 2018 from <https://play.google.com/store/apps/details?id=hu.sprego.oktatoprogram>.
- Csapó, G. (2017a). The ICT graduation exam and the text-management culture of computer-science undergraduate students. In Hungarian: Az informatika érettségi és az informatikushallgatók szövegkezelési kultúrája. *Válogatott tanulmányok a pedagógiai elmélet és szakmódszertanok köréből*. Retrieved February 09, 2017 from <http://www.irisro.org/pedagogia2017januar/85CsapoGabor.pdf>.
- Csapó, G. (2017b). Sprego Virtual Collaboration Space. *8th IEEE International Conference on Cognitive Infocommunications*, (pp.137-142). Retrieved January 31, 2018 from <http://ieeexplore.ieee.org/document/8268230/>. ISBN 978-1-5386-1264-4. DOI=10.1109/CogInfoCom.2017.8268230
- Csernoch, M. & Biró, P. (2015a). Computer problem-solving. In Hungarian Számítógépes problémamegoldás. *TMT, Tudományos és Műszaki Tájékoztatás, Könyvtár- és információtudományi szakfolyóirat*, (62(3), pp.86–94).
- Csernoch, M. & Biró, P. (2015b). Sprego Programming. *Spreadsheets in Education (eJSiE)*, 8(1). Retrieved July 21, 2016, from <http://epublications.bond.edu.au/ejsie/vol8/iss1/4>.
- Csernoch, M. & Biró, P. (2015c). Wasting Human and Computer Resources. *International Journal of Social*

- Education Economics and Management Engineering*, (9(2), pp.555–563).
- Csernoch, M. & Biró, P. (2018). Edu-Edition Spreadsheet Competency Framework, *Proceedings of the EuSpRIG 2017 Conference "Spreadsheet Risk Management"*. London, Imperial College, (pp.121–136). ISBN: 978-1-905404-54-4.
- Csernoch, M. & Dani, E. (2017). Data-structure validator: an application of the HY-DE model. *8th IEEE International Conference on Cognitive InfoCommunications*, (pp. 197–202). ISBN:978-1-5386-1264-4.
- Csernoch, M. (2009). Teaching word processing – the theory behind. *Teaching Mathematics and Computer Science*, (2009(1), pp.119–137).
- Csernoch, M. (2014). *Programming with Spreadsheet Functions: Sprego*. In Hungarian: *Programozás táblázatkezelő függvényekkel – Sprego*. Budapest, Műszaki Könyvkiadó.
- Csernoch, M. (2017). Thinking Fast and Slow in Computer Problem Solving. *Journal of Software Engineering and Applications*, 10(1). Retrieved July 08, 2017 from http://file.scirp.org/pdf/JSEA_2017012315324696.pdf.
- Csernoch, M., Biró, P., Abari, K. & Máth, J. (2014). Programming-oriented spreadsheet functions. In Hungarian: *Programozásorientált táblázatkezelői függvények. XIV. Országos Neveléstudományi Konferencia*. 6–8 November, 2014. Debrecen, Hungary.
- Csernoch, M., Biró, P., Máth, J. & Abari, K. (2015). Testing Algorithmic Skills in Traditional and Non-Traditional Programming Environments. *Informatics in Education*, (14(2), pp.175–197). DOI=<http://doi.org/10.15388/infedu.2015.11>.
- EuSpRIG (2018). EuSpRIG Horror Stories. Retrieved March 21, 2018 from <http://www.eusprig.org/horror-stories.htm>.
- IEEE&ACM Report (2013). Computer Science Curricula 2013. *The Joint Task Force on Computing Curricula Association for Computing Machinery (ACM) IEEE Computer*
- Kahneman, D. (2011). *Thinking, Fast and Slow*. New York, Farrar, Straus and Giroux.
- Kerettanterv (2013). Central curriculum framework for year 9-12 students. In Hungarian Kerettanterv a gimnáziumok 9-12. évfolyama számára. *Oktatáskutató és Fejlesztő Intézet*. Retrieved November 09, 2016 from http://kerettanterv.ofi.hu/03_melleklet_9-12/index_4_gimn.html.
- Merriënboer, J.J.G. van & Sweller, J. (2005). Cognitive Load Theory and Complex Learning: Recent Developments and Future Directions. *Educational Psychology Review*, (17(2), pp.147–177). DOI=<http://doi.org/10.1007/s10648-005-3951-0>.
- Microsoft (2018a). Excel functions (alphabetical). Retrieved July 30, 2018 from <https://support.office.com/en-us/article/excel-functions-alphabetical-b3944572-255d-4efb-bb96-c6d90033e188>.
- Microsoft (2018b). COUNTIF function. Retrieved July 09, 2018 from <https://support.office.com/en-us/article/countif-function-e0de10c6-f885-4e71-abb4-1f464816df34>.
- Microsoft (2018c). COUNTIFS function. Retrieved July 09, 2018 from <https://support.office.com/en-us/article/countifs-function-dda3dc6e-f74e-4ace-88bc-aa8c2a866842>.
- Microsoft (2018d). SUMIF function. Retrieved July 09, 2018 from <https://support.office.com/en-us/article/sumif-function-169b8c99-c05c-4483-a712-1697a653039b>.
- Microsoft (2018e). SUMIFS function. Retrieved July 09, 2018 from <https://support.office.com/en-us/article/sumifs-function-c9e748f5-7ea7-455d-9406-611cebc642b>.
- Microsoft (2018f). AVERAGEIF function. Retrieved July 09, 2018 from <https://support.office.com/en-us/article/averageif-function-faec8e2e-0dec-4308-af69-f5576d8ac642>.
- Microsoft (2018g). AVERAGEIFS function. Retrieved July 09, 2018 from <https://support.office.com/en-us/article/averageifs-function-48910c45-1fc0-4389-a028-f7c5c3001690>.
- NAT (2012). National Base Curriculum. In Hungarian: Nemzeti alaptanterv. *Oktatáskutató és Fejlesztő Intézet*. Retrieved October 22, 2016 from http://ofi.hu/sites/default/files/attachments/mk_nat_20121.pdf.
- Panko, R. & Port, D. (2013). End User Computing: The Dark Matter (and Dark Energy) of Corporate It, *Journal of Organizational and End User Computing*, (25(3), pp.1–19).
- Panko, R. (2013). The Cognitive Science of Spreadsheet Errors: Why Thinking is Bad. *Proceedings of the 46th Hawaii International Conference on System Sciences*, January 7-10, 2013. Maui, Hawaii.
- Panko, R. (2015). What We Don't Know About Spreadsheet Errors Today: The Facts, Why We Don't Believe Them, and What We Need to Do. *arXiv preprint*. Retrieved July 21, 2016, from <http://arxiv.org/abs/1602.02601>.
- Pólya, G. (1954). *How To Solve It. A New Aspect of Mathematical Method*. (2nd Edition 1957). New Jersey, Princeton, Princeton University Press.
- Scirra Ltd. (2018a). Create games with Construct 2. Retrieved June 22, 2018 from <https://www.scirra.com/>.
- Scirra Ltd. (2018b). Make Your Own Games - Construct.net. Retrieved June 24, 2018 from <https://www.construct.net/>.
- Sestoft, P. (2011). Spreadsheet technology. Version 0.12 of 2012-01-31. IT University.
- Skemp, R. (1971). *The Psychology of Learning Mathematics*. New Jersey, USA, Lawrence Erlbaum Associates.

- Soloway, E. (1993). Should we teach students to program? *Communications of the ACM*. (36(10), pp.21–24).
- Wakeling, D. (2007). Spreadsheet functional programming. *JFP*. (17(1), pp.131–143). Cambridge University Press.
- Wing, J. M. (2006). Computational thinking. *Communications of the ACM*. (49(3), pp.33–35). DOI=<http://doi.org/10.1145/1118178.1118215>.

Vladimir Propp'un Yapısal Çözümleme Yöntemi Çerçevesinde “Kayıp Otoban” Filminin İncelenmesi

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Özet

Günümüzde yapısalcılıktan esinlenen öykü incelemesi pek çok araştırmacı için oldukça ilginç bir araştırma konusu olmaktadır. 70 lerden sonra, yoğunlaşan modern anlatım biçimi için de, klasik anlatıdan sıyrılan yeni anlatım biçimleri ile farklı filmler yapılmaya başlanmıştır. Bilinçaltı psikolojik anlatım ve şiddetin pornografisi olarak ortaya çıkan anlatım biçimleri gibi... Kayıp Otoban filmi modern anlatı bakımından ve film kurgusu açısından örnek olarak karşımıza çıkmaktadır. Karanlık denizler, derin uçurumlar, hiçbir yere varmayan yollar ve zihinsel kısır döngüler boyunca belirsiz ve klostrofik mekanlarda kimliklerini arayan, özgül benlikleri üzerindeki kontrollerini yitirmiş iki erkeğin, birbirlerinden ayrı ve aynı zamanda birbirleriyle kesişen şizofrenik dünyalarını ele alan “Kayıp Otoban”ın (Lost Highway), film-noir (kara film) türünün son dönemdeki başarılı örneklerinden biri olmaktadır. Bu çalışmada, 1997 yapımı “Kayıp Otoban” adlı film, halkbilimi uzmanı Vladimir Propp’un “Masalın Biçim Bilimi” adlı kitabında yer verdiği kuram çerçevesinde incelenecektir. Propp, olağanüstü masalların oluşturucu bölümlerini tespit ederek, bu bölümleri karşılaştırmaktadır. Çalışmanın sonucunda ise biçimsel bir yapı ortaya çıkmaktadır. Vladimir Propp, yapıtında 31 işlev ve 7 eylem alanı kahramanından söz etmektedir. Bu çözümlemede 7 eylem kahramanı tespit edilecek ve bu kahramanların işlevleri belirlenecektir.

Anahtar Kelimeler: *Kayıp Otoban, V. Propp, Yapısalcılık, Kara Film*

Vr Apps For Engaging The Prep School Students

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Abstract

According to Schwienhorst (2002) “virtual reality (VR) comprises the notion of collaboration and interaction between users in an intuitive computer-generated environment that appears real, with full integration of artificial intelligence products and information tools. Virtual reality has been used in areas such as education, observation, testing, entertainment and health. It seems that virtual environments enable students to engage in realistic environments, provide rich perceptive clues and versatile feedbacks, enable virtual experiences to be easily transferred to real environments, enhance interaction with content, entertain students in learning, and facilitate learning of concepts (Doğan et al., 2011). It has also been shown that learning has made it possible to achieve high levels of achievement, which is still effective and engaging. The feeling of being in the environment and imagination improves the problem-solving skills of learners by providing highly interactive learning experience for the learners and provides excellent environments for brainstorming, structuring of knowledge and information synthesis from different sources (Can and Şimşek, 2016). In our study, we have used VR apps to engage the students at a Prep School of a private University in Istanbul during general English lessons and have observed an increase of motivation and higher level of participation specifically to the speaking tasks.

When Reading Is Predicting: Didactic Text Comprehension Activities Beyond Motivation

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Abstract

As Giasson (2000) pointed out, the comprehension of a text depends on factors resulting from the textual structure, the context and the reader. When preparing class activities, the teacher needs to focus on each of these aspects in order to foster reading ability in his pupils. Therefore, the way we *get into* the text appears to be crucial to promote reading comprehension, so that students may be transformed "at all times into active readers" (Solé, 1998: 114), as they increase their capacity to formulate predictions regarding what it is going to be read (Solé, 1998; Giasson, 2000).

Following an ethnographic methodology, through the implementation of two questionnaires in a professional development course, we have noticed that teachers see pre-reading activities mostly as a way to get their pupils involved with the text, regardless of a better understanding of what it is said.

Motivation is a very important factor for learning (Caballé & Clarisó, 2016), but it does not assure by itself a better reading ability. Thus, we believe that the main purpose of pre-reading is to get the student to activate previous knowledge, because "the clue is not in knowing what the text says, but in knowing what is necessary to get to know more from within the text" (Solé, 1998: 103).

In order to go beyond the motivation factor, we have presented pre-reading strategies (Solé, 1998; Ribeiro et al., 2010), which were illustrated with some activities during the course. Teachers were then invited to create their own didactic paths for their school contexts, as a way to anticipate text content, but also to promote an holistic approach in a language classroom.

In this presentation, we aim at analyzing and discussing some of the teachers' proposals, which focus on strategies such as setting reading goals (essential within instructional texts, for instance), paying attention to relevant text aspects (illustrations, titles, excerpts, types or sizes of letters and keywords) or encouraging students to expose what they already know.

“Why Students Leave: A Qualitative Study of Persistence of First-Time, Full-Time Students at a Regional Hispanic Serving Institution.”

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Abstract

According to recent data, only 23% of a freshman cohort will graduate within four years of entering a university, and rates fall even lower for those of minority status. Hispanics graduate at a rate of 16%, and those of other minorities are even lower. To assist with rates of retention and promote diversity in higher education, the US Department of Education has designated that institutions having at least 25% of the overall student population represented by Hispanic students as a Hispanic Serving Institution (HSI), and allows these institutions to have access to additional resources, such as grants or funding.

This study draws on the framework of symbolic interactionism to locate and analyze the processes through which first-time, full-time students at a rural HSI failed to persist. One of the best ways to understand how students determine whether to persist in college or not is to simply ask them. For this reason, the research design combines the qualitative data collection techniques of surveys and semi-structured telephone interviews.

Participants for this study are first-time, full-time degree seeking freshman who began at a rural, regional HSI university and failed to persist. A qualitative survey was developed for administration to this population and includes demographical questions and open-ended questions aimed at investigating students' experiences and reasons for absence from re-enrollment. Through the use of open-ended questions, the students' are allowed to openly express their opinions and experiences related to their university attendance. By exploring reasons for lack of re-enrollment, this study hopes to contribute to the identification of variables correlated with retention rates at a rural regional HSI.

Preliminary conclusions of the data indicate that many students enjoyed their experiences at the university, but were not able to continue for financial reasons as a majority of the participants lived well below the US poverty line. Surprisingly, many students enrolled at the rural university as a starting point for their education with the anticipation of continuing at a larger university. Challenges presented during the course of this study include contacting this population, as many former students have changed contact information or have relocated since enrollment.

Women Entrepreneurship And Communication: Presentation Of Women's Entrepreneurs Association Of Turkey (Kagider) In The Printed Media

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Abstract

Media has become one of the most important tools that set the agenda today, not even to set the agenda, but also it has led the masses. This feature of the media is the fourth strength of our day after legislation, execution and judiciary. News that can quickly reach to mobile platforms subsequently the press and televisions connect masses to the media and the news is used as a consumption material. This situation has made the media a new force as a news producer.

With the increase of democratic rights and freedoms, non-governmental organizations (NGOs) have made the masses shoulder the responsibilities on social problems, and NGOs has become the third sector after public and private sector. NGOs that draw it's strength from the community should be recognized, approved and supported by the community. For this purpose, NGOs often need to be involved in the media to promote themselves and to socialize. Women's entrepreneurs association of Turkey (KAGIDER) which is one of the non-governmental organization try to inform the public about women's entrepreneurship, to promote its projects for women, to encourage the women for entrepreneurship and to offer the solutions for the problems faced by women entrepreneurs.

Purpose of this study is to determine how KAGIDER is involved in the news agenda of the printed media. In this context, the research aims to determine how often, when, with which themes the printed media gives news about KAGIDER. In this study content analysis method is used. Content analysis method is common and one of the direct observation method. It is aimed to contribute the literature with concrete determination and the examination of presentation of news regarding KAGIDER in the printed media.

Keywords: Women Entrepreneurship, Communication, Media, News.

Introduction

Democracy, which includes the method by which the individuals forming the society have a right to say in their governance, becomes functional with non-governmental organizations in modern times. During the process of urbanization and modernization, the individual with the role and responsibility on non-governmental organizations ensures that democracy develops as well (Bayhan, 2002, s. 1).

Apart from the governmental organization, voluntary organizations carrying out some political, cultural, economic and social activities are called as non-governmental organizations (Kalaycıoğlu, 1998). Non-governmental organizations, one of the most important basic means of redirecting liberalism in the world, are important actors in directing societies. The importance of non-governmental organizations is increasing day by day.

The phenomenon of the non-governmental organization, which reflects the recent interesting changes has started to have a wide spreading range from economy to politics, from all aspects of culture to social life (Drucker, 2000). Today, non-governmental organizations play a role as determinants of power and even one of the factors that will ensure their continuity.

The most prominent features of non-governmental organizations are their independence from governments, public authorities, political parties, commercial interest surveys, profit-oriented interests and their mediation between central authorities and citizens (Avrupa Komisyonu Türkiye Temsilciliği, 2001).

Individuals and communities in society need solidarity with other individuals in order to be more effective in their various interests and benefits. Non-governmental organizations are reporting the problems, needs, demands, and requests of these society members. In this respect, non-governmental organizations, above all, perform a function such as 'building public opinion' in related issues (Özer, 2008). Sensitivity to common problems in the society has increased with the increase of countries' education and culture levels. Non-governmental organizations, which are called by the United Nations as the third sector after the public and private sectors, continue their activities in education, culture, health, employment rights, violence towards women, environmental pollution, politics and religious foundations.

Entrepreneurship and Women Entrepreneurship

The notion of globalization is a process of change that involves competing in the world's business context and in this context it requires a struggle with international competitors in terms of technology, speed and innovation

(Aslan ve Atabey, 2007). An entrepreneur is an innovative person who sees market opportunities, transforms them into business ideas, takes risks and brings resources together (Tekin, 2000).

Entrepreneurs' profile generally can be characterized with main factors such as personal characteristics (intrinsic motivation, hard work, positive thinking, creativity, etc.), business and management skills, utilization of existing resources and new resource search capacity and information on utilizing business ventures (vision for venture), communication effectively with others, interpersonal skills to understand the social impact of business development (Özgöner, 2003, s. 100).

Globalization has resulted in businesses and entrepreneurs working in a more intense competitive environment. Because, the closed economy period, (the concept of government-protected management against external competition) has left its place to customer-oriented flexible and rapid production and management approach which is continuously self-renewal (Kapu, 2004, s. 32).

The entrepreneurs who are the essentials of economic growth, are the actors who create the opportunity of employment in a country. They ensure that economic resources are directed from areas of low productivity to areas of high productivity. They play an active role in bringing new ideas, innovations and advanced technologies to the country (Zeybekçi, 2017).

The roles of entrepreneurs in creation of new business lines, accelerating the economy, and eliminating regional economic disparities are also remarkable (Kurt vd. 2006, s. 99).

Women constitute the half of our society. Therefore, the half of our workforce should not be ignored. The fact that our society has a patriarchal structure and men are more dominant causes a challenge for women's business life (Sayın E. , 2011).

It can be said that women entrepreneur overcome cultural obstacles to participation in the workforce more easily and manage both business and home life. Policies to increase women's participation in the workforce should take into account the structural differences between paid employees and entrepreneurs. Since it is difficult to remove cultural barriers with economic policies, encouragement, and support of entrepreneurship will be more effective in increasing women's participation in the workforce (Karakoç ve Kolaşın, 2008).

Although women have started to take their place in the economic and social fields in Turkey more actively, it should be stated that there is not a rapid increase as there is in the western countries (Soysal, 2010, s. 89).

Motivation to own a workplace and unwillingness to work for a payment and wage for various reason are among the most important factors that motivate women entrepreneurs. Although the desire for economic independence requires taking economic, social and psychological risks and working long hours, it directs women to own their business (Şahin, 2006).

Women Entrepreneurship in Turkey

In the 1980s, Turkey has taken its place in history as a period in which the women's movement gained momentum. Researchers examined the women's movement in Turkey mention about three stages historically: The Ottoman period, the first years of the Republic and the post-eighties period (Soysal, 2010). Women entrepreneurs in Turkey have taken the attention with their investment in different sectors. Some entrepreneur women have started entrepreneurship because of their desire to succeed, others have started entrepreneurship because of their dreams, and the others have started entrepreneurship because they have been forced.

The problems which women have faced in the work life are closely related to traditional, economical and socio-cultural structure of Turkey. Discrimination in society based on male dominant culture reflects us women are smothered in their social life. Less benefit for women from educational opportunities, deficiencies and inaccuracies in legal regulations can be given as an example (Besler ve Oruç, 2010).

As of 2016, the population of 79 million 814 thousand consists of 40 million 43 thousand men and 39 million 771 women. While 78% of the population live in cities, 22% of the population live in towns and villages (TÜİK, 2016). According to the results of household labor force survey; In 2015, the employment rate in the population aged 15 and over in Turkey is 46%. While this ratio is 65% for male, it is 27.5% for female.

When the labor force participation rate is examined according to educational status, it is seen that as the level of education increased, women participated more to the workforce (TÜİK, 2016).

The percentage of illiterate women participating in the workforce is 16.1%, the labor force participation rate of women completed under-high school is 26.6%, the labor force participation rate of women completed high school is 32.7%, the labor force participation rate of women graduated from vocational or technical high school is 40.8, the labor force participation rate of women graduated from higher education is 71.6% (TÜİK, 2016).

Women Entrepreneurs Association of Turkey (KAGIDER)

Association of Women Entrepreneurs whose acronym is KAGIDER carries on its activities as structuring the future business world and creating active women entrepreneurs on nationwide. KAGIDER was established as a non-profit governmental organization in 2002.

It is stated that the purpose of the association is to enable women to gain their economic freedoms and for this purpose, some projects such as “Seminars for awareness on Entrepreneurship” and “Funds for Women” have been developed. Entrepreneurial women are encouraged by the association, projects are supported, consulting services for business-own women are provided by expert members.

Since its establishment, studies and projects are developed and carried out with public, private and non-governmental stakeholders at local, national and international level. Having about 300 members, KAGIDER gives education, guidance and mentorship support for the empowerment of women entrepreneurs in the direction of its vision and mission. And also KAGIDER works to strengthen the economic position of women and conducts studies for advocating the equality between women and men (KAGIDER, 2018).

KAGIDER is a non-governmental organization that aims to empower women through entrepreneurship. It aims to empower women not only economically but also politically and socially. KAGIDER supports women's entrepreneurship for changing the unequal and exclusionary social positions of women. Benefits provided by women entrepreneurs will contribute to the empowerment of women and gender equality.

KAGIDER has close relation with respected international organizations in terms of women's rights in different parts of the world. Following the world agenda on women's empowerment, gathering and sharing with women entrepreneurs and preparing common grounds for action are the priorities of KAGIDER (KAGIDER, 2018).

The Purpose For The Study

There are some additional factors (such as reconciling business and family) that make entrepreneurship a less attractive option for women than men. Women Entrepreneurs Association and relevant ministry are trying to overcome obstacles and encourage more women to start their own companies.

KAGIDER is one of the most important association in Turkey, supporting women entrepreneurship. The aim of this study is to determine how KAGIDER is involved in the news agenda of the written press. Following questions will be answered in this context:

1. In which newspapers, the news article about KAGIDER is published?
2. How often does the press give the news about KAGIDER by years?
3. How often does the press give the news about KAGIDER by months?
4. In which type of writing (news, opinion column, interview) the news about KAGIDER was published?
5. In which parts of the journal does the press give the news on KAGIDER?
6. The place of published news about KAGIDER in the following subtitles in the literature of the news coverage will be examined in following context: Impressing private entrepreneurship and bring an effort, trying to win public opinion support, turning negative opinions about the association into positive, gaining respect via creating a positive image about the association, increasing the number of women entrepreneurs, reintegrating qualified entrepreneurs into the society, promoting relations with NGOs, enlightening the public and adopting the works, facilitating the work of women entrepreneurs, getting information from the public, informing the the public about the laws, cooperating with the public, having contact with the public for law draft and fulfilling social responsibility duties.

The information to be obtained with this study is important in terms of the measures that KAGIDER will take in the context of corporate promotion, inter-institutional relations and strategic communication. It is expected that the information obtained at the end of the study will be taken into consideration by KAGIDER. This assessment will be based on the way in which all activities and projects undertaken by KAGIDER take part on the press and regulations may be applied in its short term or strategic planning.

This study will be an factor that will be taken into account in the work of the Ministry of Family and Social Policy, since with this study, it will be determined how KAGIDER, a women's NGO, is involved in the press agenda at the same time.

Again with this study, the results of how KAGIDER's activities that reflect women's contribution to the economy in economic terms are reflected in the agenda will be a kind of feedback of the efforts of the Ministry of Economy to develop opportunity of recruitment and also to increase private entrepreneurship.

The issue is also important in terms of observing the effect of the activities of KAGIDER which is an NGO when it is considered from the point of view of non-governmental organizations (NGO).

When it is looked at European Countries (EC), women face challenges while establishing and running a business. These are;

- access to finance
- access to information
- training
- access to networks for business purposes
- reconciling business and family concerns (European Commission, 2018).

This study will also examine how this topic has become a part of the agenda in the context of the Agenda Setting Theory which is one of the Mass Communication Theories. It will be determined how the press presents and features the news about KAGIDER.

Significance of the Study

Although many project and programme based efforts are initiated every day in the name of developing women's entrepreneurship in Turkey, the extent and the number of studies identifying this increasing trend in relevant activities are rare and they are merely written within a theoretical framework.

Although entrepreneurial culture is extremely important as the driving force of the new economy, the proportion of women entrepreneurs in Turkey remains low in terms of both number and importance. Turkey has the lowest proportion of women entrepreneurs in all OECD and European countries (Ünay, 2010).

It is seen that women are behind in entrepreneurship due to the factors such as patriarchal society structure, traditional male and female roles, lack of learning, lack of experience in the workforce.

There are very few women entrepreneurs for being role model, especially for women in rural areas, where young women can take the example of establishing new jobs. Women who imagine having business owners are also influenced by factors that block entrepreneurship, such as lack of capital, lack of access to credit facilities. Lack of learning and work experience further obstructs women entrepreneurs (OECD, 2011).

There is also a relationship between the level of education of women entrepreneurs and reasons for establishing a business in our country. While the factors that attract women to entrepreneurship are mostly for university graduate women, pushing factors are more common for primary and secondary school graduate women.

Women can make room for themselves in the business world where they are often dominated by men, only through raising their educational level, knowledge and skill enhancement. When women enter the labor market with disadvantages of training, they have to concentrate on jobs that require little knowledge and skills, and as it is very difficult to survive under these conditions, the chance of achieving entrepreneurial experience is diminishing (Keskin, 2013).

The information obtained from this work will primarily be useful for the work of KAGIDER, the Ministry of Family and Social Policy and NGO's.

One of the important features that contribute to the success of entrepreneurs is personal relationships. In other words, one of the most important factors that make an entrepreneur successful or unsuccessful is public relations and human relations.

The role of women and women entrepreneurship in the economy has been increasing over the years and women entrepreneurs have become important economic power. For example, the number of women entrepreneurs has been increasing in many countries that are members of the Organization for Economic Cooperation and Development (OECD). In the future, the importance of women in the economy will increase even more (Ball, 2005, s. 2).

This study was conducted to determine the importance of the role of women's entrepreneurship in solving the employment problem, one of the major problems of our country. One of the main challenges of working on the role of women's entrepreneurship in creating jobs is the lack of robust and reliable data. The main material of the study is the TUIK data and the secondary data are the other studies related to the subject.

Women entrepreneurship offers both new business opportunities and a significant contribution to the economy. It is very difficult for women entrepreneurs who want to spend their business thoughts in an environment where the business environment is often complex and ambiguous to be able to maintain their assets and competitive advantages.

It is important to identify women entrepreneurship that will result in value creation and to measure and measure entrepreneurial influences

This study will be an factor that will be taken into account in the work of the Ministry of Family and Social Policy, since with this study, it will be determined how KAGIDER, a women's NGO, is involved in the press agenda at the same time.

Theoretical Framework

People are addicted to the media to understand what is happening in the world. While mass media pays more attention to some issues in the community, it may pay attention less interest in some issues or ignore them (Yaylagül, 2016).

With the development of scientific research in the field of communication, various approaches which suggest that mass media are sensitive to community and have long-term influences have been developed. One of the most important of these approaches, which clearly demonstrates the different kinds of effects of the media on society, is the agenda -setting theory (Atabek, 1998).

Agenda setting has methodically looked for to archive the impacts of mass media on the audience's cognitions. By ideals of making a shared, national pseudo-environment, mass media fulfill the critical work of building an open agreement on the imperative issues of the day (McCombs, 2004). The theory, defined when conventional media organizations possessed the instruments of content creation and organization dissemination, remains mostly unattempted in the unused, intuitively media age (McCombs, 2004).

The primary importance of its role in setting a nation's agenda and also to draw the public's attention to specific issues of concern remains indisputable. The way news media presents an issue to the public indicates the prominence of that issue (Shaw ve McCombs, 1972).

The core of this theory is based on the idea that with its way of presenting the news, the media defines the issues that citizens are contemplating and talking about. Briefly, by creating its own agenda, the media influences what most people will talk about and what the audience will see as facts (Yaylagül, 2016).

The role of the media in determining the country agenda and attracting the attention of the public to specific issues undisputedly comes first. News media's way of conveying the issue to the public indicates the importance of that issue (Shaw ve McCombs, 1972).

For example, the most important issue that a journalist sees as a newspaper is published as headline news. For a television channel, the most important news is the first published news. More space and time are allocated to topics that are important to the newspaper or television. Less space or time is allocated or no space is provided for less important news or news items (Yüksel, 2007).

Issue attributes have shown that traditional media play a strong role in mediating the agenda-setting impact. Previous research has shown that the media's agenda-setting effect is stronger with less important problems or problems that the viewer has less direct, personalized experience with real-world contexts. (Zucker, 1978). The ability of the media to influence the audience's agenda with their agendas is also about the nature of the subject: abstract subjects are more easily conveyed to the audience than concrete problems (Yagade ve Dozier, 1990). The media can better align the agenda with more dramatic and controversial events and shorter time frames.

The image in people's minds about the outside world has been greatly influenced by the mass media about what the images are about or what they are. The agenda-setting effects of mass media have an important influence beyond the images created in people's minds. Beyond attitudes and thoughts, images of reality created by mass media have implications for personal behavior, ranging from university preference to voting preferences (McCombs, 2004).

Media does not make news on every incident or phenomenon in the world. By deliberately including some of the incidents or ignoring some of them, media creates the public agenda and opinion (Yaylagül, 2016).

The power of the news media to determine the agenda of a country is a tremendously well-documented effect, focusing public attention on several important public topics. Not only people get factual information about public affairs, but readers and audiences learn how to attach importance to a subject based on the emphasis placed on the news. The newspapers offer a series of tips on topics of interest in daily news – cover story on page one, other front page display, large headlines, etc. (McCombs, 2004, s. 1).

Literature Background

In the survey, conducted by Sayın (2011) on the subject of "the problems of women entrepreneurs", the analysis of women in the business sector, which constitutes the half of our society, is important for the future regulations in business life. In this study, Sayın (2011) analyzed the problems of women entrepreneurs in business life and society, the comparison of female entrepreneurs with male entrepreneurs in the provinces of Aydın, how well Aydın Business Women Association was recognized and the activities they carried out to support women entrepreneurs.

A questionnaire was applied to 109 female entrepreneurs working in the sectors of food, energy, heat and ventilation, textiles, electrical and electronics, furniture, paint and chemicals, paper printing and labeling, out of a sample group including 34 female entrepreneurs who are selected by simple random sampling. In this study, problems encountered by women in entrepreneurship were put forward and efforts were made to measure the application success and level of recognition of Aydın Business Women's Association.

According to the findings of the study and the result of the viewpoint of the social and cultural environment that affect the woman's entrepreneurial life, it is necessary that the viewpoint of the society against the woman is more modern or more study is needed in this regard. Reduction of the pressure of patriarchy structure, women entrepreneurs will have more comfortable working conditions. Thus, they will be able to enter a more prolific and fruitful working discipline. It is clear that improvements should be made in order to change the point of view of the society with the organization of seminars and meetings.

In the research regarding the role of women entrepreneurs in global competition studied by Aslan and Atabey (2009) entrepreneurship concept and features of entrepreneurs, women entrepreneurship concept, characteristics of women entrepreneurs, the importance of women entrepreneurship in the development of the country and issues related to activities for the promotion of women entrepreneurship were studied.

The study including how entrepreneurship in the world and Turkey was discussed, the roles of males and females, its influence on women's entrepreneurship, its reflection on women entrepreneurship and especially the characteristics of women entrepreneurs in our country was studied with literature review method. Start-up age of women entrepreneurs and its reasons and which sectors women chose about entrepreneurship depending on their gender roles was put forth.

Aslan and Atabey (2009) gave information about women's entrepreneurship and what women's entrepreneurship should have. In the study, the following conclusions were reached regarding the causes of business establishment of female entrepreneurs: provide additional income to the family, be strong against man, prove oneself, have the desire to be independent in the economic sense, independent, autonomous and productive.

As a result of investigations carried out in Turkey, at the basis of the common problems related to women entrepreneurs lack of education and funding, families reactions, stereotypes roles of women in social area and the need to make more effort than men on trust were seen.

In terms of emphasizing equality between men and women in Turkish culture, it is necessary to establish community consciousness in this issue by cooperating with educational institutions, media, press release etc. communication institutions. The increasing number of women in the working life in our own countries and the existence of legal regulations that specify women's equality based on international contracts are not enough to change the mentality against women.

Another study on women's entrepreneurship is conducted by Sosyal (2010) about women Entrepreneurs in Turkey. With the prioritization of the policies and projects that will ensure that women take part in men's life in economic life, it is possible to make them potential forces that provide significant contributions to economic and social development. However, it can be argued that women face significant obstacles in their entrepreneurial activities and are quite challenged. This study, in today's world where entrepreneurship accelerated, from Turkey's perspective, aims to handle the barriers encountered by women in entrepreneurial activities and the opportunities women will create in a theoretical framework.

Especially the more educated, determined, ambitious and stable of the woman both enables him to strengthen his independence in economic sense and position in society and saves him from being dependent on man. The most important fact that provides this power to women is its entrepreneurial nature. On the one hand women with entrepreneurial activity gains material and spiritual benefits, on the other hand women have the opportunity to turn women's judgments with the features of financial opportunities, community service, work security, family employment and challenge. on gender discrimination in favor of women.

In recent years, it has been observed that women are more successful in business life than man. The reasons are the success of women in jobs that are believed to be peculiar to men, diminishing the difference of knowledge and experience on entrepreneurship between men and women, becoming much better organized and being more sensitive, quieter, more intense human relations to events. Woman who plays an important role as an entrepreneur in economic life have significant impact on transferring the experiences gained in the business to efficient channels, making short and long term plans for the business, optimum use of resources, establishing and maintaining human relations. The women's power in terms of financial sense may be the factor for reducing the mismanagement, violence, devastating conflicts and bribe that may arise.

The study conducted by Gül ve Altındal (2016) gives information about the adventures of women entrepreneurship in Turkey. Participation of women in working life and taking active role in entrepreneurial activities are seen one of the key improvement of development. The areas of activity for women entrepreneurship of public and non-governmental organizations increasingly diversified. Micro-credit applications for women's entrepreneurship have increased. Since structural problems blocking women's employment such as obstacles to access to economic resources, cultural resistance which women entrepreneurs face, prejudices and discrimination often were ignored, the success level of programs, policy and applications to support women's entrepreneurship were limited. In this study the adventures of female entrepreneurship in Turkey were discussed and the gender context was evaluated in the light of the literature.

Development of female employment and support for female entrepreneurship in the form of regular income within the scope of social security pave the way for the societal empowerment of a greater number of women still have access to a higher gender

Existing entrepreneurship support and programs, having their own and strategies for developing entrepreneurship focuses on increasing the supply of women in the human capital and the labor market. The cultural resistance which women entrepreneurs face, prejudices, discrimination and obstacles to access to economic resources and structural problems blocking women's employment aren't considered. Women-specific experiences and conditions should be taken into account in the incentives and the policies for women entrepreneurs who set up their own operations and also existing women entrepreneurs should be supported.

In the study conducted by Besler and Oruç (2010), the studies of women managers in press media were discussed. What topics the women managers were reported in the printed media with the method of content and text analysis. The study examines which topics women managers took in the printed press in the year of 2003.

The study consists of five categories including success news, news about discrimination, news about positive discrimination, descriptive news and other news. It is seen that senior women managers in Turkey come from a higher socio-economic level. In Turkey discrimination news for women managers, it is proved that "glass ceiling" case couldn't be broken in a male-dominated society. It is seen that positive discrimination practices in Europe aren't sufficiently applied in our country for reaching an equal level of women and men.

In this research-based news, it is an important finding that women also do not want to work with women managers and that women can not reach the executive levels even in professions called "women's work". Categories obtained from the analysis results reveal that there are many obstacles for reaching the senior management level of women in Turkey. Much effort is needed to overcome these obstacles. Male-dominated structure in Turkey prevents women from being accepted as managers in their workplaces. One important structure supporting this is the adoption of gender stereotypes of women and men. The prejudices that gender and culture feed on make it difficult for women to break the "glass ceiling".

In the study conducted by Tekeoğlu (2013) integrated marketing communication, women entrepreneurship and the studies of KAGIDER were examined. This study using entrepreneurship, entrepreneurship towards women and integrated marketing communications and non-governmental organizations' integrated marketing communications is based on publicizing the projects of non-governmental organizations and the importance of resource creation efforts. The studies of KAGIDER being one of the important milestones on women's entrepreneurship in the context of the dissemination of women entrepreneurship and a case study on KAGIDER's communication projects was conducted. After in-depth interview with KAGIDER communication director, a point of view has been presented about planning, implementation, barriers and opportunities for these projects. Emphasize the added value that communication creates / will create and thereafter opinions have been expressed to form a model for similar communication studies.

Only 6% of the entrepreneurs in our country are women and there is a very small amount in the general but an increasing number of participants attending the contest named "Turkey's Woman Entrepreneur Contest" is impressive in the last six years. In the light of these studies, KAGIDER, the most influential women entrepreneurial community in our country cannot be ignored because KAGIDER all the time supported women entrepreneurs in the context of both training for women entrepreneurship and project and leadership studies

In the study conducted by Leyla (2011) new actors of women's movement, women NGOs and their potentials were studied. The feminist movement is no longer the movement of a specific class or ethnicity but rather includes groups and compositions that have different features. In the context of the Turkish nation and supranational women, sensitive actors and gender-blindness of mere political struggle contribute to this process. Non-governmental organizations of women which have different economic and social capital can contribute to the aim of widening public space and can turn the discourse of civil society woman-sensitive. KAGIDER (Women Entrepreneurs Association of Turkey) and KAMER (Women's Centre)

moving from two different cultures and two different civil society organizations seems possible to develop an idea about the early period of women movement in Turkey. KAGIDER and KAMER organizations whose working fields and issues are different seem to be united for the empowerment of women although their working fields and working methods are different. In short, although the political-intellectual tradition by which both the civil society organizations are nourished on their political means and target group, their public discussion is creating gender sensibility. All these efforts of non-governmental organizations make it necessary to emphasize the potential of producing policy and politicizing the demands. In spite of these efforts, it must be added that the civil society organizations of women mostly see between bringing service and operating the mechanisms that remain restricted in reaching out to women.

In the study named women, entrepreneurship and regional development conducted by Yalman and Gündoğdu (2014) an application was realized in Kayseri, Sivas and Yozgat. Entrepreneurs face many problems arising from being women, general economic conditions or environmental impacts. Reducing the problems which women entrepreneurs face and solving the problems will increase the economic growth. For this reason, it is important that the proposals for the solutions and policies to be developed should be prepared considering the local characteristics.

It is aimed to conduct a survey in consideration of local characteristics, to obtain original data, to identify the problems women entrepreneurs face, to find the solutions to these problems and also to introduce the suggestions that will help increase the contribution of women entrepreneurs to develop. It is aimed to give information to women entrepreneurs operating in the TR72 region (Sivas, Yozgat, Kayseri) about general profiles of women entrepreneurs, the problems they face, the variance of these problems according to the provinces, the determining the concerns and expectations of women entrepreneurs in this regard.

Information about incentives which women entrepreneurs experience on the flotation of during and after the establishment phase and especially the microcredit system should be introduced effectively. Although the TR72 region is located in the east of Anatolia and is a region where the relatively traditional structure still prevails, contrary to the expectations of women entrepreneurs, it was seen that they haven't been neglected in their work for reasons

such as social pressure or being a woman. In order to abolish and reduce the main obstacle for women to participate in their working life, such as women are reluctant and discouraged, do not take enough support, lack of adequate education, women can be provided with personal and vocational training.

In the study conducted by Keskin (2014) the status of women entrepreneurs in Turkey were discussed. Women can make a significant contribution to their own economies, communities and employment through

entrepreneurship. But this contribution is not sufficiently developed in our country. In 2012, the ratio of employers + self-employed women is 12.1 percent, and only 14.9 percent of total entrepreneurs are female entrepreneurs. In this study, some studies on women's entrepreneurship in Turkey and the current situation of female entrepreneurs has been tried to be presented in line with the existing data.

Although women constitute half of the population in Turkey, figures indicate that women with significant entrepreneurial potential are not used effectively in entrepreneurship. Women entrepreneurs should also be supported in the formation of technology, knowledge-based, innovative businesses. Financial management training, technology training and the use of modern technology, technical assistance, financial support, credit availability, and infrastructural support should be provided to women entrepreneurs. In addition, the necessary incentives and facilities should be provided in order to have a deep knowledge of the field in which to operate and to know marketing and service delivery techniques, to provide confidence building training, e-commerce, efficient time management and skills.

The participation rate of women into the labor force and the increase in paid employment should be emphasized by Turkey. In this regard, long-term women's employment policy should be established at national level and women's entrepreneurship should be regarded as an important but not exclusive element of this policy.

Method

Problem Statement

Women Entrepreneurship and Communication: Women Entrepreneurs Association of Turkey in printed media (KAGIDER)

Statistical Hypothesis

- In which newspapers did KAGIDER become the agenda?
- How often did KAGIDER become the agenda?
- In which context did KAGIDER become the agenda?
- Which public relations activities KAGIDER conducted?

Research Model

In this study, a literature review was made primarily and the content of the research was designed by obtaining those related to the research within the existing literature (Robson, 2017, s. 92). Flexible research design includes qualitative data collection techniques. The data is summarized and detailed information on the data collection is given (Robson, 2017, s. 155). It was examined how frequently and with what subject national newspapers cover the news on women entrepreneurs association of Turkey (KAGIDER) that is influential and effective in women's entrepreneurship in Turkey. Content analysis technique was used to study the nature of the news and their sources. The study is a descriptive study. Content analysis is a research technique used to analyze available communication dimensions and to make unbiased, systematic quantitative descriptions of the content of the communication (Aziz, 2015, s. 133). The main purpose of the content analysis is to reveal the facts that may be hidden in the collected data. There are six basic elements in content analysis: Data collection, unitization, sampling, registration guide, analysis, deduction and reporting of study (Aziz, 2015, s. 136).

Identification of the Population and Sample

The population of the study is the national daily newspapers published in Turkey. According to the Press Ad Agency; all published issues of Sözcü, Hürriyet, Sabah and Posta newspapers, which are in the first three ranks determined by taking into consideration the national newspaper circulation between 01 January 2014 and 31 December 2017, were taken as the variable probabilistic sampling method. In the probable sample, the number of elements that will be included the groups is obvious. Sub-groups are formed for it. Number of members to enter groups is obvious. When this method is used, the measurement based on the sampling must be explicitly stated (Aziz, 2015, s. 143). When the survey was conducted between January 01, 2014 and December 31, 2017, all news related to KAGIDER was taken into account in the sections of the three newspapers that were called news.

Instrument

Within the theoretical and conceptual knowledge of the researcher, The content analysis category form and content analysis coding form were developed. With the help of the category form given below, 251 news articles about KAGIDER were examined.

About Content Analysis Categories and Coding Form:

The year the newspaper was published: It refers to the year of publication of the newspapers between 2014 and 2017.

The month the newspaper was published: It refers to the month of publication of the newspapers between 2014 and 2017.

The date the newspaper was published: It refers to the date of publication of the newspapers between 2014 and 2017.

The name of the newspaper: According to circulation, it refers to Hürriyet, Sabah, Sözcü and Posta

The type of the newspaper: It refers to opinion column , news, and Interview.

The news section of the newspaper: It refers to agenda, politics, economy, education and world news.

Media coverage activities: Impressing private entrepreneurship and bring an effort, Trying to win public opinion support, Turning negative opinions about the association into positive, Gaining respect via creating a positive image about the association, Increasing the number of female entrepreneurs, Reintegrating qualified entrepreneurs into the society, Promoting relations with NGOs, Enlightening the public and adopting the works, Facilitating the work of female entrepreneurs, Getting information from the public, Informing the the public about the laws, Cooperating with the public, Having contact with the public for law draft, Fulfilling social responsibility duties, equality of women and men, Encouraging women to work, Reacting to the silence of women's organizations against sexual harassment.

Opinion Columnist: Opinion Columnists who write about KAGIDER are Özlem Doğaner, Şeref Oğuz, Şelale Kadak, Emre Aköz, Bülent Cankurt, Elvan Demirkan, Ayşe Arman, Nuran Çakmakçı, Gila Benmayor, Fatih Çekirge, Vahap Munyar, Müge Akgün, Adnan Kaya, Gökhan Kimsesizcan, Jale Özgentürk, Emel Armutçu, Yalçın Doğan and Melis Alphan.

Data Analysis

First of all, all data were recorded in the form of the category for the research. The recorded data was then transferred to the statistical data analysis program (SPSS 20). Then the categories of the identifier of the data obtained from the statistical values to the number of each of the variables and the number of values percent frequency tables and the comparison between the categories of the variables to be able to number and percentages of the cross that has been obtained in the tables. The obtained tables are interpreted according to the information given in the theoretical section.

The obtained tables are interpreted according to the information given in the theoretical section.

Assumptions

Assumption - 1:

KAGIDER is a result-oriented NGO.

Assumption - 2:

KAGIDER works on women entrepreneurship.

Assumption - 3:

KAGIDER is an important voice of women in the media.

Assumption - 4:

Communication between KAGIDER and women entrepreneurs is advanced.

Assumption - 5:

There are also different NGOs on women entrepreneurship.

Limitations

1. In the research, only the first three newspapers were analyzed according to circulation reports.
2. The research covers the dates between January 01, 2014 - 31 December 2017.
3. The research is limited to newspapers only.

According to the Press Ad Agency; all published issues of Sözcü, Hürriyet, Sabah and Posta newspapers, which are in the first three ranks determined by taking into consideration the national newspaper circulation between 01 January 2014 and 31 December 2017, were analyzed.

It was examined how frequently women entrepreneurs association of Turkey (KAGIDER) took place on national newspapers.

Findings

KAGIDER is one of the most important association in Turkey, supporting women entrepreneurship. The aim of this study is to determine how KAGIDER is involved in the news agenda of the written press. In this study, the distribution of KAGIDER news by years, newspaper, months, types, sections and columnists were examined.

Table 1 – Distribution of KAGIDER News by Years

Year of the news	Frequency	Percent
2017	103	41,0
2016	65	25,9
2015	47	18,7
2014	36	14,3
	251	100,0

Table 1 shows that between the dates of the research, it is observed that a total of 251 news items were published and the most news was published in the year of 2017 with the rate of 41%. The least news was published in the year of 2014 with the rate of 14.3%.

Table 2 – The Distribution of KAGIDER News by Newspaper

Name of the Newspaper	Frequency	Percent
Hürriyet	187	74,5
Sabah	61	24,3
Posta	3	1,2
Total	251	100,0

In this period, the most news published about KAGIDER is in Hürriyet newspaper with the rate of 74.5% while at least one is in Posta with the rate of 1.2%. The rate of news published in Sabah is 24.3%.

Table 3 – Distrubution of KAGIDER News by Newspaper and Years

Year	Name of the Newspaper			Total
	Hürriyet	Sabah	Posta	
2017	88	14	1	103
2016	48	17	0	65
2015	32	13	2	47
2014	19	17	0	36
	187	61	3	251

Table-3 shows the distribution of KAGIDER news according to years and newspapers. Hürriyet published the most news in 2017. In 2014, the number of news published by Hürriyet and Sabah is almost the same. The number of news about KAGIDER has increased every year in the newspaper named Hürriyet.

Table 4 – Distrubution of KAGIDER News by Newspaper and Months

Month	Name of the Newspaper			Total
	Hurriyet	Sabah	Posta	
January	8	6	0	14
February	16	1	0	17
March	27	14	0	41
April	18	6	1	25
May	21	2	1	24
June	12	1	0	13
July	10	3	0	13
August	6	1	0	7
September	13	6	0	19
October	21	8	0	29
November	22	5	1	28
December	13	8	0	21
Toplam	187	61	3	251

When the news items of the newspapers monthly period is examined, it is seen that it is the most in November at Hürriyet newspaper, followed by October and May. The least published news was in Hürriyet in August. While the month which is the most published news in Sabah newspaper is March, the least one is in June. In Posta newspaper published only three news articles about KAGIDER, news articles were published in April, May and November.

Table 5 – Distrubution of KAGIDER News by Types

Types of the News	Frequency	Percent
News	176	70,1
Opinion Column	65	25,9
Interview	10	4,0
Total	251	100,0

When the types of the news published regarding KAGIDER news are taken into consideration, it is seen that they are mostly published in the categories of "news", "opinion column" and "interview". In terms of news types, 176 news, 65 news in the opinion column and 10 news articles in the interview section were published.

Table 6 - Distrubution of KAGIDER News by Sections

Sections	Frequency	Percent
Agenda	17	6,8
Politics	4	1,6
Economy	212	84,5
Education	8	3,2
World News	5	2,0
Culture / Art	5	2,0
Total	251	100,0

Table 6 shows that the most published news was in the Economy section with 212 news items. The number of news published in the section of politics, culture/art and world news are nearly same. After the economy section, the most published news is in the section of "Agenda".

Table 7 – Distrubution of KAGIDER News According to News Coverage

News Coverage	Frequency	Percent
Trying to win the public support	1	,4
Getting reputation by creating a positive image about the association	69	27,5
Increasing the number of women entrepreneurs	75	29,9
Reintegrating the qualified entrepreneurs into the society	13	5,2
Developing relations with NGOs	40	15,9
Enlightening the public and adopting the works	1	,4
Facilitating the work of women Entrepreneurs	6	2,4
Getting information from public	1	,4
Informing the public about the law	3	1,2
Fulfilling the social responsibility duties	3	1,2
Equality of woman and man	24	9,6

Encouraging women to work	12	4,8
Reaction to violence / Sexual harassment	3	1,2
Total	251	100,0

When news coverage about KAGIDER is examined, it is seen that the news was published to increase the number of news regarding women entrepreneurs. 75 news were published to “increasing the number of women entrepreneurs”. With 69 news, the title of “getting reputation by creating a positive image about the association” is in the second.

40 news articles were published under the title of “developing relations with NGO’s”. The least published news is from the title of “getting information from public”, “enlightening the public and trying to win the public support”.

Table 8 – Distrubution of KAGIDER News by Columnists

Columnists	Frequency	Percent
Özlem Doğaner	3	1,2
Şeref Oğuz	2	,8
Şelale Kadak	9	3,6
Emre Aköz	1	,4
Bülent Cankurt	1	,4
Elvan Demirkan	1	,4
Ayşe Arman	15	6,0
Nuran Çakmakçı	1	,4
Gila Benmayor	14	5,6
Fatih Çekirge	1	,4
Vahap Munyar	8	3,2
Müge Akgün	1	,4
Adnan Kaya	1	,4
Gökhan Kimsesizcan	2	,8
Jale Özgentürk	1	,4
Emel Armutçu	1	,4
Yalçın Doğan	2	,8
Melis Alphan	1	,4
Total	65	25,9
System	186	74,1
	251	100,0

Gila Benmayor and Ayşe Arman became columnists who made the most column writing about KAGIDER. Şelale Kadak and Vahap Munyar were the third and fourth writers respectively. 18 opinion columnist made news articles about KAGIDER and also 65 opinion column were published in the newspapers examined on KAGIDER.

Conclusion

News about KAGIDER of three national newspaper included in the sampling was examined in this study. It was determined that the number of news items differs according to topics, years and months. Among 2014- 2015-

2016- 2017 years, it is observed that a total of 251 news items were published and the most news was published in the year of 2017 with the rate of 41%. The least news was published in the year of 2014 with the rate of 14.3%. It is seen that in this period the most news regarding KAGIDER was published in Hurriyet newspaper with the rate of 74.5%. The least news published in Posta newspaper with the rate of 1.2%. The rate of news published in Sabah is 24.3%.

When the distribution of KAGIDER news according to years and newspapers is examined, it is seen that Hürriyet published the most news in 2017. In 2014, the number of news published by Hürriyet and Sabah is almost the same. The number of news about KAGIDER has increased every year in the newspaper named Hürriyet.

When the news items of the newspapers monthly period is examined, it is seen that it is the most in November at Hürriyet newspaper, followed by October and May. The least published news was in Hürriyet in August. While the month which is the most published news in Sabah newspaper is March, the least one is in June. In Posta newspaper published only three news articles about KAGIDER, news articles were published in April, May and November.

When the types of the news published regarding KAGIDER news are taken into consideration, it is seen that they are mostly published in the categories of "news", "opinion column" and "interview". In terms of news types, 176 news, 65 news in the opinion column and 10 news articles in the interview section were published.

The most published news was in the Economy section with 212 news items. The number of news published in the section of politics, culture/art and world news are nearly same. After the economy section, the most published news is in the section of "agenda". As the primary purpose of KAGIDER is to develop women entrepreneurship, the most published news section which is "economy" parallel with its purpose. The news regarding KAGIDER was made in the section of politics, education and culture/ art. It shows that KAGIDER wouldn't take part in only economy sections. The news named "KAGIDER will be the companion of women entrepreneurs" is an example for "economy" news according to section. The news states that the biggest obstacle in front of women entrepreneurs is education, access to finance, lack of market access and role model. The news named "women's quota in incentive package" is an example for "economy" news according to section. The news states that KAGIDER Chairman Sanem Oktar made suggestions for giving important incentives to women and increasing incentive rates.

When news coverage on KAGIDER is examined, it is seen that the news was published to increase the number of news regarding women entrepreneurs. 75 news were published to "increasing the number of women entrepreneurs". With 69 news, the title of "getting reputation by creating a positive image about the association" is in the second place. 40 news articles were published under the title of "developing relations with NGO's". The least published news is from the title of "getting information from public", "enlightening the public and trying to win the public support". The news named "Deadline 31st of July" is an example for "increasing the number of women entrepreneurs" news according to news coverage. The news states that "Turkey's Woman Entrepreneur Competition" is organized with the collaboration of Garanti Bank, Women Entrepreneurs Association of Turkey (KAGIDER) and Economist magazine and also every women entrepreneur can apply it.

Gila Benmayor and Ayşe Arman became columnists who made the most column writing about KAGIDER. Şelale Kadak and Vahap Munyar were the third and fourth writers respectively. 18 opinion columnist made news articles about KAGIDER and also 65 opinion column were published in the newspapers examined on KAGIDER.

References

- Aslan, Ş., & Atabey, A. (2007). Küresel Rekabette Kadın Girişimcilerin Rolü ve Türk Kadın Girişimci Tipolojisi. *Journal of Azerbaijani Studies*, 12(1-2), 1-17.
- Aslan, Ş., & Atabey, A. (2009). Küresel Rekabette Kadın Girişimcilerin Rolü ve Türk Kadın Girişimci Tipolojisi. *Journal of Azerbaijani Studies*, 1-17.
- Atabek, N. (1998). Gündem Belirleme Yaklaşımı. *İstanbul Üniversitesi İletişim Fakültesi Dergisi*(7), 155-174.
- Avrupa Komisyonu Türkiye Temsilciliği. (2001). *Sivil Toplum İşbaşında*. Ankara: Avrupa Komisyonu Türkiye Temsilciliği Yayını.
- Aziz, A. (2015). *Sosyal Bilimlerde Araştırma Yöntemleri ve Teknikleri*. Ankara: Nobel Yayıncılık.
- Bayhan, V. (2002). Demokrasi ve Sivil Toplum Örgütlerinin Engelleri: Patronaj ve Nepotizm. *C.Ü. Sosyal Bilimler Dergisi*, 26, 1-13.
- Besler, S., & Oruç, İ. (2010). Türkiye'de ve Yazılı Basında Kadın Yöneticiler. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 10(1), 17-38.
- Besler, S., & Oruç, İ. (2010). Türkiye'de ve Yazılı Basında Kadın Yöneticiler. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 10(1), 17-38.
- Drucker, P. (2000). *Yeni Gerçekler*. İstanbul: Türkiye İş Bankası Yayınları.
- European Commission. (2018). European Commission: https://ec.europa.eu/growth/smes/promoting-entrepreneurship/we-work-for/women_en adresinden alınmıştır
- KAGIDER. (2018). Şubat 16, 2018 tarihinde Türkiye Kadın Girişimciler Derneği: www.KAGIDER.org adresinden alındı

- Kalaycıoğlu, E. (1998). *Küreselleşme, Sivil Toplum ve İslâm*. Ankara: Vadi Yayınları.
- Kapu, H. (2004). Anadolu Girişimcilerinin Girişimcilik Değerleri. *12. Ulusal Yönetim ve Organizasyon Kongresi*. Bursa.
- Karakoç, U., & Kolaşın, G. U. (2008). *Kadın İstihdamını Artırmak için Girişimcilik Desteklenmeli*. İstanbul: Bahçeşehir Üniversitesi Ekonomik ve Toplumsal Araştırmalar Merkezi.
- Keskin, S. (2014). Türkiye'de Kadın Girişimcilerin Durumu. *Girişimcilik ve Kalkınma Dergisi*, 9(1), 71-94.
- Kurt, M., Ağca, V., & Saffet, E. (2006). Afyonkarahisar ili Girişimcilik Performansının Coğrafi Bilgi Sistemleri Analizi. *Afyon Kocatepe Üniversitesi, İ.İ.B.F Dergisi*, 8(2), 98-103.
- Leyla, Ş. (2011). The new actors of women's movement: women NGOs and their potentials. *Eurasian Journal of Anthropology*, 2(1), 1-15.
- McCombs, M. (2004). *Setting the agenda: The mass media and public opinion*. Cambridge: Policy Press.
- Özer, M. H. (2008). Günümüz İtibariyle Sivil Toplum Kuruluşlarının İktisadi ve Sosyal Fonksiyonları. *Elektronik Sosyal Bilimler Dergisi*, 26, 87-96.
- Özgöner, Ş. (2003). Girişimcilikte Stratejik Bir Yaklaşım: Teknoloji İnkübatörleri. *11. Ulusal Yönetim ve Organizasyon Kongresi*, (s. 91-113). Afyon.
- Robson, C. (2017). *Bilimsel Araştırma Yöntemleri Gerçek Dünya Araştırması*. Ankara: Anı Yayıncılık.
- Sayın, E. (2011). Kadın Girişimcilerin Sorunlarının Betimleyici Analizi. *Organizasyon ve Yönetim Bilimleri Dergisi*, 3(1), 23-32.
- Sayın, E. (2011). Kadın Girişimcilerin Sorunlarının Betimleyici Analizi. *Organizasyon ve Yönetim Bilimleri Dergisi*, 3(1), 23-32.
- Shaw, D. L., & McCombs, M. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, 36(2), 176.
- Songül Sallan, G., & Altındal, Y. (2016). Türkiye'de Kadın Girişimciliğinin Serüveni: Başarı Mümkün mü? *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 21(4), 1361-1377.
- Soysal, A. (2010). Türkiye'de Kadın Girişimciler: Engeller ve Fırsatlar Bağlamında Bir Değerlendirme. *Ankara Üniversitesi SBF Dergisi*, 65(1), 83-114.
- Soysal, A. (2010). Türkiye'de Kadın Girişimciler: Engeller ve Fırsatlar Bağlamında Bir Değerlendirme. *Ankara Üniversitesi Siyasal Bilgiler Fakültesi Dergisi*, 65(1), 83-114.
- Şahin, E. (2006). Kadın Girişimcilik ve Konya İlinde Kadın Girişimcilik Profili Üzerine Bir Uygulama. *Yüksek Lisans Tezi*. Konya: Selçuk Üniversitesi Sosyal Bilimler Enstitüsü.
- Tekeoğlu, A. N. (2013). Bütünleşik Pazarlama İletişimi ile Kadın Girişimciliği ve KAGIDER'in İncelenmesi. *Marmara Üniversitesi Sosyal Bilimler Dergisi*, 53-59.
- Tekin, M. (2000). *Girişimcilik ve Küçük İşletme Yöneticiliği*. Ankara : Günay Ofset.
- TÜİK. (2016). Şubat 21, 2018 tarihinde Türkiye İstatistik Kurumu: www.tuik.gov.tr adresinden alındı
- Weaver, D. (2007). Thoughts on Agenda Setting, Framing, and Priming. *Journal of Communication*, 57(1), 142-147.
- Yagade, A., & Dozier, D. M. (1990). The Media Agenda-Setting Effect of Concrete versus Abstract Issues. *Journalism Quarterly*, 67(1), 3-10.
- Yalman, İ. N., & Gündoğdu, Ö. (2014). Kadın Girişimciliği ve Bölgesel Kalkınma : TR72 (Kayseri, Sivas, Yozgat) Bölgesinde Uygulama. *Girişimcilik ve Kalkınma Dergisi*, 9(1).
- Yüksel, E. (2007). "Kamuoyu Olusturma" ve "Gündem Belirleme" Kavramları Nerede Kesismekte, Nerede Ayrılmaktadır? *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 7(1), 571-586.
- Zeybekçi, N. (2017, Ekim 17-18). TÜRKONFED 21. Girişim ve İş Dünyası Zirvesi. *Girişimci Ekonominin Yüklemidir. Yüklem Olmadan Cümle Olmaz*. Ankara, Türkiye.
- Zucker, G. Z. (1978). *The variable nature of news media influence*. New Brunswick, NJ: Transaction Books.

Work Experience of Vocational School Students: Business Department Sample

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Abstract

At Vocational School level, work is specified final years of an apprentice level course. Since the lot began to vary human-focused situation by the outcome of up to date life, every firm tried to proffer the best class. At the end of the on hand check it is central to weigh up whether much loved areas are reached. Didactic institutions are the elementary originalities where these areas must be modernized (Tuononen at all., 2015).

The cram aimed to investigate how working even as studying is associated to cram victory and took lines to erudition and the scenery of the work. A total of 154 student done a feedback form at the point in time of their promotion day. The conclusion exhibited that doing a new abstract work was associated to focal point to erudition, and non-abstract work was associated to an uncomplicated cram of courses. Also, we set up that considered studying has an imperative responsibility in terms of application practice. By focusing student' organizing helps and highlighting their deep-level erudition, student come across it straightforward to construct connection between work and sermon studies.

Key words: *Vocational school, student, work, graduation, non-academic work*

Introduction

Periods of work and work-based learning is a useful application that most young people work the work environment. Vocational School students every greater than the world fit into place in pay while erudition at school. Explore studies explain that the sum of working student has amplified in numerous countries over the years, for case in point in turkey, Czech republic and Nederland (Barley, Z., Lauer, P., Arens, S., Apthorp, H., Englert, K., Snow, D., Akiba, M. 2002; Tuononen at all., 2015; Ryan et al. 2011; Manthei And Gilmore 2005). Robotham (2009) argues that numerous students could expend supplementary time at their work place than in university programs. In addition, the authors bear the plan that the student must expend supplementary time at their work place than in university programs. For foremost explanations of student work during learning at school we can say two intentions that top the rate of existing settings and in advance work for coming occupation. But it is wanting to add the student' work is commonly non-abstract, for example, working in the textiles or package sector (Broadbridge And Swanson 2006). And, the work is frequently not associated to their training grounds and potential occupations because of their first measures to first-class the working dwelling is cost-effective to a certain extent than educational (Tuominen at all., 2015).

Methods

The study was passed out at Kocaeli Vocational School of Kocaeli University In Turkey. The facts were together in the spring of 2017 from beginning to end an electronic questionnaire. A total of 154 business department student done the opinion poll at the time of their promotion. The contestants were female 54 % (n = 83) and male %46 (n = 71). The ages varied from 21 to 38 years (m = 27, sd = 6.3): more than a third of the contestants were fresher than 23 eons. (Tuononen at all., 2015).

The useful feedback form precise the student' work and lines to erudition. The scenery of the work was not speaking into three categories: own abstract work, other abstract work and non-abstract work (Tuominen at all, 2015).

- *Other academic work meant work that was academic but differed from the student's own study field.*
- *Own academic work meant work that was related to the student's discipline or major.*
- *The third type had no connection to university studies.*

This cataloging planned by the playwrights of the flora of the work connected with the student' own estimations of their works. Student was inquired how many hours they achieved unlike varieties of work on usual per week thru the second year of education. The ruler stayed 1 = none, 2 = less than 20 h and 3 = more than 20 h. For the student may have had unlike varieties of works, it was fashioned a flexible work in which 1 = no work, 2 = own abstract work, 3 = non-abstract work, 4 = both own abstract work and non-abstract works (Barley, Z., Lauer, P., Arens, S., Apthorp, H., Englert, K., Snow, D., Akiba, M. 2002; Tuominen at all, 2015). Variables calculating the flora of work and training victory are existing (table 1).

Table 1. Variables measuring the nature of work and study success (Tuominen at all., 2015)

<u>Variable</u>	<u>indicator</u>
Nature of work	
Own academic work	1 = none, 2 = < 20 h, 3 = ≥ 20 h
Other academic work	1 = none, 2 = < 20 h, 3 = ≥ 20 h
Non-academic work	1 = none, 2 = < 20 h, 3 = ≥ 20 h
Work	
1 = no work	
2 = own academic work	
3 = non-academic work	
4 = both own academic and non-academic works	

Findings

The outcome showed that 88 % of the student had worked all through their last year of studies. 30 % had own academic work and 21 % non-academic work. Also, 37 % had both an own academic and non-academic works. Only 12 % of student had no work. More than half of the student worked less than 20 h per week and 44 % of them more than 20 h. The number of students' works are presented in table 2 (Tuominen at all., 2015).

Table 2. The nature and amount of student' works

	F	%
<u>Nature of work</u>		
No work	18	11.7
Own academic work	46	29.9
Non-academic work	33	21.4
Both own academic and non-academic works	57	37.0
A total of cases	154	100.0
<u>Amount of working (per week)</u>		
None	25	16.2
<20 h	61	39.6
≥ 20 h	68	44.2
A total of cases	154	100.0
<u>Nature and amount of work</u>		
<u>Own academic work</u>		
None	60	39.9
<20 h	56	36.4
≥ 20 h	38	24.7
A total of cases	154	100.0
<u>Other academic work</u>		
None	99	64.3
<20 h	35	22.7
≥ 20 h	16	13.0
A total of cases	154	100.0
<u>Non-academic work</u>		
None	78	50.6
<20 h	46	30.0
≥ 20 h	32	19.4

A total of cases	154	100.0
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When we investigated the facts, a few misplaced ethics was observed. The sum of not their morals regarding the work variables was from top to bottom near: other abstract work 18 %, non-abstract work 14 % and own abstract work 5 %. When missing values turned out in the work variables with non-missing values in another work variable. The values were replaced by zeroes. For example, if a student had a missing value in “non-abstract work” and “other abstract work” and a non-missing value in “own abstract work”, the two missing values were replaced by zeroes to explain the situation that the student had only worked in own abstract field (Tuominen at all, 2015).

The relationships between the flora of work and gender/age were analyzed with irritable-organizations and devious chi square (χ^2) statistics. The connections between the total and flora of work and study success were first investigated by Anovas. Then, the outcome sizes were planned to use g^2 ethics on condition that by SPSS 16. The entity feedback form stuffs were not integrated in the investigates because they were unsurprisingly recognized to compare lofty near (Tuominen at all., 2015).

The factors model performed as the root for the organizational model for the representations. The autonomous factors (the factors associated to flora and quantity of work) were categorical in flora. Dummy factors had created, that the sort “no work” effective as a represent. The relapse factors connected to the factors testified under the model are so taken as representing from the situation value. The possessions of the autonomous variables on the product factors are explained as virtual to the situation variables (Tuominen at all., 2015; Hayes and Preacher, 2014; Katsikas, 2013).

Results

The outcome of this study explains that financial, common and pay conditions could not be similar in different countries, but it give the impression that comparisons on hand in work can sustenance student’ knowledge period if working periods are comparatively not much. In this cram we understand that even though the instruction program organization is different from the supplementary republics, the outcome is unmoving in contour with the prior scholarships about this question (Tuominen at all., 2015). In conclusion, to scrutinize these comparisons and transformations in supplementary detail, more examination is desirable to comportment in numerous republics with dissimilar instruction and community classifications.

Student who worked not as much of than 20 h acknowledged supplementary education glories than that the person worked over 20 h per week. Moreover, the education created that non-working student established much education glories than student who worked a lot of hours, but which students didn’t be different from student who worked lower than 20 h weekly. This mean that the education proved the subnormal connection between working hours and education accomplishment. Student who had both own abstract field and non-abstract works got more education credits than the student who only one type of work or no work (Tuominen at all., 2015).

References

- Barley, Z., Lauer, P., Arens, S., Aphthorp, H., Englert, K., Snow, D., Akiba, M. (2002). Helping A-Risk Students Meet Standards: A Synthesis of *Evidence-Based Classroom Practices*, No. ED-01-CO-0006, Office of Educational Research and Improvement, Washington, DC.
- Broadbridge, A., & Swanson, V. (2006). Managing Two Roles. A Theoretical Education Of Student’ Employment Whilst At University. *Community, Work And Family*. Doi:10.1080/13668800600586878.
- Hayes, A. F., & Preacher, K. J. (2014). Statistical Mediation Analysis With A Multi categorical Independent Variable. *British Journal Of Mathematical And Statistical Psychology*, 67(3), 451–470. Doi:[10.1111/Bmsp.12028](https://doi.org/10.1111/Bmsp.12028).
- Katsikas, E. (2013). The Impact Of Student’ Working Status On Academic Progress: Assessing The Implications Of Policy Change In Greece. *Journal Of Education And Work*. Doi:[10.1080/13639080.2012.691606](https://doi.org/10.1080/13639080.2012.691606).
- Manthei, R. J., & Gilmore, A. (2005). The Effect Of Paid Employment On University Student’ Lives. *Education Training*. Doi:10.1108/00400910510592248.
- Neill, N., Mulholland, G., Ross, V., & Leckey, J. (2004). The Influence Of Part-Time Work On Student Placement. *Journal Of Further And Higher Education*. Doi:[10.1080/0309877042000206705](https://doi.org/10.1080/0309877042000206705)
- Tuononen, T., Mattsson, M., Parpala, A. & Lindblom-Ylänne, S. (2015). Work In Relation To Study Pace And Thesis Grade: Investigating The Mediating Role Of Student Learning. *Higher Education*. Doi:10.1007/S10734-015-9937-Z.
- Ryan, M., Barns, A., & McAuliffe, D. (2011). Part-Time Employment And Effects On Australian Social Work students: A Report On A National Study. *Australian Social Work*. Doi:10.1080/0312407x.2010.538420.

Wrestling with the Future in Vocabularies of Tradition: The New Entrepreneurial Subject of the Postcolonial Elite School

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Abstract

“Given the socio-cultural structure of post slavery Barbadian society, this invariably meant some sacrifice of the essence of negritude, of what it meant to be quintessentially Black and African. Similarly in an age when for most Blacks formal schooling was the main avenue of social mobility and the Established Anglican Church, the bastion of social privilege, to internalize collective norms and values of the Grammar School and the Established Church was to improve one’s chances of achieving upward mobility from the working class.” (Jemmott, 1998, p. 48).

Even now...like my uncles...my mother...they are asking me...well, when are you applying to Harvard....Oh, next year you will be going to Yale.... So, these are my expectations and I just live up to it...I have a cousin who went to Harvard at age 15.....(Ashley, Sixth Form Student at Old Cloisters High School, Barbados)

Introduction

The story I am about to tell of Barbadian Postcolonial Elite Schooling is a story paradoxically about a group of working and lower middle-class youngsters who embrace excellence as a pure line vehicle to middle class futures. It is a story of aspirant subjects in an aspirant nation, an aspirant island. It is a story written against methodological nationalism and rooted in the existential transnationalism that defines the modern history of the island from its founding in British 17th century colonial expansionist trajectory in the region. In telling the story of findings of ethnographic research on “Barbados Elite Schools in Globalizing Circumstances,” I begin with a satirical quote from Regent Jeffrey— a white alumnus of one of the two schools I am studying there, Old Cloisters (the other school in the study is called Ardent Arbors)—on the occasion of the school’s 250th anniversary. Regent Jeffrey’s mock serious quip inverts the liquid commonsense of the “tourist/vagabond” motif that Zygmunt Bauman argues is embedded in the globalization discourse of late modernity (Bauman, 1998): “Barbados got the most talented and intelligent African immigrants, and the most intellectually backward deportees from England, Scotland and Ireland...Over the years we whites have been content to get kicked out of school around third form, run businesses, fornicate, drink rum and use language laced with expletives leaving the intellectual side of things to our more erudite black brethren” (Jemmott, 2006, p. 159). Let’s establish Regent Jeffrey’s mischievous comments as a place marker of sorts in the swiftly shifting sands of the new century. Besides, Jeffrey’s quaint attachment of prestige to the vernacular, his elevation of the vulgar gaze as symbolic capital, and his re-scripting of Pierre Bourdieu’s inventory of dispositions or habitus, what is important here is that Jeffrey’s comments allude to the making process of the island’s intellectual class, its transnational character, and in our interested case, the recruiting of post-C. Wright Mills elite ethical subjects from deep within the subaltern classes of Barbadian black labor. [These are the subjects that V.S. Naipaul tells us in his books *Middle Passage* and *Half A Life*...are “halfmade”] The postcolonial scenario of the worlding of elites is one not of class reproduction, therefore, so much as of class making. This then leads me to a larger starting point. That is that, any examination of the interface of education and globalization with respect to what Aihwa Ong and Saskia Sassen call “post- development states” such as India, Argentina, Singapore, Hong Kong, South Africa and Barbados—whose elite schools are the focus of our international research collective — must be voiced in a postcolonial timbre (Ong, 2006; Sassen, 2008). That is to say, that the coordinates at this intersection of dynamic worlding processes must be set within the long durée of the project of modernization and the aspirational riddle of modernization theory in particular—From Juan Ginés de Sepúlveda and Bartolomé de las Casas’s debate on the question of does the native have a soul? to the neo-soul of Rihanna, Cover Drive, and the new aspirations of Barbadian youth hitching a ride with their school diplomas to Christopher Lasch’s North America as the “one and only true heaven.” In this presentation, I take a distinctly Benjaminian approach, drawing on his insistence in his discussion of the Janus nature of Paul Klee’s haunting painting, *Angelus Novus*, that the past buffets the present. There is he said “a storm in paradise” (Benjamin Year and page)...This storm maybe in the case of this study the

roiling ambitions of the Barbadian young, juxtaposed to the powerful traditions in their school system inherited as it is from the British metropolitan paradigm.

The modernization project as it bears upon education in Barbados has a strong existentially transnational character. In what follows, I briefly outline the transnationalist history and context to elite schooling in the island, always with this long relief of modernization thinking in mind. Because, following Arjun Appadurai's essay "The Spirit of Weber," under neoliberalism the modernization project has been transformed from a proposed policy initiative of socially caring emerging TW states into something else: the work and care of the self articulated chiefly in the adventurism and the risk taking of the young. It has become as Madhavi Murty ("It's True, India Has Emerged": Gender, Class, and the Entrepreneurial Subject in India's Mainstream Media) suggests the project of the entrepreneur—the new heroic figure rising from the ashes of the collapsing Keynesianism of welfarist states. I discuss the schools in light of this. I introduce some of the students as exemplars of new neoliberal calculations—representatives of the spirit of enterprise. And, I draw some conclusions bearing upon what the venerable geographer, David Harvey calls "ruptures with continuities."

History as Context

Barbados from the very beginnings of its modern British colonial settlement in 1627 has always been an island defined by powerful processes of absorption and expulsion. The logics of this are rooted in its precarious but steely economic existence, its particular race/class configuration, its peculiar insertion into the global economy as a plantation/post-plantation society, and the compensatory and the muscular aspirations of its people articulated most poignantly, deep inside its gentrified, largely landless, working class. This has meant—despite its historical and popular depiction of continuity, relative economic prosperity, solidity and cultural conservatism—continuous diremption, mobility and a pragmatic transnationalism, circulation and extension of its population. It has meant the movement of labor from Birmingham, Liverpool, Dublin (<https://bimchat.wordpress.com/tag/ireland/>), later from Africa, India, China and the continuous circulation of population across the islands of the Caribbean sea, to the South American Continent, to England and North America. This is captured in novels such as George Lamming's *The Emigrants*, V.S. Naipaul's *The Mimic Men*, Samuel Selvon's, *The Lonely Londoners* and Jamaica Kincaid's *Lucy*. Lamming's *Emigrants*, for instance, foregrounds the motley crew of cooks, masons, and transportation workers from all over the Caribbean, along with intellectuals like Lamming and Naipaul, leaving for England on the same ship, the Empire Windrush, in the 1950s. The foundations of this mobility (real and vicarious)—residing in matters of its constrained space (a tiny island of 166 square miles) and its relative lack of natural resources—has often meant a fundamental investment in the care of the self as the only viable means of production available to the property-less working class. The is class that the Cloisters school historian, Rembrandt Simmons, calls the gentrified working class—defined by the home-school-church nexus, a taste for light classical music, old country and western songs...Jim Reeves, Marty Robbins, Charlie Pride ...and the whole venue of slow music, a rigorous investment in the law and an insistence that the law be followed. A significant dimension of this working class expression of the care of the self has been linked to an existential cosmopolitanism and outward movement. Significant elements of its population have always anticipated movement, even as its relative prosperity and regional ascendancy has meant the migration of peoples from other Caribbean islands to it. This movement has been polyvalent—within the Caribbean region, to the US, Canada and the UK, to Europe, Latin America. And, increasingly China, Singapore, etc have become points of reference. As Claire Livingston, curriculum leader at Old Cloisters, told me in our interview: "There is a saying: 'You can find a Bajan (a Barbadian) everywhere, even on the moon.'"

This framework of liquid global connections, forces and imaginations—the Burawoyian parameters that inform our research exploration—melt and flow into each other in the lived and commodified existence of real existing subjects of the Old Cloisters school we are studying in Barbados. The Barbadian educational system was profoundly externalized from its very beginnings in the seventeenth and eighteenth centuries. Old Cloisters and Ardent Arbors were historically exemplars of the British grammar school transplanted overseas. All of Cloisters headmasters, right up until almost the last quarter of the twentieth century came from Oxford or Cambridge and the schools' faculty came out of the British elite public school tradition to spawn a high stakes, high achievement culture in the island (show a list of these headmasters and their public school origins). The Barbados educational system was therefore hooked up to the British educational system, with a sponsored minority ending up in Oxford and Cambridge (The Mitchinson Report, cited in McCarthy 1983, p. 205).

But we now were entering a research context in Barbados at a flashpoint of profound change and disruption of the British grammar school model as the forces of globalization, the downturn in the global economy and the emergence of the post-development state (Barbados has set 2020 as the date when it expects to transition into First World developed status), the expansion of the media environment dominated by American cultural form, and the

ubiquitous access to cell phones and the internet that define the everyday life of the young, have generated new rambunctious aspirational and entrepreneurial desires and imaginations for exotic career futures within the contemporary youth communities that exceed the capacities of the school and the nation. This has resulted in strategic action on the part of students reflected in new curricular choices (management of business, information technology, computer science, law, economics, accounts, communications studies, Spanish are displacing the traditional liberal arts subjects of history, geography, Latin, Greek, etc and the complete demise of the classical sixth form around which the School had built its identity as a school of extraordinary academic excellence) parked alongside the old liberal arts emphasis that constitutes historical bequeath of these schools .

As Ardent Arbors and Old Cloisters' students turn their gaze towards futures beyond the island, reciprocal developments of great import are occurring. New aggressive recruitment drives are being launched by universities and elite high schools in the US and Canada targeting academic talent in Barbados (<http://www.nationnews.com/articles/view/universities-eye-local-students/>). This reciprocal investment—precipitated by a metropolitan generated opportunism underwritten by the new priorities of NAFTA and WTO to externally integrate third world economies (inclusive of services such as health and education) into the global system—has brought the phenomenon of the annual International College Fair showcasing US, Canadian and UK universities and colleges onto the Barbadian setting fomenting new powerful desires in Barbadian school youth for something that their schools cannot satisfy.

This hard court press on the Barbados elite schools was corroborated by Judith Pim, guidance counselor at Ardent Arbors, who informed us that: “We have a College Fair every year in Barbados and a number of universities from within the Caribbean, US, Canada and England are in attendance. However most of them, if not all, try to get a special visit to our schools. That I can remember now—Canada...Waterloo, Queens, Western Ontario, Humber/Guelph, St. Mary's, York, University of Toronto—these come about every year. A rep from Waterloo has come in and done a workshop for me on 'Job Preparation,' actually we will meet-up later in the month for a send-off for the students going this year.” The International College Fair and the recruiting practices of the international universities and colleges help set up and bolster the powerful drive of Ardent Arbors and Old Cloisters students to look to a future outside of Barbados.

These developments have set off powerful configurations of needs, interests and desires and reflect themselves in extraordinary juxtapositions and hybridities. The British grammar school tradition is evident as a powerful imperial symbolic that materially dwells within the zone of reference that Basil Bernstein calls a “restricted code” (1977, p. 4) of school uniform, emblems, flags, school songs, and the ritual of time—Michaelmas Term, Hilary Term and Trinity Term—old ways of ordering the school world that have disappeared elsewhere. There is evidence of these colonial condensations everywhere. The students clearly embraced this sense of tradition and saw their schools as markers of distinction that also helped to define them as unique and different and “elite.” But at the same time, these students are not orienting to England in the ways of the past. They are orienting to North America and increasingly also to China, which now has committed itself to providing 5,000 scholarships to students in Caribbean and Latin America. Students are therefore pursuing two parallel curriculums: often the schools' liberal arts/humanities collection code as well as their neoliberal calculative project defined around business studies. Elements of this parallel, neoliberal curriculum were often pursued outside the school as several of the students attended “lessons” with “master teachers” in their particular chosen subjects of study.

Most of the students we interviewed expressed a strong interest in entrepreneurship. One student, Ginger, going so far as to indicate that she wants to found a magazine because this would allow her to combine her interest in writing and the creative arts with her interest in business:

CM: Now as you kind of think about your schooling and...your future ...is this informing how you are taking your school subjects?

Ginger: Well I do management of business, economics and literatures of English...When I got into sixth form I chose...I want to work at a Magazine and eventually own my own...So then I chose business to go with that and... literatures in English....

M.M: ...Why the push to business...how then to business now?

Ginger: Because business...business...well business basically rules the world!

It is this powerful discourse of entrepreneurialism that suffuses the air in the nation's popular, in the newspapers and electronic media, in the language of politicians and the speeches of government leaders and cheerleaders of the young. And, at Old Cloisters and Arbors Ardent youngsters are making the rational calculations that the venue that would support entrepreneurial activity is not, Barbados but somewhere “abroad.” The idea of making something from nothing, of creating a new productive activity drives these young imaginations. As, one

student at Ardent Arbors (Megan) noted: “Globalization is big!” Megan felt that the island and the schools have been overtaken by the speed and force of these changes:

CM: We were talking about globalization and were wondering if you had thoughts about that...we are interested in how young people are being prepared for globalizing futures...

Megan (with her friends Kelvin, Alistair, Abigail and Safiya): It (Globalization) is big now...We talk about it a lot in our classes because the Caribbean is very susceptible to it...as a small... as a number of very small open economies with the influx of all of these foreign goods...they are talking about the effect on domestic producers....different things are happening in the world...the taxation on the airfares ...the effect that it is having on our economy....the recession in the other countries....

CM: So what you are articulating is that globalization is being experienced as a kind of vulnerability of the region and its economies and Barbados in particular...

Megan: ...Before we use to have our preferential markets, you know, our exports... but things like that are disappearing...Because there are some people who don't see it [the challenges and the decline]...I am talking about adults here. I am like how can you not know this?

In response to this sense of the overwhelming challenge of globalization some students like Kelvin felt, more positively, that globalization offered opportunities. “It” was “useful... because it exposes us to different cultures.” Kelvin saw globalization as offering a world of convergence and online community: “you get to learn a lot.” The “world” he believed was available in the BlackBerry revolution:

Kelvin: Because right now, right now, I am kind of losing my grades in Spanish [laugh]... and I actually have a Spanish friend in Mexico and every now and then she would help me to revise and stuff...

MM: So, she is a native speaker?

Kelvin: Yes...

CM: And you are in touch with her ...How? ...Through Facebook?

Kelvin: Skype and basically everything else...

MM: How did you meet her?

Kelvin: Well....it was basically on an online game...

Not all Old Cloisters or Ardent Arbors students want to be entrepreneurs. A few of them like Blaise Pascal or Floyd Pitts see their peers as “sheep” (Floyd Pitts) who are blindly following “what is on television” and “online”...Pitts maintained that he was not part of the “BlackBerry” revolution. Neither was he overly taken by tertiary education in North America. He felt, that except for universities like Harvard, a good liberal arts degree from the University of the West Indies was “equal to any abroad.” His colleague, Blaise Pascall at Old Cloisters, was even more critical of his peers and their quest for lucrative professional futures:

Blaise: I do have to commend the staff of the institution. They are very devoted...But I do think that there is still the emphasis, the enduring emphasis...probably since colonial times....especially since education is seen as a tool of social mobility and we have this uh...this drive to become doctors and medical doctors and lawyers and what not.....it has become really like an oversaturation of those in job markets now...every street you see in Barbados ...there is always such and such attorney at law...we really do have this drive for technical-scientific subjects...everybody in my class...I don't know... I find them really irritating... “Oh I want to be doctor”...Good...really unique!

MC: Why do they want to be a doctor?

Blaise: Because if they told me they wanted to help people then I would be a little more interested but...everybody knows it is the money...Because if they were really concerned about helping people, they would join something like Médecins Sans Frontières..They are not concerned with helping people. They are concerned with the very lucrative profession that it is.

Students like Blaise at Old Cloisters and Megan at Ardent Arbors, who articulated such a keen sense of the challenges facing their school and country, were attending the three-day International College Fair, held at the Sir Erskine Sandiford Sherbourne Convention Centre with a keen sense of curiosity and optimism even when they were skeptical. There, they talked to recruiters from North America about prospects and possibilities of job futures in areas that range from underwater welding to robotics, artificial intelligence, control engineering and business to theater and comedy— exceeding the establishment curriculum taught in the school. In other words, students at Old Cloisters and Ardent Arbors were wrestling over their futures as they both embraced and struggled with the symbolic layers of tradition that defined their school pasts, and of which they were the current custodians. They were also wrestling with the wider society, as well, which they saw as overtaken by events and a block to their aspirational desires:

Blaise: The problem we are having now is that because the orientation of tourism [to eco tourism]...I find Barbados itself is not really competing.....

This perceived sense of the limited range of options informed the encounter between students and recruiters. Students were seeking new avenues and futures that they felt could be realized at the universities in North America. Recruiters told us that it was better to talk to the students without their parents because the parents still wanted the traditional career paths—doctors and lawyers. The encounter with recruiters, then, was a well-managed collusion among students and recruiters and the school personnel who recognized that these universities offered the promise of material futures for their students. I have discussed this rendezvous of stakeholders elsewhere...Given the constraints of time I would like to conclude and summarize here.

Schools Ancient and Modern: Old Cloisters and Ardent Arbors

In our many visits to Old Cloisters and Ardent Arbors grammar schools in Barbados, we were struck by one overwhelming and persistent feature. These schools wrapped up like the island itself in myths and traditions deeply rooted in a British colonial restricted code of ritual, distinctive emblems, school flag, distinctive school uniform and a pyramidal structure of authority going back to the seventeenth, eighteenth and nineteenth centuries were now caught up, despite themselves, in a swirl of change linked to globalizing pressures, national and regional imperatives, and the dynamic global imaginations of school youth. To understand this change from the perspectives of actors and stakeholders (students, teachers, parents, policy makers, politicians, business community, etc.) within the school and without, one must attempt to understand something of the long relief of the past of these schools (which still plays into the present) and the way a key variable that animates our research investigation, “elite” has overtime come to be redefined. Both Old Cloisters and Ardent Arbors were schools that were founded to promote the education of white youth (boys in the case of Old Cloisters; girls in the case of Ardent Arbors) who could not afford the exclusive education overseas in England (Eton, Harrow, Rugby) or in the United States (William and Mary). But these same schools would quickly become the preserve of fee-paying planter/mercantile elites who saw the schools rise in status as educational institutions of excellence. One only needs to look at the photographs aloft on the walls of the school halls [show pictures of these]. Every single school principal, right up to the early part of the post independence era came from England. The school pictures also foreground, during this long durée, a preponderance of planter mercantile youth. But on our research visit, visible and embodied evidence of change was everywhere registered: the schools’ principals, the teachers, the students, its key stakeholders were now Afro-Barbadians. This transition—we were told in our interviews with students, principals, teachers and critical analysts outside the school—did not happen by some process of natural attrition of Barbadian local whites but reflected a mix of Fabian socialist educational and social policy interventions pursued by the first Prime of Minister of Barbados, Errol Walton Barrow in the early 1960s and consolidated thereafter. These policies aimed at expanding access to the grammar schools to “all Barbadians” (Stuart Calmley at Old Cloisters) based on competitive exam results (scores in the Common Entrance Exams) as part of policy agenda of universal secondary education. This policy opened the floodgates to lower and middleclass black youth on the island. Old Cloisters and Ardent Arbors are emblematic markers of this policy of meritocratic re-orientation of the schools. But Barbados is now entering a new phase that might be called post developmental. There is a strategic engagement with globalization and neoliberalism in terms of the vaunting of entrepreneurship as the means-ends rationality of all institutions, which has now entered these schools. Old Cloisters and Ardent Arbors therefore represent uneven, contradictory, conflicted and hybrid institutions animated by the nodal discourse of globalism, cultural heritage linked to England, national assertion that articulates a useable Africanism and diaspora discourses, regionalism and externalist globalist imagination of young fueled by the cell phone, the internet, popular culture and the mass media.

We found that “eliteness” at Old Cloisters and Ardent Arbors was an investment in a plenitude qualified by the gap between aspirations and real existing conditions and resources. Cloisters and Arbors were schools marked by the play of contradictions and haunted by what Harry Harootunian calls a pregnant past.

- There was a powerful discourse of meritocratic justification that effaced race and class. The principals, teachers and students all maintained that it was “ability” and success in the steeple chase-like Common Entrance Exam that determined admission into the school. These schools were sites of disavowal of stratification of any kind, to use the language of Hommi Bhabha and Edward Said. Old Cloisters’ principal, Stuart Calmley, noted: “we have students from every strata.”
- These schools—which were overwhelmingly white, planter mercantile class up until the middle of the 20th century—are now overwhelmingly black, with a sprinkling of Indian, Chinese, and white students, the children of expatriates and multinational corporations.

- We found surprisingly that these students—who saw themselves as the best of the best— were often the children of masons, carpenters or police officers along with children of the professional middle class—lawyers, doctors and financial consultants.
- We did not find any children of the white planter mercantile class...There was a sense that these children were going to other schools, often private schools...one like Codrington High which we made a brief visit to and found children there represented from about 50 different nationalities.
- Old Cloisters and Ardent Arbors are schools defined by high academic achievement but this achievement is tied to a strategic set of actions and orientations of the students that, in the language of Tom Cross, an alumnus of Old Cloisters is undermining the ethos of intellectual cultivation that defined these schools in the past.
- This strategic action was reflected in new curricular choices that are displacing the old liberal arts curricular emphasis. Students were choosing such curricular subjects as business, economics, law and accounts and communication studies...instead of literature, history, geography, and mathematics. They are strategically putting together courses with the goal of pursuing professions in business, accounts, law, medicine etc.
- Both schools are also feeling the pressure to sustain their traditions in the context of new student orientations and central government pressure for the schools to participate in reproducing the new type of school subject that will better fit into the new Caribbean and the world, the new desire to orient to creative knowledge economy.....
- While this is the case, Old Cloisters which is located in the urban center seems to be struggling more with this change than Ardent Arbors where the principal, Kent Greene, who has two or three management degrees, is leading a strategic reorganization of the school. Ardent Arbors now competes in international exam competitions organized by the University of Waterloo in Canada among other things. Greene also runs professional retreats for his faculty in educational law, management, as well as first aid. Indeed, Ardent Arbors offers courses such as law and economics that students at Old Cloisters are choosing to take.

Conclusion

Forget the brain drain – today’s highly skilled migrants circulate between the US and developing countries, creating new technology businesses and spreading prosperity along the way. (Anna Saxenian, http://people.ischool.berkeley.edu/~anno/Papers/IMF_World_Bank_paper.pdf)

In her extraordinary essay, “Higher Learning in Global Space,” Aihwa Ong (2006, pp. 139-156) usefully observes that the North American university has become the grand bazaar, the great global marketplace, for international students from around the world in pursuit of globally valid credentialing and careerist futures. The university has been, in her view, disoriented from its endogenous role of preparing young people for citizenship within the US democracy and national space. According to her, the North American university has re-engineered its mission towards capturing substantial market share of the trans-border population of the worldly, upwardly-mobile and rationally-calculative young citizens increasingly leaving the Global South to seek their fortunes in the United States or Canada. The thrust of Ong’s writing in this fascinating essay is on the transformations, in light of these developments, occurring in US higher education. What the Barbados elite schools study illustrates is a reciprocal action on the part of the gentrified working class students who now turn away from traditional attachment to England and from unqualified nationalist affiliation and identity given their deep-bodied aspirational quest for educational and professional futures in North America. Here, we are ever mindful of the fact that the global ambitions of Barbadian youth are part of a larger set of processes linked to the revivification of modernization as a project that does not simply involve structural and economic processes but also practices of the care of the self that have a long historical backdrop in countries moving out of colonial pasts. Such processes of self-transformations linked to institutional change in the postcolony are often marked by disjuncture, contradiction and hybridity. The aspirational element of working class behavior as Schielke has told us in his brilliant essay on Egypt (“Living in the Future Tense: Aspiring for World and Class in Provincial Egypt”) is expressed in a new desire to breakaway entirely from the state apparatus that supported the old middle class tied to the elaboration of third world bureaucracy. Aspiration expresses itself in a lack—a pervasive sense of pressure on existential postcolonial lower middle class and working class subjects for a middle class respectability and material fulfillment—a semiotically bolstered dream of a plenitude that never comes and whose shadow side is an empty, unfulfilling debt-driven consumption represented in the North American middle class life. The Barbadian elite school subjects in this tale see their academic success and attainment as the only possible guarantee of access to this imagined life. Their idol then, their ambition as they tell it, is not to touch the garment of the heroic national transformer symbolized by the politician, the lawyer and the

doctor of the past...but to embrace the new figure of the entrepreneur who can turn water into wine....Schooling is thereby stripped of its sui generis meaning.....No student seemed interested in the toil of the teacher or the academic...who now fall steadily beneath their gaze.

References

- Bauman, Z. (1998). Globalization: The Human Consequences. Cambridge, UK: Polity.
- McCarthy, C. (1983). 1983 Imperial Involvement in Popular Education in Barbados 1833-1876. Edmonton, Alberta: M.Ed thesis.
- Ong, A. (2006). Neoliberalism as Exception: Mutations in Citizenship and Sovereignty. Durham, North Carolina: Duke.
- Robinson, W. (2004). A Theory of Global Capitalism: Production, Class, and State in a Transnational World. Baltimore, Maryland: John Hopkins.
- Sassen, S. (2008). Territory, Authority, Rights: From Medieval to Global Assemblages. Princeton, New Jersey: Princeton.
- Sklair, L (2009) The transnational capitalist class: theory and empirical research. In: Sattler, Friederike and Boyer, Christoph, (eds.) European Economic Elites: Between A New Spirit of Capitalism and the Erosion of State Socialism. (497-522). Berlin, Germany: Duncker & Humblot.

Yabancı Dil Öğreniminde Seyahat İngilizcesi İçin Sanal Gerçeklik Kullanımı

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Özet

Günümüzde teknoloji artık hayatımızın her alanını etkiler hale gelmiştir. Bu etkilerin en yaygın şekilde görüldüğü alanlardan biri de sanal gerçekliktir. Kesintisiz odak sağlaması, görsel öğeler sayesinde verilen içeriğin hafızada canlı kalması ve tecrübe ettirerek öğretmesi sayesinde sanal gerçeklik ile öğrenim eğitim alanında oldukça etkili bir yöntem haline gelmiştir. Özellikle yabancı dil öğreniminde en verimli yolun konuşma pratiği, en büyük engelin ise konuşma pratiği konusunda çekingenlik ve başarısızlık korkusu olduğu düşünülürse gerçeğini yansıtan sanal bir ortamda çeşitli yöntemlerle tekrar tekrar deneterek konuşma pratiği kazandıran ve bu sayede İngilizce konuşma konusunda çekingenlik ve korkuyu azaltan bir sanal gerçeklik uygulaması oldukça etkili olacaktır. Bu çalışmada yabancı dil öğretiminde seyahat İngilizcesi için seyahat sürecini tecrübe ettiren ve bu süreçte konuşma becerisini geliştiren bir sanal gerçeklik uygulamalarının kullanımının incelenmesi amaçlanmaktadır.

7 Haziran Ve 1 Kasım 2015 Genel Seçimlerinde Chp ve Mhp'nin Kampanya Stratejilerinin İncelenmesi

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Özet

Seçimler demokratik sistemin vazgeçilmez unsurudur; milli iradenin tecelli ettiği yer olan sandıkta seçmen oyunu kullanarak arzu ettiği siyasal partiyi iktidara taşımaktadır. Ancak seçmen kararını oluştururken siyasal bilgiye ihtiyaç duymakta, partiler ve adaylar arasındaki farkı anlamayı, kendisi için hangisinin daha yararlı olacağını görmeyi arzu etmektedir. Seçmene bu imkanı sağlayan ise siyasal iletişim kampanyalarıdır. Seçmenin ihtiyaç duyduğu bilgilerin belirli bir yöntem ve kapsam içerisinde seçmene sunulması, siyasal iletişim yönetiminin temel fonksiyonunu oluşturmaktadır. Siyasal iletişim yönetiminin içerisinde seçim kampanyasının planlanması, siyasal reklamlar, halkla ilişkiler, medya yönetimi, iletişim stratejileri vb. pek çok unsur bulunmakta; bütün bu unsurların tümü, seçmenin demokratik sistem içerisinde özgürce kanaatini oluşturmaya yardımcı olmayı amaçlamaktadır. Siyasal iletişim yönetiminin odak noktası olan seçim kampanyaları son yıllarda çok önemli gelişmeler kaydetmiş, iletişim teknolojilerindeki gelişmeler ile internetin ve sosyal medyanın hayatımızda kapladığı yer, seçim kampanyalarının teknik ve yöntemlerine de hızla yansımıştır. Siyasi partiler, hedef kitlesi olan seçmeni tanımak, anlamak, derdini anlatmak ve ikna etmek için tüm etkili yol ve yöntemlere başvurmakta, 'seçilen/tercih edilen' olmak için büyük bir çaba harcamaktadır. Kimi partiler bu amaçlarına ulaşırken, kimileri de başarısız olabilmektedir. Seçimlerden arzu ettiği sonucu alamayan siyasi partilerin karşılaştığı en önemli sorunların başında kendisini doğru ve etkili şekilde seçmene anlatamaması, ikna edici bir iletişim stratejisi ortaya koyamaması ve güven tesis etmekten, inandırıcı olmaktan uzak olması gelmektedir.

Çalışma siyasal seçim kampanyalarını incelemekte, başarılı olmak için neler yapılması gerektiği üzerinde durmakta, seçmeni ikna eden iletişim stratejilerine vurgu yapmaktadır. Makalenin örnek olay incelemesi 7 Haziran ve 1 Kasım 2015 genel seçimlerinde Cumhuriyet Halk Partisi ile Milliyetçi Hareket Partisi'nin siyasal seçim kampanyalarıdır. Her iki partinin anılan tarihlerdeki seçimlerde izledikleri kampanya stratejileri çeşitli boyutlarıyla ele alınmış, analiz edilmiş ve başarılı/başarısız oldukları yönler ortaya konulmuş, ilerisi için bir yol haritası sunulmuştur.

Anahtar kavramlar: *Siyasal iletişim, Seçim kampanyaları, İletişim stratejileri*

Giriş

21. yüzyıl bilginin bollaştığı, hızının arttığı, etkisinin çoğaldığı bir yüzyıl.. Bu yüzyılda bilgi ile birlikte iletişim de aynı hızlı süreci yaşadı, hayatımızın odağına yerleşti. Bilgi sahibi olan, bunu da çok hızlı bir şekilde gerçekleştiren bireylerin farkındalıkları arttı, dünya görüşleri genişledi, daha çok şey görür, bilir, anlar hale geldi. Bu durum, eskiden ikna etmenin nispeten daha kolay olduğu kitlelerin ikna edilmesini giderek çok daha zorlaştırdı. Bilgi kaynakları çeşitlenen, enformasyonu çok hızlı bir şekilde değişik mecralardan alabilen kitleler, kendilerine söylenenler karşısında daha temkinli yaklaşımaya başladılar. Bu tabloyu siyasete bağlayacak olursak, son yirmi yılda pek çok şeyin değiştiğini, hızla dönüştüğünü görürüz. Siyasal iletişim yönetiminden, seçim kampanyalarının içeriklerine kadar bu alandaki değişimler gözle görülür, elle tutulur niteliktedir. Siyaset kurumunun/siyasetçinin seçmenle kurduğu ilişki biçimi değişmeye başlamış, eski yöntem ve teknikler, teknolojinin de gelişmesine paralel olarak, yerini yeni olana bırakmaya başlamıştır. Yeni olan nedir diye bakıldığında, öncelikli olarak karşımıza "Yeni Medya" (sosyal medya) çıkmakta, eskiden miting yapmayı seçim kampanyasının en önemli işi gören siyasi partiler artık sosyal medyada tweet atmayı öncelemektedir. Eskiden seçmeni sokak sokak gezerek arayıp bulan ve derdini anlatan siyasetçiler, şimdilerde internet ortamında seçmeniyle buluşmakta, sanal ortamda canlı yayıp yapabilmekte, seçmeniyle etkileşimli bir ortamda mesajını verebilmekte, seçmenin derdini dinleyebilmektedir.

21. yüzyılın bu değişim ve dönüşüm parametrelerini anlayıp ona göre kendisini yeniden tasarlayabilen partiler; seçimlerden başarılı sonuçlar alabilmekte, seçmene kendisini doğru şekilde anlatabilme imkanı bulmakta, seçmeni ile sağlıklı bir iletişim köprüsü inşa edebilmektedir.

Makale siyasal iletişim yönetiminde yaşanan bu değişim ve dönüşümlere dikkat çekmekte, siyasi partilerin yeni yüzyılda gelişen iletişim teknik ve yöntemlerini kullanarak gerçekleştirdikleri seçim kampanyalarını incelemektedir. Çalışmanın evreni Türkiye'de 7 Haziran ve 1 Kasım 2015 tarihlerinde yapılan iki genel seçimdir. Örnek olay olarak ise Cumhuriyet Halk Partisi ile Milliyetçi Hareket Partisi'nin sözü edilen seçimlerde yürüttükleri siyasal kampanyalar seçilmiştir. Her iki partinin siyasal kampanyaları söylem analizi yöntemiyle incelenmiş, detaylı şekilde analiz edilmiştir.

Kavram Olarak Siyasal İletişim

Siyasal iletişim demokratik toplumların bir uygulamasıdır. İktidara talip olan siyasi partilerin iletişim yöntem ve tekniklerini kullanarak kendilerini seçmene anlatmasına, onları ikna ederek oylarını almasına siyasal iletişim yardımcı olmaktadır. Siyasal iletişim için yapılan en anlamlı tanımlardan biri “siyasal arenada partilerin/politikacıların/seçmenin birbirini anlama ve anlatma biçimi” şeklindedir (Kentel, 1991: 40). Bu öz tanım aslında içerisinde pekçok unsuru barındırmaktadır; Anlama ve anlatma işin özünü oluşturmaktadır. Sadece tek yanlı bir “anlatma” demokratik sistemin ruhuna aykırıdır, aynı zamanda anlatanların, başkalarını anlamaya çalışmaları da elzemdir. Başka fikirlere açık olan, başka düşüncelerin de doğru olabileceğine inanan, gerektiğinde kendi düşüncesini revize eden siyasiler, bu davranışlarıyla toplumsal barışın tesis edilmesine katkı sağlayacaklardır. Öteki türlü bir tek yönlülük, “sadece benim fikrim doğru, yalnızca benim anlattıkların en tutarlısı” gibi bir mantık uzlaşmaya değil, çatışmaya hizmet edecektir.

Bu pencereden bakıldığında siyasal iletişim aslında siyasal arenada farklı fikirlerin seslendirilmesine imkan tanımakta, sesi pek duyulamayan partilerin/siyasilerin siyasal iletişim kampanyaları vesilesiyle kamuoyu önüne çıkmasına yardımcı olmakta, çok sesli bir demokratik ortamın inşasına katkı sağlamaktadır.

Siyasal iletişim, ortaya çıkan siyasal sorunların tanımlanmasına yardımcı olma, bu sorunların siyasal tartışma ortamına dahil edilerek meşruiyet kazanmasını temin etme ve tartışma konusu olmaktan çıkmış, ortak bir görüşe varılmış konuları da gündemden düşürme gibi üç önemli fonksiyonu icra etmektedir (Özkan, 2007: 25). Siyasal iletişim; hem seçmenlere neyin söyleneceğini araştıran, bulan, kurgulayan, dizayn eden bir stratejik iletişim yöntemidir, hem de hangi araçla bunu söylerse daha etkili/başarılı sonuçlar alınabilir sorusunun cevabını en sağlıklı şekilde bulabilecek potansiyele sahiptir (Özkan, 2015: 13). Kamuoyu araştırmaları, kitle iletişim araçları, siyasal pazarlama ve siyasal reklamcılık siyasal iletişimin öğeleri arasında yer almaktadır. Katılımcı demokrasilerde sadece sistemce meşru kabul edilen siyasal örgütler değil, siyasal süreç içinde güçlerini kabul ettirmeye çalışarak siyasal bir meşruiyet kazanmaya uğraşan tüm kişi ve kurumlar, siyasal iletişimin aktörleri olarak kabul edilmektedir. Bunların arasında siyasi partiler, kamu yararına çalışan örgütler, sivil toplum kuruluşları, baskı ve menfaat grupları, medya kuruluşları, merkezi ve yerel hükümetler ile vatandaşlar yer almaktadır (Özkan, 2015: 13).

Görüldüğü gibi siyasal iletişimin kapsamında pekçok aktör rol almakta, hepsinin de birbiriyle doğrudan ya da dolaylı ilişkisi bulunmaktadır. Bu ilişki ağını sağlıklı şekilde yönetebilen siyasi partiler kendilerini daha doğru ve etkili anlatabilmekte; bu da beraberinde ikna edilmiş seçmen kitlesini getirmektedir.

Seçim Kampanyası Olgusu ve Siyasal Reklamlar

Siyasal iletişim yönetiminin sahada uygulanan kısmı seçim kampanyası olarak tanımlanmakta, siyasal reklamlar da kampanyaların bel kemiğini oluşturmaktadır. Seçim kampanyası mutlaka uzman ve ehliyet sahibi bir ekip tarafından yönetilmeli; ekiye sadece iletişim bilimciler, reklamcılar değil, aynı zamanda sosyologlar, siyaset bilimciler, psikologlar, ekonomi, dış politika vb. alanlarda uzmanlar da yer almalıdır. Çünkü seçim kampanyası yönetimi çağımızda hem çok önemli hale gelmiş hem de eskiye oranla daha karmaşık bir yapıya kavuşmuştur. Seçmenin bilgi ve ilgi düzeyi artmış, beklentileri yükselmiş, yeni fikirlerin seslendirilmesini talep etmeye başlamıştır. Zor tatmin ve ikna edilen seçmenlere kendi fikir ve iddiasını kabul ettirmek isteyen partilerin/siyasilerin çok stratejik davranması gerekmekte, arzu ve talepleri karşılayan, farkındalık oluşturan bir vizyon ortaya koymaları beklenmektedir.

Siyasal kampanyaların odak noktasında yer alan siyasal reklamlar; bir parti ya da adayı en çok sayıda seçmene tanıtmak, öteki adaylarla arasındaki ayrımı belirtmek ve seçimi kazanmak için en çok oyu toplayabilmeyi amaçlamaktadır. Siyasal reklamcılık; siyasal partilerin uygulamalarını haklı çıkarmak ve meşrulaştırılmasını sağlamak hedefi de taşımaktadır. Siyasal parti ve adayların seçim kampanyası boyunca seçmenleri bilgilendirmek ve onları ikna etmek için kullandıkları siyasal reklamlar, olumlu bir imaj oluşturmak ya da var olan imajı daha da olumlu anlamda pekiştirmek işlevi de görmektedir. Bu nedenle siyasal iletişim uygulamalarında siyasal reklamlar artık diğer tutundurma araçlarıyla birlikte en çok tercih edilen iletişim yöntemlerinin başında yer almaktadır (Uztuğ, 1999: 122).

Siyasal reklamın bilgilendirme gücü, hem kaynağından hem de sahip olduğu içerikten kaynaklanmaktadır. Çünkü siyasal reklamlar kampanya yöneticileri/aday ya da partiler tarafından oluşturulduğu için mesajın denetlenebilme imkanı vardır. Bu denetim aynı zamanda medyada aday veya parti hakkında çıkabilecek olumsuz, yanlış, hatalı bilgileri düzeltme imkanı da verir. Siyasal reklamlar seçmenlere doğrudan vaatleri ulaştırırken mesajları açık ve etkileyici şekilde sunar. Bu da seçmenin ikna edilmesinde önemli bir katkı sağlamaktadır (Uztuğ, 1999: 316).

Siyasal reklamlar; seçimlere pek ilgi duymayan, ya da oy kullanmaya son anda karar veren seçmenleri ikna etme konusunda da yardımcı olmaktadır (Kaid-Johnston, 2001: 23). Ayrıca siyasal reklamlar; partizan oyları ve taraftar seçmenlerin kanaatlerini daha da kuvvetlendirmek için de kullanılmaktadır. Siyasal reklamcılıkta başarı, iletişim kaynağının güvenilirliğine olduğu kadar, iletişimin doğru planlanmasına ve uzun süreli sağlıklı bir şekilde uygulanmasına da bağlı olmaktadır (Devran, 2004: 19).

Etkili siyasal reklamlar hem seçim kampanyasını renklendirmekte, akılda kalıcılığı artırmakta, hem de seçmene verilecek mesajların doğrudan aktarımını sağlamaktadır. Ancak şu hususun da altını çizmek gerekmektedir; siyasal reklamlar tek başına seçim kampanyasını kotaracak bir kahraman değildir, kampanyanın mutlaka diğer unsurlarında da başarılı çalışmalar ortaya konulmalıdır.

7 Haziran ve 1 Kasım Genel Seçimlerinde Siyasal Kampanyalar

Türkiye 2015 yılında 7 Haziran ve 1 Kasım tarihlerinde üst üste iki genel seçim yaşadı. 7 Haziran seçimlerinden sürpriz bir sonuç çıktı; üç dönemdir tek başına iktidarda olan AK Parti, seçimden tek başına hükümeti kuracak çoğunlukla çıkamadı. Koalisyon hükümeti olasılığı gündeme geldi. Seçmenin mesajını alan siyaset kurumu, koalisyon hükümetinin kurulması için harekete geçti. Hükümeti kurma görevini alan dönemin AK Parti Genel Başkanı Ahmet Davutoğlu diğer partilerle yürüttüğü temaslara rağmen ortaya bir hükümet tablosu çıkamayınca Türkiye yeniden seçim atmosferine girdi. 1 Kasım 2015 tarihinde genel seçimler yenilendi. Ama bu seçimlere toplumda büyük bir tedirginliğe, güvensizliğe ve endişeye yol açan terör olaylarının gölgesinde girildi. Alışık olduğumuz renkli seçim kampanyası sürecine 1 Kasım'da rastlamak mümkün olmadı; partiler çoğu siyasal iletişim faaliyetini iptal etti, geniş katılımlı miting yapmaktan vazgeçti. Zaman da dar olduğu için partiler kapsamlı yeni bir hazırlık yapmak yerine bu seçim döneminde çoğunlukla önceki siyasal iletişim materyallerini kullanmayı tercih etti (Özkan, 2016: 2).

Bu çalışmada 7 Haziran ve 1 Kasım 2015 seçimlerinde Meclis'e girmeye hak kazanmış Cumhuriyet Halk Partisi (CHP) ile Milliyetçi Hareket Partisi'nin (MHP) izlediği siyasal iletişim yöntemi ve seçim kampanyası stratejileri incelenmiştir.

7 Haziran seçimleri uzun bir süredir iktidarda olan AK Parti'nin tek başına iktidarı kaybettiği bir seçim olması açısından önem taşımaktadır. Bu anlamda muhalefet partileri olan CHP ve MHP'nin nasıl bir seçim kampanyası stratejisi izlediği sorusu merak konusudur. CHP ve MHP'nin seçim kampanyasında gösterdikleri performansın bu tablodaki payı da çalışmanın cevabını aradığı sorular arasındadır.

7 Haziran seçimleri sonrası hükümet kurulamayıp kısa süre sonra 1 Kasım tarihinde yeniden seçimlere gidilmiş ve bu defa AK Parti tek başına hükümet kuracak çoğunluğa erişmiştir. Bu manada 1 Kasım seçimlerinin kampanya yönetimlerine, seçmene ne söylendiğine de bakmak önemli hale gelmiştir.

Çalışmada önce CHP'nin, daha sonra da MHP'nin 7 Haziran ve 1 Kasım 2015 genel seçimlerindeki kampanya stratejileri kapsamlı şekilde incelenecektir. Bu incelemede daha önce kaleme aldığım ve SETA tarafından yayınlanan "7 Haziran ve 1 Kasım seçimlerinde Siyasal iletişim" başlıklı (Ocak 2016, Analiz no:146) analizimden büyük oranda yararlanılmıştır.

Cumhuriyet Halk Partisinin Seçim Kampanyaları

Cumhuriyet Halk Partisi, Türkiye'nin ana muhalefet partisi olarak iktidara en yakın parti konumundadır. İktidarın en yakın aday olan partiden kendisini iktidara taşıyacak bir siyasal iletişim vizyonu ve yönetimi beklentisi kuşkusuz yüksektir. CHP'nin 7 Haziran seçim kampanyası 'ses getiren' bir kampanya olarak kayıtlara geçse de 1 Kasım için aynı şeyi söylemek pek mümkün değildir.

7 Haziran Seçimlerinde CHP

Cumhuriyet Halk Partisi 7 Haziran seçimlerine reklamcı Ali Taran ile hazırlanmıştır. Taran, geçmişte Genç Parti'nin seçim kampanyasını da yönetmişti. Reklam sektöründe çarpıcı sloganlar bulması, konuyu basitleştirerek anlatması ve marka ile anılacak figürleri oluşturma becerisi ile tanınan Taran'ın, hem Genç Parti hem de CHP'nin seçim kampanyasında da reklamcı reflekslerinden vazgeçmediği, bilindik yöntemlerini siyasi partiler için de uygulamaya koyduğu görülmektedir.

Cumhuriyet Halk Partisi'nin 7 Haziran'da nasıl bir seçim kampanyası tasarladığının ve uyguladığının işaretlerini yayınladığı "2015 Genel Seçim Süreci Parti İletişim İlkeleri" isimli belgede bulmak mümkündür. Bu belgeye göre CHP iki aşamalı bir seçim kampanyası planlanmış, birinci aşamada "Milletçe alkışlıyoruz" ana başlığı kullanılarak siyasal iktidarın uygulamalarını protesto etme amacı taşıyan bir seçim kampanyası yapacağını açıklamıştır. Bu

protesto alkışının toplumsal bir değer kazanarak yaygın ve sürekli bir gösteriye dönüşmesi hedeflenmiş, protesto alkışı seçim kampanyasının bir simgesi haline getirilmek istenmiştir.

Kampanyanın ikinci aşamasında; seçmenlerle somut çözüm vaatlerinin paylaşılacağı, bu vaatleri “Yaşanacak Bir Türkiye” temasıyla ve aynı adlı logoyla açıklayacağı belirtilmiştir. CHP bu aşamada, televizyon reklamları, mitingler, basın ilanları, internet ve açık hava reklamlarıyla eşgüdüm içinde “Yaşanacak Bir Türkiye” temasıyla vatandaşa seslenmiştir. Böylece, kampanyanın ikinci aşaması ekonomiye ve çalışan sorunlarına odaklı olarak devam etmiştir. Kampanyanın üçüncü aşamasında ise “Sorunları Sıfırlıyoruz” teması ve söylemi kullanılmış, bu söylem ağırlıklı olarak kampanyanın son döneminde ve basılı materyallerde yer almıştır (Göksu-Özkoyuncu, 2015: 115).

Kampanya süresince televizyon reklamlarında ve diğer mecralarda “Gelin oy verin gitsinler” mesajı sürekli olarak yinelenmiştir. Kampanyanın geneline bakıldığında ekonomi üzerine inşa edilmiş bir vaatler bütünü görülmektedir. CHP, 7 Haziran 2015 Genel Seçimleri’nde yüz yüze iletişim çalışmalarına, geçmişteki kampanyalarına göre daha fazla ağırlık vermiştir. Seçim kampanyası çerçevesinde CHP teşkilatları tarafından vatandaşlara ev ziyaretleri gerçekleştirilmiş, çeşitli hediyeler verilmiştir.

CHP, son yıllardaki en ayrıntılı ve kapsamlı seçim bildirgesini 7 Haziran 2015 Genel Seçimleri’nde açıklamıştır. 203 sayfadan oluşan bildiğe, CHP’nin iktidar tasavvurunu ortaya koymakta, ekonomi odaklı seçim stratejisinin en önemli göstergesini oluşturmaktadır. CHP Genel Başkanı Kemal Kılıçdaroğlu seçim bildirgesini açıkladığı konuşmasında sosyal yardımların üzerinde durmuş, engellilere, kadınlara, askere giden gençlere, yaşlılara ve annelere nakdi yardımda bulunulacağını ifade etmiştir. Öğrencilere eğitim araç gereç desteği ve aile sigortası, seçim bildirgesinde dikkat çeken diğer başlıklardır. %10 seçim barajının kaldırılması ve medyanın üstündeki baskıların kalkacağı vaatleri de seçim bildirgesindeki diğer belirleyici unsurlardır. CHP seçim bildirgesinde; “Kredi faiz borçları silinecek”, “Vergi borcu olmayan KOBİ’lere sıfır faizli kredi verilecek”, “Mazot 1,5 TL olacak” gibi ekonomi ağırlıklı vaatlerde bulunmuştur (Göksu-Özkoyuncu, 2015: 116).

CHP’nin kampanyasının temelini ekonomi oluşturmuş, ekonomik vaatler üzerinden seçmen ikna edilmek istenmiştir. Oy verme davranışı üzerine yapılan araştırmalar ekonomi konusunun seçmen davranışını doğrudan etkileyen unsurların başında geldiğini göstermektedir. CHP hem seçim bildirgesinde, hem de vaatlerinde ekonomiyi öne çıkartarak seçmeni ikna etme yolunu seçmiştir.

CHP seçim kampanyası kapsamında siyasal reklamlara önemli bir yer ayrılmış, siyasal reklamlar farklı mecralarda belli süreler içerisinde eş zamanlı olarak aynı temalarla yayınlanmıştır. Seçim kampanyası boyunca CHP medya ortamı olarak televizyon, gazete, açık hava ve dijital mecraları kullanmıştır. CHP seçim kampanyasına, 2015 Nisan başında televizyonlarda yayınlanan 16 saniyelik “Milletçe Alkışlıyoruz” teaser filmiyle başlamıştır. Daha sonra “Milletçe Alkışlıyoruz” filminin uzun versiyonu yayınlanmış ve bu filmde neden alkış kullanıldığının gerekçesine de yer verilmiştir. Bir dakika süren filmin sonunda “Gelin Oy Verin, Gitsinler” sloganı yer almaktadır. CHP seçim kampanyası için “Milletçe Alkışlıyoruz” reklam filmlerine ek olarak, “Yaşanacak bir Türkiye” temalı 11 kısa reklam filmi hazırlanmıştır. Bu filmler, televizyonda çeşitli frekanslarda ve çeşitli zamanlarda yayınlanmıştır. CHP, seçim kampanyasında, basın ilanlarına, televizyon ve açık hava reklamlarına göre, daha az önem vermiştir. Basın ilanlarına “Neden mi alkışlıyoruz Ahmet Bey” başlıklı ilanla başlanmış; basın ilanlarında görsel unsurlardan ziyade metinsel içeriğe önem verilmiştir. CHP’nin seçim kampanyasında çok sayıda açık hava reklamı da kullanılmıştır. Tematik olarak “Milletçe Alkışlıyoruz” başlıklı açık hava reklamlarından sonra “Yaşanacak Bir Türkiye” başlıklı siyasal reklamlar billboardlarda yer almıştır (Göksu-Özkoyuncu, 2015: 118).

CHP 7 Haziran 2015 seçimlerine yoğun bir miting maratonu ile hazırlanmış, Kılıçdaroğlu 66 ilde toplam 101 seçim mitingi düzenlemiştir. Mitinglerde, ağırlıklı olarak, seçim bildirgesinde yer alan temel konulara yer verilmiş, CHP’nin iktidar olması durumunda yapacakları anlatılmıştır. Mitinglerde Kılıçdaroğlu’nun konuşmalarının arasında “Milletçe Alkışlıyoruz” reklam filminin davul ritimleri yüksek sesle çalınarak meydanların hareketlendirilmeye çalışılması dikkat çekmiştir.

CHP açtığı “yasanacakbirturkiye.com” web sitesiyle kampanyasının materyallerini dijital ortama taşımış, kullandığı tüm işitsel, yazılı ve görsel malzemelere bu sitede yer vermiştir. Bu site aynı zamanda seçmenle iletişim kurmak için de kullanılmıştır. 7 Haziran seçimlerinde CHP’nin dijital mecraları daha etkin kullandığı, sosyal medyanın diline daha yatkın davrandığı, özellikle genç seçmene ulaşmak için dijital ortamı önemseydiği görülmektedir. 7 Haziran seçimlerinde CHP’nin genç seçmenin % 23.2’sinin oyunu aldığı hatırlandığında sosyal medya kullanımının başarısından söz edilebilir. Eskiden dijital mecralara yoğunlaşmayan CHP’nin 7 Haziran’da bu alanda görünür olması ve önemini anlaması, bundan sonra sosyal medyanın seçim kampanyalarında daha fazla fonksiyon üstleneceği şeklinde değerlendirilebilir.

Cumhuriyet Halk Partisi ekonomi konularında seçmenin hoşuna gidecek vaatlerde bulunsa, birtakım projeler sunsa da çözüm süreci, Suriye’de bizi de yakından etkileyen savaş ortamı, 21. yüzyılda Türkiye’nin nasıl bir stratejik vizyon ortaya koyması gerektiği gibi temel ve önemli konularda ikna edici bir söylem ve eylem planı geliştirmekten uzak bir görünüm arz etmiştir.

1 Kasım Seçimlerinde CHP

7 Haziran seçimlerinde reklamcı Ali Taran’a seçim kampanyasını teslim eden Cumhuriyet Halk Partisi, 1 Kasım seçimlerinde Taran ile çalışmaktan vazgeçmiş, gerekçe olarak ise medyaya maddi konularda anlaşılamadığı iddiası yansımıştır.

CHP 1 Kasım seçimlerine Ohmlette reklam ekibi ile hazırlandı, daha önce de çeşitli platformlarda birlikte çalışılan bu ekibin seçilmesinde hazine yardımı alınamamasının etkili olduğu beyan edildi.

1 Kasım seçimlerinde Cumhuriyet Halk Partisi 109 sayfalık “Önce Türkiye” başlıklı bir seçim bildirgesi açıklamış, bildirmede demokrasiden, özgürlüklere, ekonomiden insan haklarına kadar temel konular ele alınmış, saptamalar yapılmış, çeşitli öneriler getirilmiştir.

CHP 1 Kasım 2015 seçim kampanyasında teşkilatlarından ülkenin içinde bulunduğu durumu dikkate alarak, birlik, beraberlik ve kardeşlik mesajı vermelerini istemiş, seçmene yönelik tüm iletişim çalışmalarının odağına bu perspektifin oturtulmasını talep etmiştir.

CHP 7 Haziran seçimlerinde olduğu gibi büyük ölçekli bir kampanya yapmak yerine 1 Kasım’da çok dar kapsamlı bir seçim kampanyası yapmayı tercih etmiştir. Parti “Önce Türkiye” söylemini kampanyasının odağına oturtmuş; görsel, işitsel, yazılı ve dijital mecralarda bu söylemi tekrarlamış, ülkenin birlik ve beraberliğe duyduğu ihtiyacı vurgulayarak, bu konuda parti olarak üzerlerine düşen görevi yapmaya hazır oldukları mesajını vermiştir.

CHP’nin 1 Kasım seçim kampanyasındaki siyasal reklamları, “Çözüm var; Biz varız, yaparız” konseptiyle seçmene sunulmuştur. Önce ülkenin temel sorunları sıralanmış, bu sorunlarının çözümünün olduğu ifade edilmiş, sonra da CHP’nin varolduğu, sorunları çözeceği iddiasında bulunulmuştur. Sorunların nasıl çözüleceği ise belirtilmemiştir.

7 Haziran’daki vaat bolluğuna bu seçim kampanyasında rastlanmamakta, daha çok “Önce Türkiye” ifadesi öne çıkartılarak ülkenin içinde bulunduğu hassas durum ve toplumun duygu durumundan yararlanılmak istendiği gözlenmektedir.

Siyasal iletişim kampanyalarını yakından izleyen ve bu konuda önemli eserlere imza atan Necati Özkan’ın 1 Kasım kampanyasıyla ilgili olarak yaptığı değerlendirme kayda değerdir: *“CHP 1 Kasım seçimlerine ‘Önce Türkiye’ diyerek girdi. Zaten bir süredir kendisini ‘Türkiye’nin Birleştirici Gücü’ olarak konumlama yoluna girmiş olan parti bu kez ‘Önce Türkiye’ diyerek aslında bir şey dememiş olmayı tercih etmiş oldu. Aslında ‘Önce Türkiye’ CHP için bir fıkirden ziyade slogandı. O kadar ki, kampanyasında kenar süsü gibi işlev gördü...”*

CHP’nin 1 Kasım kampanyasında bir gelecek vizyonu görmek mümkün değildir. Kampanyanın anlattığı esaslı bir ‘hikaye’ de yoktur. Yalnızca terör korkusu ve güvenlik kaygısı öne çıkartılarak, seçmende bu duyguların oluşturduğu birikimden yararlanma amacı vardır. Yine 7 Haziran seçim kampanyasında olduğu gibi ülkenin temel konuları ve sorun alanlarıyla ilgili CHP’nin 1 Kasım seçim kampanyasında ortaya koyamadığı stratejik vizyon eksikliği kendisini hissettirmektedir. “Önce Türkiye” diyen CHP, “Nasıl bir Türkiye” inşa edeceğini seçmene anlatmamış, kampanyasını kuru bir retorik üzerinden yürütmeyi tercih etmiştir.

Oysa iktidara en yakın aday olan anamuhalefet partisinden ülkenin temel meseleleriyle ilgili somut çözüm önerileri ve geleceği inşa edecek önemli projeler beklenmektedir. Sadece seçim döneminde açıklanan acelece hazırlanmış birtakım vaatler ile seçime özel proje sunumları seçmenin ikna olmasına yetmemektedir. CHP’nin seçim dönemleri dışında da iktidar alternatifi sorumluluğu ile çalışması, proje üretmesi, ülkenin geleceğini tasarlaması önemli bir ihtiyaç olarak kendisini hissettirmektedir.

Milliyetçi Hareket Partisi’nin Seçim Kampanyaları

Milliyetçi Hareket Partisi’nin son yıllarda yaptığı seçim kampanyalarına “meydan okuma iletişim tarzı”nın hakim olduğu gözlenmektedir. Bu tarzda muhalefet partileri yalnızca iktidarın yapıp ettiklerine odaklanmakta, iktidarı sert bir şekilde eleştirmekte ama kendilerinin seçmene nasıl bir vizyon sundukları anlaşılamamaktadır. Böylesi bir yaklaşımda seçmen çoğunlukla “korkutularak” ikna edilmek istenmektedir.

7 Haziran Seçimlerinde MHP

MHP 7 Haziran 2015 seçim kampanyasını şu üç söylem üzerine oturtmuştur: “Hatırla”, “Bizimle Yürü Türkiye” ve “Seninle Yürüyorum.”

MHP, “Hatırla” söylemiyle seçmene iktidarın yaptıklarını hatırlatmayı amaçlamış, kendince eksik ve yanlış gördüğü icraatlarını hatırla başlığı altında kamuoyunun gündemine getirerek iktidar partisine oy verilmesini önlemeyi hedeflemiştir.

MHP genel başkanı Devlet Bahçeli’nin resmiyle birlikte kullanılan “Bizimle yürü Türkiye” ifadesi aynı zamanda “ihanete karşı, yolsuzluğa karşı, yoksulluğa karşı, bölünmeye karşı, işsizliğe karşı” ifadeleri ile birlikte kullanılmakta, MHP işaret ettiği olumsuzlukların önlenmesi için kendisini adres göstermektedir.

“Seninle yürüyorum” ifadesi ise toplum kesimlerinden çeşitli kişilerin resimleri ile birlikte kullanılmış, konsept Bahçeli’nin ‘bizimle yürü’ çağrısına olumlu karşılık verilmesi üzerine kurgulanmıştır.

MHP seçim kampanyası döneminde başta siyasal reklamları olmak üzere, mitinglerinde, toplantılarında, televizyon konuşmalarında sürekli mevcut iktidarın icraatlarını eleştirerek, Türkiye’nin sonu belirsiz bir felakete sürüklendiği, ülkenin bölüneceği gibi toplumda korkuya neden olacak söylemleri gündemde tutmuş, seçimin bir varolma ya da yokolma dönüm noktası olduğunu iddia ederek olağandışı bir anlam yüklemiştir. Bu anlamda MHP’nin ve genel başkanı Bahçeli’nin siyasal söylemlerinin son derece sert olması dikkat çekmiştir.

MHP seçim kampanyasında toplumun değişik kesimlerine yönelik çeşitli vaatler açıklamış, çalışma hayatından emeklilere, işçilerden esnafa, tarımdan ekonomiye kadar pekçok alanda iyileştirmeler yapacağı sözünü vermiştir. Bu vaatler içerisinde MHP’nin ülkenin geleceği için tasarladığı, üzerinde çalıştığı, olgunlaştırdığı ve uygulama aşamasına getirdiği herhangi bir somut proje bulunmamaktadır.

MHP’nin 7 Haziran seçimlerinde yürüttüğü kampanyanın merkezinde ekonomik vaatler yer almaktadır. Örneğin, evi olmayan muhtaç ailelere 250 TL kira yardımı yapılması, muhtaç ailelere 700 TL aile desteği verilmesi, yaşlıların aylıklarının artırılması, asgari ücretin 1400 liraya çıkartılması, sosyal yardım alanların bu yardımlarının kesilmeden aynen devam ettirilecek olması, ihtiyaç sahibi ailelere hilalkart verilmesi vb. gibi pekçok alandaki ekonomik vaatler dikkat çekicidir (Yıldırım-Hançer, 2015: 230).

MHP parti politikalarını anlatmak için 44 ilde miting düzenledi, hepsinde de genel başkan Devlet Bahçeli konuştu. Yukarıda da işaret edildiği gibi bu konuşmaların çoğunun içeriğini sert iktidar eleştirisi oluşturdu, milli bütünlük vurgusu yapıldı, ülkenin bölünme tehdidi ile karşı karşıya olduğu iddiası gündeme getirildi. Miting konuşmalarında ayrıca çözüm süreci adı altında ülkenin felakete sürüklendiği ve “çözöldüğü” ifade edildi; tüm bu olumsuzlukların giderilmesi için de adres olarak MHP gösterildi.

MHP’nin “Toplumsal Onarım ve Huzurlu Gelecek – Bizimle Yürü Türkiye” ismini taşıyan seçim bildirgesi 3 Mayıs Türkçülük Günü’nde Ankara’da kamuoyuna açıklandı. Bahçeli’nin burada yaptığı konuşmada verdiği şu mesajlar, bildirgeye yüklenen anlamı ve MHP’nin seçimlere nasıl baktığını anlamak açısından ilginç ipuçları taşımaktadır (Yıldırım-Hançer, 2015: 241):

“Umutların dip yaptığı bir dönemde, hayallerin kurduğu bir süreçte, zulüm ve eziyetlerin zirveye çıktığı bir zamanda, milli varlığımıza yönelik saldırı ve tahammülsüzlüğün yoğunlaştığı bir eşikte, sosyal risklerin, siyasal hezimetlerin, ekonomik afetlerin her insanımızın boğazına çöktüğü ve düğümlendiği bir buhran devrinde, milliyetçi Hareket Partisi cesaretiyle, ilkel tutumuyla, çevik ve çabuk siyasi tavrıyla buradadır. Milliyetçi Hareket Partisi toplumsal onarım iddiasıyla, huzurlu gelecek, milli, ahlaklı ve adaletli yönetim vaadiyle milletimizin huzurundadır. Biz bu aziz vatani ağırlıklarından kurtarmaya talibiz. Biz bu güzel ülkeyi arsızın, kansızın, hırsızın, uğursuzun elinden kurtarmaya yeminliyiz. Biz bu necip milleti sorunlarından arındırmaya, dertlerinden çekip çıkarmaya azimliyiz...”

Seçim bildirgesinde yerel yönetimlerden kırsal kalkınmaya, kamu yönetiminden esnaf ve sanatkarlara kadar pekçok konu yer almakta, bu konulardaki sorunlara yönelik tespitler yapılmakta, MHP’nin sorunlarla ilgili değerlendirmeleri bulunmaktadır.

MHP seçim kampanyası sürecinde bir yandan mitinglerle ve esnaf ziyaretleri ile halkla temas kurmayı öncelerken diğer yandan da kitle iletişim araçlarını kullanarak seçmene mesajlarını iletmeyi amaçlamıştır. Ancak MHP’nin medyayı etkili şekilde kullandığını söylemek zordur; yazılı, görsel-işitsel, açık hava ve dijital ortamlarda MHP’nin kimi reklamları yayınlanmış ama bunlar sıradanlık çizgisini aşmayı başaramamıştır. Kamuoyunun konuştuğu, çarpıcı, etkileyici, sarsıcı bir siyasal reklam uygulamasına rastlamak mümkün değildir. MHP genel başkanı Devlet

Bahçeli'nin mesaj vermek için medyayı kullanma konusunda gösterdiği çekingenlik de kaydedilmesi gereken başka bir konudur. Çok az söyleşi veren, gazetecilerle teması hep mesafeli olan Bahçeli, kitle iletişim araçlarını etkili şekilde kullanma, mesajlarını geniş kitlelere duyurma konusunda geri planda kalmayı tercih etmektedir. Bu tavır da MHP politikalarının geniş kesimlere ulaşmasının önünde engel oluşturmaktadır.

MHP kendi kurduğu online platform olan “alpturk.tv” web adresinden partinin siyasal faaliyetlerini ve kampanya uygulamalarını yayınlamış, bu yolla kamuoyunu bilgilendirme yoluna gitmiştir. Yalnızca böyle bir yöntemin kamuoyunu bilgilendirme ve ikna etme konusunda çok sınırlı bir etkisinin olacağı ise açıktır.

MHP'nin internet ortamında açtığı bir başka site www.bizimleyuruturkiye.com'dur. Burada da seçim materyalleri bulunmakta, seçim bildirgesi başta olmak üzere, siyasal reklamlara ulaşmak mümkün olabilmektedir. MHP sosyal medyayı bu seçim kampanyası döneminde kullanmış, facebook ve twitter hesaplarından kamuoyuna yönelik çeşitli siyasal mesajlar paylaşılmıştır. Genel Başkan Bahçeli kişisel twitter hesabını aktif olarak kullanmakta, önemli bulduğu konulardaki görüşlerini twitter hesabı üzerinden kamuoyu ile paylaşmaktadır.

MHP'nin seçim kampanyasının kendi içinde bir bütünlük arzettiği görülmekte ama bu kampanya tasarımının, verilen mesajların, seçmenin talep, beklenti ve arzuları ile ne kadar uyduğu konusu tartışmaya açıktır. Seçmenin yalnızca belirli kavram ve olgular üzerinden korkutulmaya çalışılması, bir felaket senaryosu hazırlanarak seçmenin ikna edilmek istenmesi üzerinde yeniden düşünülmesi gereken konular olarak öne çıkmaktadır.

1 Kasım Seçimlerinde MHP

Milliyetçi Hareket Partisi, 7 Haziran seçim döneminde izlediği siyasal stratejinin aynısını 1 Kasım seçimlerinde de izlemiş, milli birliğimizin tehlikede olduğu, terörün güvenliğini tehdit ettiği, ülkenin bölünmeye doğru gittiği söylemini kampanyasının odak noktası yapmıştır.

MHP, 7 Haziran seçim kampanyasında kullandığı “Bizimle Yürü Türkiye” sloganını 1 Kasım seçimlerinde değiştirmiş; “Ülkenin geleceğine oy ver” sloganıyla seçmenin karşısına çıkmıştır. MHP bu sloganla 1 Kasım seçimlerinin Türkiye'nin geleceği açısından yol ayrımı olacağına vurgu yapmayı amaçlamış, ülkenin birlik ve bütünlüğü için MHP'nin önemine dikkat çekmeyi hedeflemiştir. 1 Kasım'da verilecek oyun “sadece iktidarı değil, ülkenin geleceğini de belirleyeceği” mesajı seçmene verilmek istenmiştir.

MHP bu seçimde ayrıca “Sen, bilirsin Türkiye” ifadesini de kampanyasının siyasal iletişim materyallerinde kullanmıştır. MHP'nin “Sen, bilirsin Türkiye” ifadesi meramını anlatamadığı gerekçesiyle kamuoyunda çeşitli tartışmalara neden olmuştur. İfadeye yönelik eleştirilerden biri şöyledir: *“Bir şey söylemeden 1 Kasım seçimlerine girme stratejisini en açık ve harbi biçimde uygulayan ise ‘Sen, bilirsin Türkiye’ diyen MHP oldu. Ancak parti, ‘Sen’ ve ‘bilirsin’ arasındaki virgülden de çok şey beklediğini göstermiş oldu açıkçası. MHP'nin parti olarak, Türkiye'ye ‘sen bilirsin’ diyerek ‘posta koymadığını’, aksine Türkiye'nin vicdanına ve kararına güvendiğini belli etmek için kendi kendini bir virgüle muhtaç etmesi siyasal iletişim tarihimizin örnek vakaları arasına girmeyi şimdiden garantiledi...”* (Özkan, 2015).

MHP 1 Kasım seçimlerine özel sanatçı Atilla Yılmaz'a “Devlet Bahçeli Vaktidir” isimli şarkı hazırlattı. Ancak şarkıda bir kez bile MHP'nin isminin geçmemesi eleştiri konusu oldu (Karar, 2015).

MHP 7 Haziran seçimlerinde açıkladığı “Toplumsal Onarım ve Huzurlu Gelecek – Bizimle Yürü Türkiye” isimli seçim bildirgesinin ismini 1 Kasım seçimlerinde “Huzurlu ve Güvenli Gelecek” olarak değiştirdi. Bildirgede MHP'nin Türkiye'nin geleceği olduğu vurgusuna sıklıkla rastlanmaktadır. Ayrıca bildirgenin sunuş yazısında MHP genel başkanı Devlet Bahçeli'nin şu ifadesi dikkat çekmektedir: *“Türkiye'yi yaşadığı sıkıntılardan kurtaracak program ve projelerimizin yanı sıra 46 yıllık tecrübe, yetişmiş kadrolar ve imanımız iddiamızın kefilidir...”*

MHP 1 Kasım seçimlerinde az sayıda basın ilanı vermiş, açık hava mecralarında kısıtlı şekilde yer almış, sosyal medyayı da bir önceki seçime göre çok daha az kullanmıştır. Devlet Bahçeli ise kendi twitter hesabından gündeme dair açıklama yapmayı sürdürmüş, sosyal medyayı mesajlarını kamuoyuna duyurma aracı olarak kullanmıştır.

Her iki seçim kampanyası birlikte yorumlandığında şu tesbiti yapmak mümkündür: MHP'nin toplumsal değişimin kodlarını çözmekte zorlandığı, bu değişim sürecini anlamakta yeterli çabayı göstermediği açıktır. Siyasi partiler, toplumla birlikte gelişen, değişen, yaşayan canlı organizasyonlardır. Toplumsal değişmeye ayak diremek, küresel değişimleri yok saymak bir siyasi parti için seçmenin gerisine düşmek demektir. MHP'nin ayrıca kendini anlatma sorunu olduğu görülmektedir. Kullandığı soğuk savaş dili ve üslubunun artık günümüzde geçerliliğinin olmadığını

görmesi, özellikle gençlere yönelik yeni bir dil geliştirmesi önem taşımaktadır. Ayrıca korkutmak yerine anlatmak, sadece eleştirmek yerine alternatif üretmek, çalışmak, seçmeni daha çok dinlemek de önem arz etmektedir.

Sonuç

2015 yılında yapılan her iki seçimde de CHP ve MHP'nin yeni yüzyılın beraberinde getirdiği yeni iletişim teknik ve yöntemlerini kendi seçim kampanyalarında kullandıkları görülmektedir. Bunun anlamı şudur; Her iki parti de siyasal iletişim yönetimi açısından gelişen teknik ve yöntemleri takip etmekte, kampanyalarında kullanmakta, mesajlarını seçmene en etkili yoldan ulaştırmanın çabası içerisinde olmaktadır.

Elbette yalnızca teknik ve yöntemleri kullanma becerisi, tek başına seçim başarısı olarak ortaya çıkmamaktadır. Mesajların seçmene etkili şekilde aktarılması işin bir boyutu ise, bir başka boyutu o mesajların ikna edicilik niteliği, seçimde nasıl karşılık bulduğu konusudur. Seçmen verilen mesajları okuyor, görüyor, duyuyor ama acaba oyunun rengini değiştirecek ölçüde mesajlar onda bir etki bırakıyor mu, ikna oluyor mu? Her iki parti için bu konunun temel sorunların başında geldiği söylenebilir. Yine her iki parti için söylenebilecek bir başka şey de kendi seçmen tabanları dışında potansiyel başka seçmenlere açılama, onları ikna edebilecek bir vizyonu ortaya koyamama sorunudur.

Sonuçta Cumhuriyet Halk Partisi'nin seçim kampanyaları ile ilgili şu değerlendirme yapılabilir: CHP 7 Haziran'da "Yaşanacak bir Türkiye", 1 Kasım'da ise "Önce Türkiye" mesajı ile seçmenin karşısına çıktı ama iktidara en yakın anamuhalefet partisi olmasına rağmen seçmenden iktidar vizesi alamadı. 7 Haziran kampanyası kamuoyunda epey ses getirmesine, konuşulmasına rağmen seçmeni ikna etmekten uzak kaldı. İktidar alternatifi bir parti olmasına rağmen negatif bir seçim kampanyası yapmayı tercih eden CHP, iktidar eleştirisi üzerinden seçmenin oyunu almaya çalıştı. Vaatleri ekonomi odaklıydı ama bunların yapılabilirliği konusunda seçimde yeterli güveni oluşturamadı. "Merkez Türkiye" diye sunulan ve uluslararası bir nitelik taşıdığı iddia edilen projeyi, ne kendisi kamuoyuna anlatabildi ne de seçmen projenin aslında ne olduğunu anlayabildi. CHP'nin her iki seçimde de görülen eksikliği; seçmenle sürekli bir ilişki kurmadığı, teşkilatlarını motive etmede zayıf kaldığı, seçmenin talep ve beklentilerini karşılayacak bir vizyon ortaya koyamadığı ve Türkiye için nasıl bir gelecek tasarladığını açık seçik anlatmakta güçlük çektiği gerçeği oldu (Özkan, 2016: 28).

Milliyetçi Hareket Partisi'nin her iki seçimde yürüttüğü siyasal kampanyalarla ilgili genel bir değerlendirme için şunlar söylenebilir: MHP'nin 7 Haziran ve 1 Kasım seçim kampanyaları meydan okuma iletişim tarzıyla yapılan, iktidara yönelik sert eleştiriler içeren ve ortaya somut projeler koymayan bir içeriğe sahipti. "Bizimle yürü Türkiye" diyen MHP'nin seçmeni nasıl bir Türkiye'ye doğru yürüttüğü, istikametinin neresi olduğu anlaşılmadı. Sadece iktidarın icraatlarını 'hatırlatan' MHP, seçmene bir "hikaye" sunmadı, geleceği inşa edecek stratejik bir vizyon ortaya koymadı. 7 Haziran sonrasında MHP'nin uzlaşmaz görüntüsü, ön şart koşan, hükümet kurmaktan kaçınan tavrı seçimde tepkiye neden oldu; bu tepki sonucunda MHP 1 Kasım seçimlerinden 40 milletvekilini kaybederek çıktı. MHP 1 Kasım seçim kampanyasında neden uzlaşmadığını, niçin hayır dediğini seçmene anlaşılır bir şekilde anlatamadı. Seçmenin güven ve istikrar talebini okuyamayan MHP, kampanyasında sert söylemini, korkutarak seçmeni ikna etme stratejisini devam ettirince 1 Kasım seçimlerinde ancak dördüncü parti olabildi (Özkan, 2016: 29).

Özetle şu söylenebilir; Her seçim dönemi siyasal partiler ve siyasetçiler için bir laboratuvar niteliğindedir; Burada sürekli bir araştırma, geliştirme, yenilik peşinde koşma, seçmeni doğru anlamaya gayret etme, yanlış yapılanları tespit edip düzeltme, kendisini geliştirme ve gerçeklerden kopmadan geleceğe yönelik vizyon inşa etme işlemleri sürekli devam etmelidir. Siyaset kurumunu "kazanma/kaybetme" ikileminden çıkartmak, yurttışa, ülkeye hizmet etme paradigmasına oturtmak yapılması gereken birincil görevlerin başında gelmelidir. Seçim kampanyaları daha fazla sayıda milletvekili/belediye başkanı elde etmenin ötesine geçmeli; ülkenin barışına, demokrasisine, özgürlüğüne hizmet etme yarışına dönüşmelidir.

Ancak o zaman güçlü bir Türkiye inşa edilebilir..

Kaynakça

Alkan,H., Özkan, A. (2015). "Değişim, kurumsallaşma ve kırılma: 7 Haziran seçimleri bağlamında AK Parti".

(Ed: Edip Asaf Bekaroğlu) **Araftaki Seçim**. İstanbul: Vadi Yayınları

CHP 2015 Genel Seçim Süreci Parti İletişim İlkeleri, 2015

Devran, Y. (2004). **Siyasal Kampanya Yönetimi**. İstanbul: Odak İletişim Yayınları

Göksu, O., F. Özkoyuncu. (2015). "2015 Genel seçimlerinde CHP'nin seçim kampanyasının temelleri, söylemi ve uygulamaları", **Siyasetin iletişim odağı: Seçim Kampanyaları** (Ed: Abdullah Özkan), Konya:

Eğitim Yayınları

Kaid, L., Johnston, A. (2001). **Videostyle in Presidential Campaigns**. London: Praeger

Kentel. F. (1991). "Demokrasi, Kamuoyu ve İletişime Dair". **Birikim Dergisi**. Sayı:30. İstanbul: İletişim Yayınları

- Kaid, L., Johnston, A. (2001). **Videostyle in Presidential Campaigns**. London: Praeger
- Özkan, A. (2016). **7 Haziran ve 1 Kasım seçimlerinde Siyasal İletişim**. İstanbul: SETA Yayınları
- Özkan, A. (2007). **Siyasal İletişim Stratejileri**. İstanbul: Siyasal İletişim Enstitüsü Yayınları
- Özkan, A. (2015). “Siyasal İletişim Yönetimi; Seçim Kampanyası, Siyasal Reklam ve İletişim Stratejileri”. (Editör: Abdullah Özkan) **Siyasetin İletişim Odağı: Seçim Kampanyaları**, Konya: Eğitim Kitabevi
- Uztuğ, F. (1999). **Siyasal Marka: Seçim Kampanyaları ve Aday İmajı**. Ankara: Mediacat Yayınları
- Uztuğ, F. (2004). **Siyasal İletişim Yönetimi**. İstanbul: MediaCat Yayınları
- Yıldırım, A., E. Hançer (2015). “MHP’nin 7 Haziran 2015 Genel Seçimlerinde uyguladığı seçim kampanyasının analizi”, **Siyasetin iletişim odağı; Seçim kampanyaları** (Ed: Abdullah özkan), Konya: Eğitim Yayınevi

İnternet Kaynakları

- “CHP seçim ilkelerini belirledi”, Hürriyet Gazete, 08.10.2015, (<http://www.hurriyet.com.tr/chp-secim-ilkelerini-belirledi-30262669>)
- MHP’nin seçim kampanyaları ile ilgili materyaller www.bizimleyuruturkiye.com web adresinde yayınlanmıştır.
- “MHP’nin adı geçmeyen MHP 1 Kasım seçim şarkısı belli oldu” <http://www.karar.com/gundem-haberleri/mhpnin-adi-gecmeyen-mhp-1-kasim-secim-sarkisi-belli-oldu-40362>
- N. Özkan,(2015). “Muhalefet liderleri 1 Kasım’da hangi fikri temsil ediyor?” <http://necatiozkan.blogspot.com.tr>
- Önce Türkiye, CHP’nin 1 Kasım 2015 seçim bildirgesi, <http://secimisleri.chp.org.tr/Public/1/Folder//52608.pdf>

Yeni İletişim Teknolojilerinin Evrensel Ruhu Whatsapp Ve Aktif Kullanıcıları: Babyboomer Kuşağı Üzerine Bir İnceleme

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Özet

Bu çalışmada, bireylerin kendilerini ifade etme biçimlerinin zenginleşmesine olanak sağlayan ve diğer yeni iletişim teknolojileriyle birlikte, insanın temel iletişim etkinliklerinde geleneksel zaman ve uzam algısını değiştirip yeni ve evrensel bir ruhun “Apparatgeist” oluşmasına neden olan mobil telefonlar ve whatsapp uygulaması incelenmiştir. Akıllı telefonların yaygınlaşması mesajlaşmalarda artış sağlamış, bir çok ülkede en çok indirilen iPhone ve Android uygulaması olan WhatsApp, 1945-65 yılları arasında doğan Babyboomer kuşağının ustaca kullandığı bir iletişim mecrası olmuştur. Bu bağlamda, yaşları 50-60 arası olan Babyboomer kuşağı temsilcileri arasında aktif Whatsapp kullanıcısı olan 12 kişiyle odak grup görüşmeleri yapılmış, zaman ve uzam algısını yeniden şekillendiren bu iletişim mecrasında bu kadar aktif olmalarının nedeni incelenmiştir. Çözümlemeler nitel veri analiz türlerinden betimsel analiz yöntemi kullanılarak yapılmıştır.

Anahtar Kelimeler: Yeni İletişim Teknolojileri, Whatsapp, Babyboomer, Apparatgeist

The Universal Spirit Of New Communication Technologies *Whatsapp* And Its Active Users: A Study On Baby Boomers

Abstract

This study includes an analysis of mobile phones and WhatsApp, which have enabled individuals to express themselves in a richer way and, together with other new communication technologies, altered the conventional perception of time and space in man's basic communication activities, thus causing the emergence of a new and universal spirit *Apparatgeist*. The increased use of smartphones has generated more messaging, and WhatsApp — the most downloaded iPhone and Android application in many countries — has become a communication tool that Baby Boomers, people born between 1946 and 1964, skilfully use. In this context, focus group discussions with 12 active WhatsApp users, aged 50-60 years and chosen from among Baby Boomers, have been held, and the reasons why they are so active in this communication channel, which has changed the conventional perception of time and space, are examined. The study employs descriptive analysis, one of the methods used in analysing qualitative data.

Keywords: New communication technologies, WhatsApp, BabyBoomers, Apparatgeist.

Giriş

Bireylerin günlük yaşamlarında giderek daha fazla yer alan mobil telefonlar, kendilerini ifade etme biçimlerinin gelişimine ve zenginleşmesine olanak sağlamaktadır. Bireyler zaman ve uzam algısında değişimler yaşamakta, cep telefonları ile ulaştıkları sanal alemle (evrensel ruh) bütünleşmektedirler. James E. Katz ve Mark Aakhus adlı araştırmacılar bu konuda değişik fikirler öne sürmüş; teknolojinin toplumsal olarak inşa edildiği görüşüne karşı çıkarak, mobil telefonların, bu teknolojiyi kullanan farklı bireyler ve toplumlar arasında, uzamdan bağımsız, ortak bir zaman algısına dayalı, yeni ve evrensel bir ruhun, bir tür Apparatgeist' in gelişmesine yol açtığını ileri sürmüşlerdir. Bu evrensel ruh her kuşaktan bireyleri etkilemekte, özellikle mobil teknolojilerin kullanımında Babyboomer kuşağı bireyleri aktiflikleriyle dikkat çekmektedir. Bu nedenle çalışmada Babyboomer kuşağı aktif Whatsapp kullanıcıları incelenmiştir.

Günümüzde, daha önce benzeri görülmemiş bir dizi medya teknolojisi, bireyselleştirilmiş ilişki ağlarını mümkün kılmaktadır. Bu, bir yandan, mesafelerin iletişimini sağlayan Internet aracılığıyla sınırları ortadan kaldıran iletişim, Facebook, Xing ve Twitter gibi sosyal ağ siteleriyle kullanıcılara translokal (farklı yerleri ve insanları birbirine bağlayan ve etkileyen) iletişim ağlarına entegre olma olanağı sağlanmıştır. Medyada kişilerarası etkileşim ve iki yönlü iletişimin sosyal ilişkilerin eklenmesinde önemli bir rol oynaması cep telefonlarını giderek artan bir şekilde iletişimsel ağlar içinde önemli bir konuma getirmiştir (Berg, 2017, 51).

Günümüzde iletişim ve medya çalışmaları bağlamında çeşitlilik, hız ve bunun sonucunda toplumsal değişim süreçlerinde radikalleşmenin yaşandığı görülmektedir. Medya teknolojilerinde yaşanan dijitalleşme sürecinde özellikle mobil telefonlara odaklanılmıştır. Sonuç olarak, medya, iletişim ve mobilite açısından baktığımızda, durağan medyanın önemi azalmış, hız ve mobilite ön plana geçmiştir (Berg,2017, 17). Mekansal hareketlilik ve dijital iletişim medyası yakından ilişkilidir. Medya giderek daha hareketli hale gelmekle kalmamakta, aynı zamanda insanlar iletişimsel hareketlilik için medyayı giderek daha fazla kullanmaktadır (Wimmer/Hartmann, 2014).

New Jersey Rutgers Üniversitesi'nde bir iletişim profesörü olan James Katz, bir Apparatus'ın (Almanca "makinenin ruhu") olduğunu ileri sürmektedir. İnsanlar,kültürden bağımsız olarak kişiselleştirilmiş iletişim teknolojileriyle etkileşim sağladıklarında, evrensel özellikler taşımaya eğilimli olmaktadır.Uzun vadede ise ulusal farklılıklar ortadan kalkmaktadır (Fryer, 2009). İnternet, mobil iletişim, dijital medya ve çeşitli sosyal yazılım araçlarının yayılımı, yerel ve küresel bağlanan yatay iletişim ağlarının gelişimini sağlamıştır. Sanayi toplumunun iletişim sistemi, kitle iletişim araçlarının etrafında toplanmış ve tek yönlü bir mesajın birinden diğerine kitlesel dağılımı ile karakterize edilmiştir. Ağ topluluğunun iletişim temeli, eşzamanlı ve eşzamansız çok sayıda etkileşimli mesaj alışverişini içeren yatay küresel iletişim ağlarından oluşmaktadır (Castells, 2007, 246). Almanca Apparatus (makinenin ruhu) olarak tanımlanan bu sistem kültürel farklılıkları ortadan kaldırmaktadır. En yaygın teknoloji olaniPhone ve diğer "akıllı" telefonlar tarafından yönlendirilen ve kullanıcıların internete erişimini sağlayan oyunlar, sosyal ağ programları ve diğer pek çok şey de dahil olmak üzere mobil uygulamaları indiren cep telefonu devrimi hızla yayılmaktadır. Mobil operatörler, daha geniş bir uygulama ve hizmet yelpazesi için daha hızlı bağlantısağlayacak ağlar kurmaktadır. Küreselleşme, farklı ulusal ve bölgesel hikayeleri gizlemekte, asimile etmektedir. Kültür, yaşam tarzımızı etkilemekte, yaşam tarzları da iletişim tarzımızı etkilemektedir (Berg, 18).

Genel Olarak Kuşaklar

Modern çağda toplumların nasıl değiştiğini belgelemeyi amaçlayan ampirik çalışmalar yaygın olarak kullanılmaktadır. Örneğin, 1950'lerde Samuel Stouffer, komünistlerin, ateistlerin ve sosyalistlerin hoşgörüsüzlüğünü halkın desteklediğini, daha sonraki nesillerin ise büyüklerinden daha fazla hoşgörülü olduklarını, ancak ait oldukları jenerasyonların özelliklerinden etkilendikleri görüşünü öne sürmüş, bunun ise kısmen konuşma özgürlüğüne ve fikir alışverişine olanak sağlayan yüksek eğitim düzeylerine bağlı olduğunu iddia etmiştir. 1970'lerde, Ronald Inglehart, Batı Avrupa'daki İkinci Dünya Savaşı sonrası kuşakların, savaş öncesi kuşakların ekonomik güvenlik ve politik düzen konusundaki kaygılarının aksine, özgürlüğü ve kendilerini serbestçe ifade etmeyi istediklerini gözlemlemiştir. Ekonomik, teknolojik ve sosyo-politik değişiklikler, son yıllarda ileri sanayi toplumlarının kültürlerini de dönüştürmektedir. Bu iddialı çalışma, dini inançlardaki, iş güdülerindeki, siyasi çatışmaya neden olan konularda, çocukların ve ailelerin sahip olduğu önem ve boşanma, kürtaj ve eşcinselliğe yönelik tutumlarda yaşanan değişiklikleri incelemektedir. Ronald Inglehart'ın daha önceki "The Silent Revolution" (Princeton, 1977) adlı kitabı, sanayi toplumlarında kuşaklararası farklılıkları incelemiş ve bu konuda bir temel oluşturmuştur. Bu değerler değişimi, toplumlarda giderek politik, ekonomik ve toplumsal hayatı dönüştüren çok daha geniş bir kültürel değişim sürecinin bir parçası olmuştur.Inglehart, 1970'den 1988'e kadar toplanan yirmi altı ülkeden devasa bir anket verisi kullanarak, yaşlı nesillerde gençlerin yavaş yavaş yer almasıyla ortaya çıkan kültürel değişimleri analiz etmiştir. Bu değişimlerin geniş kapsamlı siyasi sonuçları vardır. Toplumların ekonomik büyüme oranlarında ve ekonomik kalkınmada değişimlere neden olmaktadır (Inglehart,1990). Maslowian'ın "ihtiyaçlar hiyerarşisi" perspektifinden baktığımız zaman, temel bir ihtiyaçlara odaklanmak zorunda kalan yaşlılara göre, yeni nesillerin daha erken bir zamanda daha ekonomik refaha ve lükse sahip olduğu görülmektedir. Buna "nesiller arası" bir fenomen olarak atıfta bulunulması, tarihsel etkiler belirli zaman diliminde büyüyen çoğu insanın gelişimini şekillendirmekte ve onları birbirinden ayıran ortak bir kültürel kimlik bulunmaktadır. Bununla birlikte, farklı kuşakların fikri, varlığı ve etkileri kolaylıkla belgelenmeyen karmaşık bir kavram olduğu da gözlenmektedir. biçimlendirici deneyimlerin doğası ne olursa olsun, insanlar yine de hayatları boyunca kendi eğilimleri, kimlikleri ve inançlarında değişmeye devam ederler mi? Gençlik döneminde meydana gelen eşsiz tarihsel olaylar hiç şüphesiz güçlüdür. Elbette, bazı dönemler ve toplumsal hareketler (örneğin, Kadın hareketi ya da Sivil Haklar Dönemi) ya da bazı yeni ideolojilerin ortaya çıkması (örneğin, 1930'ların Roosevelt'in Yeni Anlaşması ya da 1970'lerin çevre hareketi) gençlik için farklı deneyimler sunmakta(Alwin/Mccammon, 2003, 25), toplumların ideolojilerini, tutumlarını ve davranış biçimlerini etkilemekte, kültürel değişimlere neden olmaktadır.

İnsanların algıları, beklentileri, öncelikleri, hayata bakış açıları ve nihayetinde de davranışları zaman kavramına bağlı olarak değişmekte, birbirlerine yakın dönemlerde dünyaya gelen insanların benzer özelliklerinin olması ve her bir kuşağın farklı özelliklere sahip olması, araştırmacıların kuşak kavramı ve kuşakların özelliklerine olan ilgisinin yoğunlaşmasına neden olmaktadır (Adıgüzel, 2014, 165). Günümüzde bir arada yaşamak ve çalışmak zorunda olan dört kuşak olduğu gözlenmektedir.

Bireyler arası farklılıklardan dolayı ortaya çıkan kuşak/jenerasyon kavramı; tarih, sosyoloji, psikoloji ve yönetim bilimi gibi sayılabileceğimiz disiplinler açısından önemli araştırma ve çalışma alanlarının ortaya çıkmasına olanak sağlamıştır. Böylelikle dünya genelinde yapılan çalışmalardan ülke ve kültürel farklılıklar bazında kuşak ayrımları tanımlanmış ve kültürel olgulara göre sınıflandırmalar yapılmasına olanak sağlanmıştır. Bu sınıflandırmalar ve tarihsel aralıklar, sosyal olaylar ve kültürel etkilere göre farklılıklar göstermektedir. Bu tanımlamalar genel olarak, Gelenekselciler, Sessiz Kuşak, BabyBoomer Kuşağı, X Kuşağı ve Y Kuşağı ve Z kuşağını içine alarak yapılmıştır. Birbirinden farklı özelliklere sahip olan bu kuşakların birlikte yaşıyor olmaları, sahip oldukları kültürel zenginlikleri ve kolektif bilinç paylaşımı ile birlikte, başta iletişim sorunu olmak üzere pek çok sorunları ve çatışmaları beraberinde getirmektedir (Adıgüzel, 2014, 167). Bu açıklamalardan da yola çıkarak kuşak kavramını, aynı dönemlerde yaşayan, ortak özelliklere sahip bireylerin oluşturduğu gruplar olarak da tanımlanmamız mümkündür.

Christian Licoppe 'e göre yarattığımız bilgi toplumu, akıllı telefonlar gibi yeni teknolojiler sunmakta ve online olarak ilişki yönetimini mümkün kılmaktadır. Akıllı telefonlar, önceki yıllardan farklı olarak, fiziksel olarak ortamda olmayan ya da bir şekilde müsait olmayan tarafla bile iletişim kurmamızı sağlamaktadır. Bulunmadığımız ortamlarda bile bizimle iletişime geçebilecek bir teknolojinin varlığı söz konusudur. Önceleri iletişim içerisinde bulunmak istemediğimiz zamanlarda gelen aramayı cevaplamaz ya da telefonumuzu kapatırdık. İş ile ilgilenmek istemediğimizde maillerimizi kontrol etmezdik. Artık, gelen her elektronik postayı bildiren bir cihazla yaşamakta olup, "görmedim" sözü bir bahane olmamaktadır. Çünkü whatsapp, Messenger gibi bazı uygulamalar mesajı ileten tarafa bizim gördüğümüzün bilgisini vermektedir (<https://www.alperweb.com/apparatgeist/>).

Geleneksel Kuşak üyeleri 1922-1945 yılları arasında doğanlardır. Otoriteye ve kuralara uyma, sadık, disiplinli, mantıklı, detay odaklı olma, çatışmayı sevmeme, teknolojik gelişmeleri araştırma, hiyerarşik organizasyonel yapıları tercih etme gibi özelliklere sahiptirler. Birçok kaynak, BabyBoomers kuşağını 1943-1965 arasında doğmuş insanlar olarak tanımlamaktadır. O dönemde doğan milyonlarca bebekten dolayı Bebek Patlaması olarak adlandırılmaktadırlar (AnickTolbize, 2008). Akşamları ve hafta sonları da dahil olmak üzere ofiste uzun saatler geçirebilirler. Kariyerlerini uzun vadede ve işverenlerine sadakatle inşa ederler. Kaliteli ve iyi iş yapmayı tercih ederler. Çözüm odaklıdırlar. Otoriteye saygı gösterirler. X kuşağı üyeleri 1965-1980 yılları arasında doğanlardır. Nicelikten çok niteliğe önem verirler. Hedefler koyarlar, çok üretkendirler. İş ve özel yaşamlarında esnek çalışma saatleri, iş paylaşımı gibi denge unsuruna önem verirler. Otoriteye karşı rahat hareket etme, aşta bağımsızlık, etnik çeşitlilik onlar için önemlidir. Y Kuşağı üyeleri ise 1981-1994 arasında doğanlardır. Değişim önemlidir. Her zaman çok çeşitli görevler alabilirler. Aktif katılıma önem verirler. Çalışma saatlerinde esneklik, rahat bir çalışma ortamı, takım çalışması, iş başında eğitim, iş ve özel yaşam dengesi (Mitchell) onlar için önemlidir.

Ortalama her yirmi yılda yeni bir kuşak doğmakta ve bu kuşağın da ortak istekleri, ihtiyaçları, güdülleri ve eylemleri oluşmaktadır (Adıgüzel/Batur/Ekşili, 2014, 170). Tarihsel aralıklar, sosyal olaylar, kültürel etkiler ve teknolojiye yaşanan hızlı gelişmeler kuşaklararası farklılıkların ortaya çıkmasında en önemli etkenler olarak görülmektedir.

WJSchroer adlı kuruluşun yaptığı araştırmada kuşaklar 8 dönem olarak ele alınmıştır (Wjschroer, 2018);

Depresyon Kuşağı (1912-21-1930-39): Depresyon dönemi bireyleri muhafazakâr, borca girmekten korkan, finansal açıdan tedbirli hareket eden, iyi bir miras bırakma sorumluluğu olan, vatansever, zevkten önce çalışmaya yönelen ve ahlaki bir yükümlülük duygusu olan bireylerdir.

Savaş Kuşağı (1922-27-1940-45): Bu dönemin insanları zorlukları yenmek için ortak bir amaç etrafında birleşmişlerdir. Ben değil, biz görüşünün hakim olduğu bir dönemdir. Savaşın yarattığı güvensizlik ortamını yaşadılar. Bu güvensizlik onların tüm davranış kalıplarına yansdı. Türkiye açısından bu kuşağın 1923-1929 yılları arasındaki bölümü Cumhuriyet Kuşağı'na karşılık gelmektedir.

Savaş Sonrası (1928-1945): Savaşın sona ermesiyle bu nesil eğitimde ve iş yaşamında önemli fırsatlara sahip oldular. Ekonomik patlama ise Amerika'yı vurdu. Ancak, Soğuk Savaş gerginliklerinde büyüme, nükleer savaş potansiyeli ve daha önce hiç görülmemiş tehditlerle yüksek seviyelere çıktı. "Büyük Buhran" adı da verilen ve tüm dünyayı kasıp kavuran işsizlik sonrası, dünyanın savaşın eşiğine geldiği bir dönemde, iş ve güven kavramlarının hayat mücadelesinde temel rol oynadığı bir dönemde dünyaya gelen nesillerdir. Savaş sonrasında bile gelecek kaygıları olan bir kuşak olarak hayatlarını sürdürmüşlerdir. 1939-1945 yılları arasında doğanlar savaşın yıkıcı atmosferi içinde her şeyden önce hayatta kalmanın önemini öğrenerek büyüdüler. İkinci Dünya savaşı döneminde Türkiye her anlamda sıkıntılı günler geçirdi. 1940-1945 döneminde nüfus artış hızı ciddi biçimde düştü. Savaş yıllarında daha az sayıda bebek doğdu. "Savaş çocukları" diyebileceğimiz bu nesil de, çocukluğunu yokluk ve sıkıntı içinde geçirdi (<http://aydancag.com/kusaklar/>).

Baby Boomers I (Baby Boomers) (1946-54): II. Dünya Savaşı'ndan sonra doğanlardır. Tüm nesillerin en büyük nüfusuna sahiplerdir. Çoğu zaman işlerini hayatlarının merkezine yerleştirdiler. "işkolik" terimi onların döneminde çıktı. Sağlık değerleri, idealizm, yaratıcılık, takım odaklılık, kariyer odaklılık, liderlik pozisyonlarına hızla yükselme, takımda düzenli değişim, ilişkileri ve ağırları korumak, özelliklere sahiptirler. İletişim ortamı olarak telefon ağırlıktadır (Mörsted, 2018). Çalışmamızın ana teması olan günümüz Baby Boomers'ları da bu geleneklerini sürdürerek, en çok indirilen iPhone ve Android uygulaması olan whatsapp'ı yoğun olarak kullanmaktadırlar.

Boomers II. (Jenerasyon Jones) (1955-65): Amerika’da hükümete olan güvenlerinin çoğunu kaybeden Watergate sonrası kuşağıdır. 1979’daki petrol ambargosu da dahil olmak üzere ekonomik mücadeleler ve medyaya olan şüphecilik duygusu ile yaşadılar. Boomer I kuşağı, Boomers II kuşağının yararına olan işlerden ve fırsatlardan daha çok yararlanmıştır. Hem jenerasyon X hem de Bomeers II, Boomers I tarafından kullanılan bu fırsatların gölgesinde kalmıştır (Mörsted).

X Kuşağı (1966-1976): Bazen "kayıp" nesil olarak adlandırılan, ve ebeveyn boşanmalarına maruz kalan “latchkey” çocuklarının (ebeveynleri çalıştığı için okuldan boş bir eve dönen, bakıcıların baktığı çocuklar) yaratıldığı dönemdir. X, jenerasyonu genellikle yüksek düzeyde kuşkuculuk ile karakterize edilir. Birçok jenerasyon X’in çocukluklarında yaşadıkları anne-baba boşanmaları, kendi ailelerini nasıl şekillendireceklerinin en belirleyici deneyimlerden biri olarak görülmektedir. X’ler tartışmasız önceki nesillere göre en iyi eğitilmiş nesildir (Mörsted, 2018). Türkiye açısından ara kuşak anlamına gelen geçiş dönemi çocukları olarak da adlandırılan X Kuşağının geçiş dönemi olarak adlandırılmasının nedeni; sözkonusu yıllarda dünyanın önemli değişim ve dönüşümler yaşamaya başlamasından kaynaklanmaktadır. Sözkonusu dönemde yaşam şartlarında görülen olumlu gelişmeler, bireylerin davranışları üzerinde de etki yaratmış, bireylerin parasal konular dışında, sosyal yaşamla ilgili unsurlara önem vermelerini beraberinde getirmiştir. (www.humanica.com.tr/kusaklari-anlamak-yonetmek). Bağımsızlık, bireycilik, yüksek yaşam kalitesi isteği, zamanı paradan daha değerli kabul etme, çalışma hayatında sonuç odaklı olma, Gücü ve sorumluluğu paylaşma ortak özellikleridir (Mörsted).

Y Kuşağı (1980-1999): Diğer kuşaklardan, yetiştikleri dönemin olumlu şartlar taşıması sebebiyle ayrılan Y Kuşağı, teknolojik imkanlar olarak da gelişme gösteren bir dünyada yetişmişlerdir. Türkiye’de 1980 sonrası olarak ifade edilen Y kuşağı, PC’nin ve GSM teknolojilerinin doğduğu, teknoloji dostu, bireysel, rahat ve küreselleşmeye başlayan dünyanın çocuklarıdır. Yaşam şartlarında meydana gelen değişim ve dönüşümler, Y kuşağının diğer kuşaklardan farklı beklentilere, ümitlere ve tercihlere sahip olmalarını beraberinde getirmiştir (www.humanica.com.tr/kusaklari-anlamak-yonetmek). Kuşaklar arası farklılığın en çok hissedildiği nesil özelliği taşırlar. Çünkü onlar bağımsız olmayı seviyorlar, özgürlüklerine düşkünler ve iş yaşamlarında da farklılar. (http://www.acikbilim.com/2013/09/dosyalar/nesiller-ayriliyor-x-y-ve-z-nesilleri.html). Yeni teknolojilerle büyümeleri, 24 saat çevrimiçi olmaları, öğrenmeye istekli, çalışmaya istekli olmaları, Esnek ve bağımsız çalışmayı sevmeleri, proje odaklı ve takım çalışmalarına yönelik olmaları ve kendini gerçekleştirme isteğinin hakim olması özellikleridir (Mörsted). Ayrıca bağımsızlığı sevmeleri, özgürlüklerine düşkün olmaları, otoriteyi sevmemeleri, kendilerine kurallar koyulmasından hoşlanmamaları, iş yaşamlarında kurallara ve mesai saatlerine göre çalışmayı sevmemeleri ve çok fazla iş değiştirmeleri de kendilerini diğer kuşaklardan farklılaştıran özellikleridir.

Z Kuşağı (1995-2012): Tamamen dijital teknolojiler ile büyümüş olan Z jenerasyonu iş ve özel yaşamında Y kuşağından çok farklıdır. Sabit sınırlar ve net yapılar tekrar aranıyor. İşten sonra dizüstü bilgisayarları evde de yanlarındadır. Kendini gerçekleştirme artık sadece iş yaşamlarında değil, boş zamanlarında ve sosyal ilişkilerin de söz konusudur. Sanal ve gerçek arasında hiçbir ayırım kalmamıştır (Mörsted). Z nesli, 2000 yılı ve sonrası doğanlara denir. En büyüğü 13 yaşındadır. İnternet ve mobil teknolojileri kullanmayı seviyorlar. Günümüzde yaygın olan akıllı telefonlar, ipad’ler ya da tablet bilgisayarlar ile her alanda aktifler. Özellikle internet aracılığıyla sosyalleşmeyi tercih ediyorlar. Diğer nesillerden farklı olarak, internet ve teknoloji ile doğdukları tabir edilir (http://www.acikbilim.com/2013/09/dosyalar/nesiller-ayriliyor-x-y-ve-z-nesilleri.html). Generation Z, aynı zamanda günlük hayatın dijitalleşmesini hayatlarına dahil eden Generation YouTube olarak da bilinir (www.absolventa.de).



Resim 1: <https://www.b.dk/nationalt/anklage-mod-bedsteforaelder-generationen-i-er-sociopater>

Apparatgeist Teorisi

Bu teori, kişinin teknolojiyle ve toplumla olan ilişkisini incelemektedir. Katz ve Aakhus'a göre evrensel özellikleri açısından bireyler altyapıyı standartlaştırmaya ve tutarlı zevklere doğru yönelmeye eğilimlidirler. Kullanıcılar cep telefonlarını büyük ölçüde benzer şekillerde kullanmaktadırlar.

Aparatgeist Teorisine göre, teknoloji kullanımı normları sosyal olarak inşa edilmiş ve bu normlar teknolojinin nasıl kullanılması gerektiğine dair ortak bir anlayış geliştirmiştir.. Bu paylaşılan anlayış, sosyal yapıdan türetilmiştir ve genellikle “sosyal inşacılık” olarak anılmaktadır. Böylece, kullanıcılar, kullanımdan kaynaklanan sonuçların farkında olarak teknolojilerine anlamlar yüklemektedirler (Lever-Mazzuto, 2012, 83). Mobil teknolojilerin kullanımının bir sonucu olan ve evrensel ruh ya da makinenin ruhu denilen bu doğal oluşumun içinde X, Y ve Z kuşağının yanı sıra BabyBoomers kuşağı da aktif olarak yer almaktadır. Özellikle Whatsapp uygulamasına gündelik yaşamlarında var olan arkadaş gruplarını taşıyarak mesaj bombardımanı yapmakta, Katz ve Aakhus tarafından evrensel ruh ya da makinenin ruhu olarak tanımlanan mobil teknolojilerin olanaklarından yararlanmaktadırlar.



Resim 2: <https://listelist.com/baby-boomers-bencil/>

Bir Iphone Ve Android Uygulaması Olarak Whatsapp

Akıllı telefonların yaygınlaşması ile mesajlaşma uygulamaları artmış, WhatsApp bir çok ülkede en çok indirilen iPhone ve Android uygulaması olmuştur. İnternet üzerinden karşılıklı mesajlaşma ve dosya gönderebilme programı olan WhatsApp, kullanıcıların GSM operatörlerine ödedikleri kısa mesaj ücretlerini de azaltarak, sınırsız mesajlaşma, resim, video ve ses kaydı gönderme gibi olanaklar yaratmaktadır. Dünyanın internet bağlantısı olan her yerinde WhatsApp yardımı ile mesajlaşma, fotoğraf veya video gönderimi mümkün olmaktadır.



Resim 3: <https://www.hurriyet.com.tr>

Masuda'nın adına “sosyal teknoloji” dediği ve toplumu başkalaştıran bir sistem olarak tanımladığı bu yapı toplumları ve bireyleri bağlı hale getirmiş, dünya küresel bir köye dönüşmüştür. Dünyamızın artık küresel olarak birbirine bağlı hale geldiğini belirten Dijk ise, uydu televizyonlar, mobil telefonlar ve internetin hızla yayılmasıyla gelişmekte olan ülkelerin ağ toplumuna dönüştüğünü belirterek, 21. yüzyılı “Ağlar çağı” olarak tanımlamıştır (Dijk, 2016:13). Ona göre ağlar, toplumun sinir sistemleridir ve bu altyapı hem sosyal hem de özel hayatlarımızda büyük bir etkiye sahiptir. Gündelik yaşamda bireylerin her an içinde var oldukları bu ağlar sistemi Katz ve Aakhus

tarafından Apparategeist olarak adlandırılmıştır. Bireyler bilgilerin, duygu ve düşüncelerin, resimlerin paylaşıldığı bu ağlar sisteminde sadece iş yaşamlarında değil, ağırlıklı olarak sosyal ilişkilerinde de kendini gerçekleştirme güdülerini tatmin etmektedirler.

Bauman'ın akışkan modern dünya olarak tanımladığı bu yeni toplumun, sürekli bir değişim halinde olduğunu ve akışkanlığının buradan geldiğini belirtmektedir. Elektronik dolayımın gittikçe artan bir olgu olduğunu, iş yaşamında, oyunda ve hatta birçok seviyedeki ilişkilerde yeni iletişim platformlarının öneminden bahsetmektedir (Bauman, 2013, 42). Sosyal hayat rutin olarak elektronik ortamda sürmekte ve sosyal yaşam temel olarak bir bilgisayar, İpad veya cep telefonu aracılığıyla yürütülmektedir (Lyon, Bauman, 2013,36). Akışkan toplumun “kişisel sunum kültürü” yeni bir tüketim piyasası oluşturmuştur. Buna göre “tüketmek” damak zevkinden ziyade kişinin kendi sosyal aidiyetine yatırım yapmasıdır. Tüketim toplumunun bir üyesi olmak, ayak uydurmak yetersizlik korkusunun hiç bitmediği çetin bir mücadeledir. Yeni iletişim teknolojilerinden türeyen yeni medya platformları da bu piyasanın sunduğu tüketim mallarıdır. Bireysel olarak yerine getirilen “kendini üretme” işi için gereken “araçlar” şirketler tarafından tedarik edilmekte ve bu araçlar bireylerin önceden olduğu gibi şimdi de özgür olabilmek için öğrenmesi, uyması gereken karşı konulamaz “zorunluluğun” kristalleştirilmiş biçimleridir (Lyon, Bauman, 2013,38-41, Akt: Baran/Kurt/Tekeli, 2017, 5).Tüketimin kişinin sosyal aidiyetine yatırım yapması olarak algılanan günümüz tüketim toplumunda, BabyBoomers kuşağı bireyleri de gündelik yaşamlarında İped ve mobil iletişim teknolojilerinin sağladıkları olanaklardan aktif olarak yararlanmaktadırlar.

Araştırmanın Amacı

Günümüzde Sosyal yaşam elektronik ortamda, siber yaşam olarak süregelmekte, kişilerarası ilişkiler çoğunlukla bilgisayarlar, İpad veya cep telefonları aracılığıyla yürütülmektedir. Araştırmanın amacı, Mobil teknolojilerin kullanımının bir sonucu olan ve evrensel ruh ya da makinenin ruhu “Apparategeist” denilen bu doğal oluşumun içinde en az X, Y ve Z kuşağı temsilcileri kadar BabyBoomers kuşağının da aktif olarak yer almalarının incelenmesidir.

Araştırmanın Yöntemi Ve Sınırlılıkları

Bu çalışmada yöntem olarak, bilgiye tümevarım yöntemini kullanarak ulaşmaya çalışan nitel araştırma yöntemlerinden odak grup görüşmeleri yapılmış, araştırma nitel veri analiz türlerinden betimsel analiz yapılarak sonlandırılmıştır. Kullanılan amaçlı örneklem modelinde araştırmanın konusunu oluşturan kişiler, BabyBoomers kuşağını temsil eden ve aktif olarak whatsapp kullanıcısı olan, 50-60 yaş arası olan 7 bayan ve 5 erkek katılımcı araştırmanın sınırlılıklarını oluşturmaktadır.

Elde Edilen Bulgular

Yapılan odak grup görüşmeleri sonucunda elde edilen bulgular;

Aşağıda elde edilen veriler, odak grup görüşmesi yapılan kişilerin kendi ifadeleri olarak aktarılmıştır. Hiçbir değişiklik yapılmamıştır. Görüşme yapılan 12 katılımcının birbirine benzer cevapları aynı cümleler içindeki ifadelerde yer almış, benzer söylemler ortak noktada birleştirilmiş, dikkati çeken bazı söylemler olduğu gibi aktarılmıştır.

-Whatsapp uygulamasını günde ne kadar süre ile kullanıyorsunuz? Sorusuna verilen yanıtlarda yer alan “her an ve her yerde” ifadesinden, mobil teknolojiler arasında yer alan whatsapp’ın yarattığı evrensel ruhun etkisinde oldukları anlaşılmaktadır.

-Bu uygulamayı sadece resim, bilgi ve haberlerin paylaşımı amacıyla mı kullanıyorsunuz?

- Whatsapp’ta herşeyi paylaşıyoruz. Duygu ve düşüncelerimiz, elde ettiğimiz haber ve bilgiler dahil her şeyi paylaşıyoruz.

-Whatsapp kullanımında bu kadar aktif olmanızın nedenleri nelerdir? Sorusuna verilen cevaplar çok çarpıcıdır; -“Gençlik dönemimizde bu teknolojilerin olmamasının yaratmış olduğu iletişim ve paylaşım duyulan özlem olabilir. Eskiden boş vakitlerimizi geçireceğimiz, arkadaşlarımızla her an iletişime geçeceğimiz olanaklarımız yoktu. Bugün ise cep telefonum yanımda yokken, kendimi sosyal yaşamdan kopuk hissediyorum.”

-Arkadaşlarınızla aynı zaman ve uzamda birlikte olma isteğinizi whatsapp uygulaması sağlıyor mu?

-Bu uygulama her an arkadaş gruplarımızla sanal alemde de olsa birlikte ve iletişim içinde olmamızı sağlıyor.

-Whatsapp, arkadaşlarınızın ne zaman ve nerede neler yaptığını, neler düşündüğünü öğrenmenin bir yolu mudur? Merak duygularınızı bu yolla gideriyor musunuz?

-Merak duygularımızı tatmin ediyor.

- Neler yaptıklarımız arkadaşlarımız tarafından izleniyor.

-Arkadaşlarımızın neler yaptıklarını merak ediyorum ve merak edilmeyi seviyorum.

Kullanıcılar günün her saatinde Whatsapp’ta aktif olduklarını söylemektedirler. Görüşmelerdeki söylemlerden özellikle resim paylaşımlarının, merak duygularını giderme, başkaları tarafından izlenme, ve beğenilme duygularını tatmin ettiği anlaşılmaktadır.

-A adındaki katılımcı;

“Gençlik dönemlerimizde arkadaşlarımızla anlık iletişim kuramazdık. Sabit telefonlar tek iletişim aracımızdı. Şimdi her şey çok kolay. İstedğimiz herhangi bir şeyi gerek resim, gerek haber olsun anında arkadaşlarımızla paylaşabiliyoruz. Çeşitli arkadaş grupları oluşturarak, dilediğimiz gibi iletişim kuruyoruz. Bu sayede sanki gençlik dönemlerimize dönmüş gibi hissediyoruz. Keşke bu teknolojilere çok önceden sahip olsaydık.” söyleminde duygu ve düşüncelerini aktarmıştır.

-D adındaki katılımcı ise;

“yapmış olduğum işleri, gezdiğim yerleri ve düşüncelerimi başkalarıyla paylaşmak hoşuma gider. Keşke gençliğimde bu teknoloji olsaydı.”

söyleminde başkaları tarafından takdir edilme, beğenilme ve izlenme duygularının whatsapp’ta aktif olmasının asıl nedeni olduğunu belirtmiştir.

Sonuç

Mobil telefonlar bireylerin günlük yaşamlarında giderek daha fazla yer almaya başlamıştır. Milenyum çağı kuşakları gibi Babyboomers’lar da kendilerini ifade etme biçimlerinin gelişimine ve zenginleşmesine olanak sağlayan mobil teknolojileri aktif bir şekilde kullanmakta, zaman ve uzam algısında değişimler yaşayıp, cep telefonları ile ulaştıkları ve James E. Katz ve Mark Aahus adlı araştırmacıların “Apparatgeist” evrensel ruh adını verdikleri sanal alemle bütünleşmektedirler. James E. Katz ve Mark Aakhus teknolojinin toplumsal olarak inşa edildiği görüşüne karşı çıkarak, mobil telefonların, bu teknolojiyi kullanan farklı bireyler ve toplumlar arasında, uzamdan bağımsız, ortak bir zaman algısına dayalı, yeni ve evrensel bir ruhun, bir tür Apparatgeist’ in gelişmesine yol açtığını ileri sürmüşlerdir. Bu evrensel ruh her kuşaktan bireyleri etkilemiş, özellikle mobil teknolojilerin kullanımında Babyboomers’lar aktiflikleriyle ön plana çıkmışlardır.

Bu çalışmada Babyboomers kuşağı aktif Whatsapp kullanıcıları incelenerek, gençlik dönemlerinde bu teknolojilerin olmamasının yaratmış olduğu iletişim ve paylaşım isteklerini ancak bu dönemlerinde karşılayabildikleri yapılan görüşmelerde yer alan söylemlerinden anlaşılmıştır. Whatsapp uygulamasının her an arkadaş gruplarıyla sanal alemde de olsa birlikte ve iletişim içinde olmalarını sağladığı, merak duygularını tatmin ettikleri, yaptıklarının arkadaşları tarafından merak ediliyor ve izleniyor olmasının hoşlarına gittiği anlaşılmaktadır. Bu teknolojiler kendilerini gençlik dönemlerine dönmüş hissettirmektedir. “Keşke bu teknolojilere çok önceden sahip olsaydık” söylemi ile de, içinde var oldukları Apparatgeist’a olan özlem ve bağlılıklarını dile getirmişler, cep telefonları yokken, kendilerini sosyal yaşamdan kopuk hissettiklerini belirtmişlerdir. Dolayısıyla haberleri, duygu ve düşüncelerini, resimlerini paylaştıkları bu ağlar sisteminde Baby Boomers’lar gündelik yaşamlarında, sosyal ilişkilerinde kendini gerçekleştirme güdülerini de tatmin etmektedirler.

Kaynakça

- Adıgüzel, O. /Batur, H.Z. / Ekşili, N., (2014), Kuşakların Değişen Yüzü ve Y Kuşağı İle Ortaya Çıkan Yeni Çalışma Tarzı: Mobil Yakalılar, Journal of Süleyman Demirel UniversityInstitute of SocialSciencesYear: 2014/1, Number:19
- Antje-BrittaMörstedt, PFH PrivateHochschule, Göttingen.
https://www.pfh.de/fileadmin/Content/PDF/forschungspapiere/vortrag-generation-z-moerstedt-ihk-goettingen.pdf,
- Baran, G./Kurt, K., Ş./Tekeli, E.S., (2017) YaşlılarınDijitalTeknolojileriKullanımDüzeyleriÜzerineBirAraştırma, İletişimKuramveAraştırmaDergisi -Sayı 45 / Güz 2017
- Castells, (2007), Communication, Powerand Counter-power in the Network Society, International Journal of Communication 1 (2007)
- Duane F. AlwinRyan J. Mccammon,(2003), Generations, Cohorts, andSocialChange, Handbook of the Life Course, Mortimer J.T.,Shanahan M.J. (eds) Handbook of the Life Course. Handbooks of SociologyandSocialResearch. Springer, Boston, MA
- Fryer, J. (2009), Mobile-phonecultureTheApparatgeistcalls, https://www.economist.com/briefing/2009/12/30/the-apparatgeist-calls
- Inglehart, R. (1990). Cultureshift in advancedindustrialsociety. Princeton: Princeton UniversityPress.
- Lyon/Bauman, (2013), Akışkan Gözetim, Ayrıntı Yayınları
- Berg,M.(2017),KommunikativeMobilität,DiemedialeVernetzungberuflichmobilerMenschen,SpringerFachmedie nWiesbadenGmbH , DOI 10.1007/978-3-658-15941-2 2).
- Mazzuto, K .L.,(2012), KatzandAakhus’ Theory of Apparatgeist: Students’ Perceptions of NormativeandNon-normativeBehaviorsforTechnologyUse, CommunicationTeacher ,Vol. 26, No. 2, April
- Mitchell, B., (2005), AchieveSolutions , UnderstandingandManagingDifferentGenerations, Putting People First, LPC, NCC, CEAP
- Tolbize, A. (2008), Generationaldifferencesintheworkplace, August 16, Researchand Training Center on CommunityLiving at theUniversity of Minnesota (Contract: TLG — 05-034-2967.06).
- Van Dijk, J.G. M., (2016). AğToplumu, İstanbul: Kafka Yayınevi.

Wimmer. J.,Hartmann, M.(2014), Medienkommunikation in Bewegung: Mobilisierung – Mobile Medien – Kommunikative Mobilität. Springer, V.S, ISBN-13: 978-3531193748, ISBN-10: 3531193740

WJSchroer, (2018), Generations X, Y, Z and the Others, <http://socialmarketing.org/archives/generations-xy-z-and-the-others/>, E.T.22.06.2018

X.Y.Z. Generationen auf dem Arbeitsmarkt, www.absolventa.de/karriereguide/berufseinsteiger-wissen/xyz-generationen-arbeitsmarkt-ueberblick)

<http://aydancag.com/kusaklar/>

<http://www.humanica.com.tr/kusaklari-anlamak-ynetmek/>

<https://listelist.com/baby-boomers-bencil/>

<https://www.alperweb.com/apparatgeist>

<https://www.b.dk/nationalt/anklage-mod-bedsteforaelder-generationen-i-er-sociopater>

Yurtdışındaki Türk Diasporasına Yönelik Yürütülen Faaliyetlerin Türkiye'nin Yumuşak Güç Kapasitesine Yaptığı Stratejik Katkıların Değerlendirilmesi

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Özet

Küreselleşme süreciyle birlikte devletler arasındaki ilişki biçimi uluslar arası arenada toplumlar arası ilişki inşasına evrilmiş, ülkeler sahip oldukları yumuşak güç unsurlarını öne çıkartarak kapasite inşa etmeyi hedeflemeye başlamışlardır. Kültür, eğitim, spor, sanat, bilim gibi yumuşak güç kaynaklarını etkili şekilde kullanmayı başaran ülkeler, cazibe merkezi ve söz sahibi olmaya başlamıştır. Öte yandan ülkelerin yurtdışında (diasporada) yaşayan kendi vatandaşları da önemli bir yumuşak güç kaynağı olarak belirmeye başlamıştır. Türkiye son yıllarda diasporadaki vatandaşlarını adeta yeniden keşfetmiş, onlara yönelik kapsamlı eğitim, kültür ve sosyal çalışmalar başlatmıştır. Başbakanlık makamına bağlı olarak kurulan Yurtdışı Türkler ve Akraba Topluluklar Başkanlığı eliyle yürütülen Türk diasporasına yönelik faaliyetler, hem seslendiği hedef kitlesi, hem geleceğe dair hedefleri açısından oldukça dikkat çekicidir.

Çalışmada Yurtdışı Türkler ve Akraba Topluluklar Başkanlığı eliyle yürütülen Türk diasporasına yönelik faaliyetler detaylı şekilde incelenmiş, Türkiye'nin kamu diplomasisi vizyonu başta olmak üzere yumuşak güç kapasitesinin geliştirilmesine yapılan bu çalışmaların nasıl bir katkısının olduğu analiz edilmiştir.

Anahtar kelimeler: *Yumuşak güç, Türk Diasporası, Yurtdışı Türkler ve Akraba Topluluklar Başkanlığı*

Giriş

Türkiye'nin yurtdışında yaşayan büyük bir diaspora nüfusu bulunmakta olup bu kitle ile yıllardır etkili bir iletişim kurulması ne yazık ki pek mümkün olamamıştır. Bu durumun çeşitli nedenleri olmakla birlikte, diaspora ile kurulamayan bu iletişim köprüsü Türkiye'nin yurtdışında kendisini daha iyi tanıtmayı, anlatmayı ve politikalarına destek verecek bir gücü yanında hissetmesi olgusundan da mahrum kalmasına yolaçmıştır.

Türkiye 2010 yılında yurtdışında yaşayan Türk diasporalarına yönelik kurumsal çalışmalara başlamış ve Yurtdışı Türkler ve Akraba Topluluklar Başkanlığı'nı (YTB) kurmuştur. Kültür, eğitim, hukuk, gençlik ve sivil toplum gibi temel alanlara yoğunlaşan YTB, kamu diplomasisi perspektifinden hareket ederek, Türkiye'nin yumuşak güç potansiyelini harekete geçirmeyi amaçlamıştır. YTB'nin kurulduğu günden bugüne kadar yaptığı faaliyetlere, çalışma alanlarına, yürüttüğü projelere, bunların etkilerine bakıldığında şimdiye kadar ihmal edilen bir alandaki önemli bir potansiyeli açığa çıkardığı görülmektedir. Açığa çıkartılan bu potansiyel yapılan çalışmalarla daha görünür hale gelmekte ve Türkiye'nin yumuşak güç kapasitelerinin kullanılarak neler yapılabileceğinin de işaretlerini vermektedir. Türkiye kültür, eğitim, medya, bilim vb. pekçok alanda önemli yumuşak güç kapasitesine sahip bir ülke olup; doğru planlama, sabırlı/kararlı çalışma ve odaklanma ile bu kapasitenin kalıcı ve başarılı ilişkilerin inşa edilmesinde kullanılabileceğinin en iyi örneğini ise YTB oluşturmaktadır.

Çalışma YTB'nin yurtdışındaki Türk diasporalarına yönelik faaliyetlerine odaklanmakta, bu faaliyetlerin Türkiye'nin yumuşak güç kapasitesi ile ilişkisini incelemektedir. Türk diasporalarına yönelik faaliyetlerin aynı zamanda Türkiye'nin imaj ve algısına yaptığı katkılar da çalışmada analiz edilmektedir.

Kamu Diplomasisi Perspektifi

Kamu diplomasisi kavramı son yıllarda çokça gündeme gelmekte, başarılı uygulama örnekleri görüldükçe bu kavrama olan ilgi de giderek artmaktadır. Etkili iletişimi, kalıcı iknayı, başarılı ilişki inşasını esas alan kamu diplomasisi ülkeler açısından yeni yüzyılın öne çıkan olgularından biri haline gelmektedir.

Kamu diplomasisi, hükümetlerin yabancı kamularla ülkelerinin fikirlerine, ideallerine ve ülke çıkarlarına hizmet edecek şekilde sempati oluşturma amacıyla kurdukları iletişim sürecine vurgu yapmaktadır (Signitzer, 2008, 206). Dolayısıyla kamu diplomasisi her ülkenin kendi çıkarlarını korumak, kendi fikirlerini destekleyecek kişi ve toplumların sayısını artırmak, ideallerine ortak olacak ülkeleri bulma amacına hizmet etmektedir.

Kamu diplomasisi kavramını incelerken ilişki inşa etme gücüne, hükümetlerin iletişim politikası olma boyutuna, kültürel diyalogun kapısını aralama becerisine, ülkelerin imajlarını şekillendirme potansiyeline, algılamaları yönetebilme sanatına ve doğru bilgiyi yayma gücüne de atıf yapmak önem taşımaktadır (Demir, 2012, 12). Çok boyutlu ve kapsamlı bir yapıya sahip olan kamu diplomasisi, etkin kullanıldığında hem ülkelerin imaj ve itibarlarının artmasına, hem stratejik değerlerinin artarak cazibe merkezi haline gelmelerine, hem de politikalarının başka toplumlar/ülkeler tarafından benimsenmesine yardımcı olmaktadır (Özkan, 2017: 5).

21. yüzyılın en stratejik araçlarından biri olarak kabul edilen kamu diplomasisi Nye'a göre (2005) üç farklı boyuttan oluşmaktadır. Birinci boyut "*günlük iletişim ve bilgilendirme*" boyutudur. Doğru bilginin sürekli kılınması, zamanında aktarılması ve sağlıklı bir algı oluşturulması kamu diplomasisi yönetiminin önceliklerinin başında gelmektedir. Kamuoyunun ilgisinin çekilmesi, bütünselliğin ve tutarlılığın sağlanması da önem taşımaktadır. İkinci boyut olan "*stratejik planlama ve ülkenin markalaşması*" uzun vadeli planlama ve stratejiye dayanmaktadır. Kamu diplomasisi, ülkelerin "marka" haline gelmesine de artık çok ciddi katkılar yapmaktadır. Ülke markasını güçlendiren, kamuoyundaki algısını sağlamlaştıran ülkelerin ikna etme kapasitesi daha da artmaktadır. İtibarlı, güvenilir, saygın ülke haline gelmek, verilen mesajların etkisini artıran bir unsur olarak değerlendirilmektedir. "Uzun vadeli ilişkiler kurmak ve geliştirmek" ise kamu diplomasisinin üçüncü boyutunu oluşturmaktadır. Kamu diplomasisi araç ve yöntemlerini kullanarak, hedef ülke ve toplumlarla çeşitli alanlarda kurulan ilişkiler, verilen mesajların kalıcılığını sağlamada önemli bir faktördür. Eğitim, medya, değişim programları, staj imkanları vb. araçlar kalıcı ve uzun vadeli ilişkiler kurabilmek için önemli imkan ve fırsatlar sunmaktadır. Bu ilişkiler toplumların ve ülkelerin birbirini daha yakından tanımalarına yardımcı olmakta, tanıma arttıkça, anlama ve ikna olma olanakları da çoğalmaktadır (Özkan, 2017: 6).

Kamu diplomasisi ilk ortaya çıktığında kaynağı hükümet olan bir iletişim süreci idi. Ancak gelişen iletişim teknolojileriyle birlikte hedef kitlenin daha ulaşılabilir olması, küreselleşmeyle beraber çok uluslu şirketlerin sürdürülebilirliklerinin kamu diplomasisi faaliyetlerine de dolaylı yoldan bağlı olması gibi nedenlerden dolayı kamu diplomasisinde kaynak artık sadece devlet olmaktan çıkmıştır. Kamu diplomasisi sürecinde artık devletin dışında başka kaynaklar da yer almakta, bu kaynaklar bazen devletin çalışmalarına dâhil olmakta bazen de devletten tamamen bağımsız olarak kendi çalışmalarını yürütebilmektedir. Şirketlerin, üniversitelerin, kuruluşların ve de diğer sivil toplum örgütlerinin, resmi dış politika amaçlarını güçlendiren ya da onlarla anlaşmazlığa düşerek kendi kendilerine yumuşak gücü geliştirdikleri doğrudur. Küresel bilgi çağında özel yumuşak güç kaynaklarının önemi artmaktadır. Yumuşak güç ağırları olarak karşımıza aileler, gruplar, şirketler, üniversiteler ve kulüpler ve onların sofistike bilgilendirme kampanyalarındaki etkileri çıkmaktadır (Sancar, 2012, 90).

"Kamu diplomasisi uygulamalarından etkili sonuçlar elde edebilmek için ülkelerin izledikleri politikaların rasyonel, ikna edici, meşru ve savunulabilir olması gereklidir. Evrensel hukuk kurallarını ihlal eden, adaletten uzak, gayrimeşru yöntemlere dayanan bir politikayı savunmak ve uluslar arası kamuoyuna anlatmak mümkün değildir (Kalın,2012,151). Kamu diplomasisi perpektifiyle hareket eden ülkeler önemli kazanımlar elde etmekte, öncelikle insanların o ülke hakkında zihinlerindeki imajlar güncellenmekte, insanların birbirine olan yakınlıkları artmakta, yanlış anlaşılmalara düzeltilmektedir. Böylece olumlu algılar çoğalmakta, insanlar arasında bağlantılar kurulmakta; eğitim, değişim programları, bilimsel işbirlikleri, turizm gibi yollarla insanların birbirini tanıması ve anlamasının yolu açılmaktadır. İnsanlar birbirini ne kadar çok tanırsa ve anlarsa, bunun sonucu olarak da ekonomik, sosyal ve kültürel işbirliklerinin kapısı aralanmakta, kalpler kazanılmakta, kalıcı ve uzun vadeli ilişkiler inşa edilmektedir (Leonard ve Alakeson, 2000,10).

Uluslar arası ilişkiler disiplininin inşacılık kuramı ile kamu diplomasisi olgusu arasındaki ilişkiye de dikkat çekmek yerinde olacaktır. İnşacılık kuramına göre, verili ve kuralları belirli olan bir sosyallik mümkün olmayıp, insanlar ve toplumsal olan arasında karşılıklı bir inşa ilişkisi ve süreci mevcuttur. İnşa süreci sürekli devam etmekte ve farklı dönemlerde farklı öznelere gerçekleşmektedir. Bu kavramsal çerçeve uluslar arası ilişkiler kuramlarına uyarlandığında, uluslar arası ilişkilerin aktörler tarafından inşa edildiği görülmektedir. Bu aktörlerin kapasiteleri yalnızca maddi güç ile ölçülmemekte, aynı zamanda sahip oldukları fikirler, değerler ve kültür onların uluslar arası arenadaki gücünü belirlemektedir (Çemrek, 2016: 38).

Kimlik, algı ve kültür gibi unsurların önemli rol oynadığı inşacılık ile kamu diplomasisi arasında yakın bir ilişki mevcuttur. İnşacılık kuramı, kamu diplomasisinin yürütüleceği araçların nasıl oluştuğuna dair verileri gözler önüne sermekte ve bunları uluslar arası ilişkileri yönlendiren temel bileşenler olarak değerlendirmektedir. Kamu diplomasisi de inşacı yaklaşımın uygulanabilmesi için bir model oluşturmaktadır. İnşacılık, kamu diplomasisi ve yumuşak gücün sunduğu teorik bakış açısının ışığında devletlerin dış politikada hareket edebilme kapasitelerini artırmaktadır (Çemrek, 2016: 39).

Kamu diplomasisi kültür, bilim, eğitim, medya başta olmak üzere bünyesinde pekçok yumuşak güç unsurlarını barındırmakta; ülkeler kamu diplomasisi perspektifiyle hareket ettiklerinde aslında başka toplumlarla inşa ettikleri ilişkilerde karşılıklı anlayışı geliştirme ve pekiştirme amacı taşımaktadır.

Yumuşak Güç Olgusu Ve Araçları

Kamu diplomasisi perspektifiyle hareket eden ülkelerin başka ülkeler/toplumlar ile kalıcı ilişki inşa etmesine yardımcı olacak en önemli unsuru yumuşak güç araçları oluşturmaktadır. Uluslar arası sistemde ülkeler artık sahip oldukları yumuşak güç potansiyeli ile (bilim, medya, sanat, kültür, spor, eğitim vb.) başka ülkeleri etkilemekte, onlar için cazip bir ülke konumuna gelmekte ve bu süreçte kendi politikalarını başka ülkelere kabul ettirmektedir. Bu sürecin temelini iletişim, etkileşim, ikna ve işbirliği oluşturmaktadır (Özkan, 2017: 8).

Joseph S. Nye (2005) yumuşak güç oluşturmak için çekici bir kimlik taşıyan kültürü, siyasi değerleri ve kurumları, ahlaki temellere ve meşruiyete dayalı politikaları gerekli görmekte, ancak bu şekilde bir “cazibe merkezi” oluşturulacağına işaret etmektedir. Nye’in da dikkat çektiği bu süreç tahmin edilebileceği gibi uzun ve zorluklarla dolu bir süreçtir. Çok yoğun çalışmayı, kararlı ve sabırlı olmayı gerektirmekte, ülkenin sahip olduğu tüm yumuşak güç unsurlarını bir arada, birbiriyle uyum içerisinde kullanabilme becerisini zorunlu kılmaktadır (Özkan, 2017: 8). Ülkeler açısından yumuşak güç odaklı bir dış politika yürütmek, sert güç odaklı bir politikayı yürütmekten çok daha yoğun ve karmaşık bir emek gerektirdiği açıktır. Çünkü sert güç askeri unsurların öne çıktığı tek bir merkezden yönetilebilirken, yumuşak güç araçları çok merkezli bir yapıya sahiptir. Sadece devletin kontrolünde olmayan yumuşak güç araçları sivil toplum örgütleri, üniversiteler, düşünce kuruluşları vb. aracılığıyla kullanılabilir (Çemrek, 2016: 37). Bu nedenle çok merkezli ve boyutlu bu yapının çok ciddi koordinasyona ve amaç birliğine ihtiyacı bulunmaktadır.

Kamu diplomasisi, karşılıklı anlayış yoluyla ülkelerin imajını ve saygınlığını artırmayı hedeflemektedir (Simonin, 2008, 24). Günümüzde ülkeler açısından en önemli unsurların başında güven, saygınlık ve itibar gelmektedir. Bu değerlere sahip ülkeler kendi politikalarını başka ülke ve toplumlara rahatlıkla anlatabilmekte, kendini dinletebilmekte, cazibe merkezi haline gelebilmektedir. İletişimde mesajın kendisi kadar, mesajın kaynağı da önem taşımaktadır. Kamu diplomasisinde, kaynak ülkelerin kendisidir. Ülkeler ne kadar güvenilir, itibarlı ve saygın olursa, kamu diplomasisi çerçevesinde verdikleri mesajlara da o oranda güvenilmekte, inanılır bulunmaktadır. Bu nedenle kamu diplomasisi stratejisi geliştirilirken yalnızca mesaja odaklanmak tek başına yeterli değildir. Aynı zamanda mesajı hedef kitleye aktaran kaynak olarak ülkelerin algılarını da düzeltmeleri, inşa etmeleri gerekmektedir. Bunun en etkili yolu da yumuşak güç araçlarını doğru kullanmaktan geçmektedir. Kültürel kapasitesini, bilimsel altyapısını, sportif başarılarını, entelektüel değerlerini etkili şekilde öne çıkartabilen ülkeler, kısa sürede cazibe merkezi haline gelebilmektedir (Özkan, 2017: 9).

Türkiye’nin yumuşak güç kapasitesini etkin şekilde kullanmak amacıyla son yıllarda kurumsal altyapı çalışmalarına önem verdiği, kapasite inşasına yatırım yaptığı görülmektedir. Bu anlamda çalışmanın inceleme konusu olan Yurtdışı Türkler ve Akraba Toplulukları Başkanlığı (YTB) bu altyapı kurma ve kapasite geliştirme çabalarına verilebilecek bir örnek olarak değerlendirilebilir. Türkiye’nin yumuşak gücünü kamu diplomasisi perspektifinden diasporada kullanmayı amaçlayan YTB, şimdiye kadar ihmal edilmiş bir alanda kalıcı ilişkilerin inşa edilmesi amaçlamaktadır.

Diaspora Diplomasisi

Yeni uluslar arası sistemde bir ülkenin başka ülkelerde yaşayan vatandaşlarına yönelik politikaları önem arz etmekte, devletlerin diaspora diplomasisine daha fazla ağırlık verdikleri gözlenmektedir (Ekşi, 2014: 218). Diaspora; doğduğu ya da kuvvetli aile bağlarının bulunduğu ülkenin dışında yaşayan, ancak geldikleri ülke ile güçlü maddi ve manevi bağlar devam ettiren göçmen nüfus olarak tanımlanmaktadır. Başka bir tanıma göre diaspora; doğduğu ülkeden başka ülkelere göç eden veya göç edenlerin soyundan gelen ve geldiği ülke ile ortak ulusal, hemşehrilik veya etnik kimliği paylaşan nüfustur. Diasporayı oluşturan bireylerin, gittikleri ülkelerde dâhil oldukları sosyal, profesyonel ve bilimsel ağlara erişmek ve bu bireylerin o ülkelerde kazandıkları bilgi ve yetkinlikleri ‘uzaktan’ kullanmak mümkün olabilmektedir (Ercan, 2015).

Yurtdışında çeşitli ülkelerde vatandaşları bulunan devletler açısından en önemli unsur bu kişilerle nasıl bir ilişki inşa edeceği, diaspora diplomasisini nasıl yürüteceği konusudur. Bu konuda çeşitli yaklaşımlar mevcut olmakla birlikte, bu çalışma kapsamında Metin Ercan’ın diaspora diplomasisi ile ilgili şu yaklaşımı konunun anlaşılması açısından açıklayıcıdır:

“Diaspora sahibi olan ülkelerin, diasporaları ile bağlarını kuvvetlendirme ve diasporadan azami katkıyı sağlama amaçlı çeşitli politika adımları öneriliyor. Diasporaya ekonomik fırsatlar sunan, bilgi katkılarını ödüllendiren ve bilgi paylaşımını kolaylaştırıp transferini sağlayan projelere parasal ve hukuki dayanak oluşturan politikaların geliştirilmesi bu adımlar arasında yer alıyor. Ayrıca, diasporanın geldikleri ülkelere olan katkıları, bu ülkelerin hukuki mercileri tarafından tanınıyor ve takdir ediliyor. Birçok hükümet; diaspora ile yakın ilişkiler kuruyor, işbirliği politikalarını açık olarak tanıtıyor ve diaspora üyelerine katkılarının önemli olduğunu hissettiriyor. Göçmen topluluklarının, hâlen yaşadıkları ve geldikleri ülkeler arasında köprü vazifesi görmelerini sağlayacak stratejiler geliştiriliyor. Diaspora stratejilerinde başlıca iki tür yaklaşım bulunuyor: Bir taraftan, bireylerin yoğun

katılımını bekleyen, zorlayıcı ‘doğrudan yaklaşım’; diğer taraftan diaspora üyelerinin katkı yapmalarını süreç içinde kendiliğinden teşvik etmeyi amaçlayan ‘dolaylı yaklaşım’. Dolaylı yaklaşım son yıllarda yaygınlık kazanıyor. Dolaylı yaklaşımın başlıca unsurları arasında; diaspora üyelerinin belli bir amaç ve spesifik sorunların çözümü için bir araya getirilmeleri, bireylerin gönüllü olarak, oluşuma katkıda bulunmaya teşvik edilmeleri ve diaspora bireylerinin, esnek ve kendi inisiyatifleri ile çalışan bir organizasyon yapısı içinde, karar mekanizmalarına katılmalarının sağlanması yer alıyor...” (Ercan, 2015).

Türkiye yurtdışındaki Türk diasporasına yönelik olarak dolaylı yaklaşımı benimsemekte, diaspora bireylerinin inisiyatif almasını önemsemekte, halen yaşadıkları ülkeler ile Türkiye arasında köprü görevi görebilecek stratejiler geliştirmeye öncelik vermekte, kapasite inşasını geliştirmeye ve işbirliğini artırmaya yönelik çeşitli projeler yürütmektedir. Tüm bu diaspora politikalarının ana amacı, diaspora bireylerinin bulundukları ülkelerde ekonomik, siyasi, kültürel ve sosyal olarak güçlenmelerini temin etmek, karar alma mekanizmalarında etkin yer almalarını sağlamak, dolayısıyla bu güçlü yapıdan Türkiye’nin kamu diplomasisi politikalarının başarısı için yararlanmaktır.

Yurtdışı Türkler ve Akraba Toplulukları Başkanlığı (YTB) böyle bir vizyonu esas alarak kurulmuş, diaspora diplomasisine işlerlik kazandırılarak yıllardır yararlanılmayan önemli bir gücün harekete geçirilmesi amaçlanmıştır.

Diaspora Diplomasisi Perspektifinden Ytb’nin Faaliyetlerinin İncelenmesi

Bugün dünya genelinde 6 milyondan fazla Türk nüfusunun yaşadığı, bu nüfusun büyük bir kısmının Avrupa Birliği sınırları içindeki ülkelerde ikamet ettiği bilinmektedir. Bu büyük nüfusla irtibat kurulması, onların kendi kimlik ve değerlerini koruyarak yaşadıkları ülkelerde varolmaları, ekonomik, sosyal ve siyasal alanlarda ilerlemelerine katkı sağlanması diaspora diplomasisinin temel perspektifini oluşturmaktadır. Yurtdışı Türkler ve Akraba Toplulukları Başkanlığı böyle bir amaçla 6 Nisan 2010 tarihinde kurulmuştur. Kendisine çalışma alanları olarak; yurtdışı vatandaşlar, soydaş ve akraba topluluklar, uluslararası öğrenciler ve sivil toplum kuruluşlarını seçen YTB, Türkiye açısından da bu tarihten itibaren etkin bir diaspora diplomasisi başlatılmasına vesile olmuştur.

YTB’nin kurumsal yapısına bakıldığında iyi bir örgütlenmeye sahip olduğu görülmektedir. Oluşturulan Yurtdışı Vatandaşlar Danışma Kurulu, 19 ülke ve bölgeyi temsilen 80 üyeden oluşmakta ve ‘Türk Diaspora Meclisi’ gibi çalışmaktadır. (Ekşi, 2014:231). Yurtdışı Vatandaşlar Danışma Kurulu’nun görevleri arasında; “Yurtdışında yaşayan Türk vatandaşlarının sorunlarının tespiti ve yapılacak çalışmaların koordinasyonu ile ilgili olarak tavsiyelerde bulunmak, bulundukları ülkelerin sosyal ve ekonomik yaşamlarına eşit katılımlarını sağlayacak öneriler geliştirmek, Türkiye tarafından karşılanması gereken ihtiyaçlarını belirlemek, bu çerçevede yapılması gerekli kanunî ve idarî düzenlemeleri tespit etmek, yabancı düşmanlığı, ırkçılık ve ayrımcılık gibi akımlara duyarlılıklarını artırarak uluslararası kamuoyunda yapılması gereken etkinlik önerilerini görüşmek” bulunmaktadır. (<https://www.ytb.gov.tr/kurumsal/yurtdisi-vatandaslar-danisma-kurulu-yvdk>)

YTB bünyesinde kurulan yurtdışı vatandaşlar daire başkanlığı, Türk vatandaşlarının yaşadıkları ülkelerdeki varlığını güvence altına alarak onları asimilasyonlara karşı korumayı, bulundukları toplumlarda gelişmelerini sağlamayı amaçlamaktadır. Bu birim vatandaşlık çalışmalarının yanı sıra, eğitim çalışmaları yürütmekte, kültürel ve sosyal programlar düzenlemektedir. Bu kapsamda aktif yurttaşlık ve katılım özendirilmekte, Türk vatandaşlarının yaşadıkları yerlerde faal ve üretken olmaları desteklenmekte, bu çalışmalar sivil toplum örgütleri ile birlikte yürütülmektedir. Ayrıca Türk vatandaşlarının bulundukları ülkelerdeki yasal yükümlülüklerini ve haklarını bilmeleri için hukuki destek çalışmaları yapılmaktadır (Kaya, 2016:135).

YTB’nin eğitim çalışmaları kapsamında yurtdışı vatandaşlar burs programı, yurtdışı genç liderler projesi, çift dillilik, hukuk eğitim programları ve eğitim destekleri alanlarında faaliyetler yürütülmektedir (<https://www.ytb.gov.tr>). “Türkiye Bursları” programına her yıl 100 binin üzerinde başvuru yapılmaktadır. 2017 rakamlarına göre 163 ülkeden 106.550 kişi Türkiye burslarına başvurmuş, 5378 lisans, yüksek lisans ve doktora bursu sağlanmıştır. Ayrıca kamu görevlisi, akademisyen ve mesleki tecrübe artırma amaçlı burslar da çok farklı ülkelerden başvuran kişilere verilmiştir (<https://www.ytb.gov.tr>).

YTB’nin bir diğer çalışma alanı olan soydaş ve akraba topluluklara yönelik faaliyetleri yürütmek amacıyla “kültürel ve sosyal ilişkiler eşgüdüm değerlendirme kurulu” kurulmuş, soydaş ve akraba topluluklarla kültürel, ekonomik, sosyal ilişkilerin geliştirilmesi için stratejilerin belirlenmesi hedeflenmiştir. Soydaş ve akraba topluluklara yönelik faaliyetler YTB bünyesinde kültürel çalışmalar, eğitim ve gençlik, tematik çalışmalar alanlarında yürütülmektedir. YTB’nin internet sitesi incelendiğinde bu alanlarla ilgili yapılmış pekçok faaliyet ve projenin olduğu görülmekte, tüm bu faaliyetlerin soydaş ve akraba topluluklarla kalıcı bir ilişki inşa etme, ortak anlayış geliştirme amacını hedeflediği gözlenmektedir.

YTB sivil toplum örgütleriyle yakın ilişki ve işbirliği içinde bulunmakta, onların yürüttüğü projelere maddi destekler sağlamakta, birlikte proje yürütmekte, sivil toplum kuruluşlarının kapasitelerini geliştirmelerine fırsat tanımaktadır. 21. yüzyılın öne çıkan olgularının başında gelen ve demokratik toplumların vazgeçilmez bir parçası olan sivil toplum eliyle yapılan hertürlü icraat daha ikna edici, kalıcı ve etkileşime açık olmaktadır. Bu anlamda YTB sivil toplum kuruluşları aracılığıyla Türkiye'nin yumuşak gücünü başka ülkelere/toplumlara taşımakta, politikalarına yönelik desteğin artırılmasına katkıda bulunmaktadır.

YTB'nin 2017 faaliyet raporu incelendiğinde değişik alanlarda farklı içerik ve vizyonla gerçekleştirilmiş kapsamlı bir faaliyet dizisi görülmektedir. Yurt içinde ve yurtdışında başta üniversiteler ve kamu kurumları olmak üzere çeşitli özel sektör kuruluşları ile amaca yönelik olarak işbirliği protokolleri imzalandığı, yapılan faaliyetlerin kalıcılığının sağlanmasına yönelik girişimlerde bulunulduğu gözlenmektedir. Ayrıca dünyanın farklı noktalarında 32 Türkiye mezun derneğinin kurulduğu da anlaşılmaktadır. Mezun dernekleri, Türkiye'de bursla okuyup daha sonra ülkelere geri dönen öğrencilerin takibi ve onlarla ilişkilerin devamının sağlanması açısından önem taşımaktadır. Çünkü bu öğrenciler Türkiye'nin kültürünü, dilini ve değerlerini çok yakından tanıyan ve bilen kişiler olarak başka ülke ve toplumlarda fahri büyükelçiler gibi çalışmakta, doğru bilgilendirme sağlamakta, sempati oluşturulmasına yardımcı olmaktadır.

Görüldüğü gibi diaspora diplomasisi perspektifinden YTB, çok boyutlu yapısıyla Türkiye'nin kültürünün, dilinin, değerlerinin başka toplumlara aktarılması, karşılıklı anlayış oluşturulması ve sağlam ilişkilerin inşa edilmesinde önemli bir rol üstlenmektedir. YTB'nin bu faaliyetleri aynı zamanda Türkiye'nin yumuşak gücünün harekete geçirilerek olumlu intiba oluşturulması, algı ve imajının güçlendirilmesi, uzun vadeli işbirliklerinin artırılması açısından da stratejik bir değer taşımaktadır. Toplamda tüm bu katkılar Türkiye'nin ülke marka değerine olumlu yansımakta, markasının güçlenmesine, algısının düzelmesine, cazibesinin artmasına sebep olmaktadır.

Sonuç

21. yüzyıl ülkeler açısından pekçok imkan ve fırsatı beraberinde getirmekle birlikte, keskin rekabet ortamı ve belirsizliklerin artması açısından çeşitli zorlukları da barındırmaktadır. Sınırların kalktığı, dünyanın küçüldüğü, iletişim ve etkileşimin arttığı bir çağda ülkelerin imkan ve potansiyellerinden en üst düzeyde yararlanmaları, başka ülke/toplumlarla kalıcı ilişkiler inşa etmeleri önem kazanmaktadır. Bu noktada kamu diplomasisi politikaları ülkelerin bu amaçlarına ulaşmalarına yardımcı olan en önemli unsurların başında gelmektedir.

Ülkeler kamu diplomasisi politikalarını hayata geçirirken yumuşak güç potansiyellerinden yararlanmakta, kültür, medya, bilim, spor, eğitim gibi yumuşak güç araçlarını başka toplumlarla kalıcı ilişki inşasında etkin olarak kullanmaktadır. Bu yüzyılda yumuşak güç kapasitelerini artıran ve etkili şekilde kullanan ülkelerin cazibe merkezi olduğu, algılarını düzelttiği, olumlu imaj oluşturduğu görülmektedir. Olumlu imaj ve algı, cazibe merkezi olma başarısıyla birleştiğinde bu durum aynı zamanda ülkelerin politik, ekonomik ve kültürel ilişki ve işbirliklerine de yansımakta, başka alanlarda işini epeyce kolaylaştırmaktadır.

Yumuşak güç kullanılan alanlardan biri de diasporalardır. Bir ülkenin başka bir ülkede yaşayan kendi vatandaşlarıyla kurduğu etkili iletişim ve etkileşim diaspora diplomasisi olgusunu gündeme getirmektedir. Diaspora diplomasisi ile diasporada yaşayan vatandaşlar ile geldikleri ülkeler arasında köprü vazifesi görmelerini sağlayacak stratejilerin geliştirilmesi amaçlanmaktadır. Bu konuda dolaylı yaklaşım etkili ve tercih edilen bir yöntem olarak ele alınmaktadır. Diaspora üyeleri belirli amaçlar için bir araya getirilmekte, gönüllülük esas alınmakta, faaliyetlere katkı sunmaları teşvik edilmekte, esnek bir organizasyon yapısı içerisinde karar mekanizmalarına katılmaları sağlanmaktadır.

Türkiye diaspora diplomasisi faaliyetlerinde dolaylı yaklaşımı tercih etmekte, diasporada yaşayan vatandaşların kendi isteği ile katkı sunacağı esnek mekanizmaları kurmayı öncelemektedir. Bu yapılardan biri Yurtdışı Türkler ve Akraba Topluluklar Başkanlığı olup, kurulduğu 2010 yılından itibaren ciddi bir altyapı çalışması yapmış, Türkiye'nin diasporada yaşayan vatandaşları ile başta kültürel ve sosyal olmak üzere çok boyutlu bir ilişki inşası faaliyetine girişmiştir. YTB'nin bu çok boyutlu yapısıyla ilgili faaliyetlerinin içerikleri web sitesinde geniş şekilde anlatılmaktadır. Bu faaliyetlerin tümü ile ilgili genel bir değerlendirme yapıldığında görülen şudur: Türkiye yıllardır ihmal ettiği diaspora alanında ciddi bir saha çalışması başlatmış, bu çalışmanın önce kurumsal altyapısını inşa etmiş, bu kurumsal altyapı değişik alanlardaki faaliyetleri planlamış ve icra etmiştir. Faaliyetlerin çeşitli kurullar ile planlanması, denetlenmesi ve değerlendirilmesi, verim alınması ve önceliklerin belirlenmesi açısından önem taşımaktadır. YTB'nin diasporada yürüttüğü çalışmalar içerisinde eğitim, kültür ve sivil toplum alanındaki çalışmaları öne çıkmakta ve Türkiye'nin yumuşak gücünün daha etkin şekilde kullanılmasına katkıda bulunmaktadır. Ayrıca Türkiye'nin yumuşak güç kapasitesinin diasporalarda başarılı şekilde kullanılması ve marka değerine/algısına katkı yapması aynı zamanda diaspora dışındaki ülke ve toplumlarla kurduğu/kuracağı ilişkilere de olumlu yansıtacağı açıktır. Bu açıdan da Türkiye'nin diasporalarda yürüttüğü kapasite inşasına

yönelik çalışmalar çok daha fazla önemsenmeli, geliştirilmesi ve kalıcı hale getirilmesi için gayret gösterilmeli ve daha katılımcı bir perspektifle hareket edilmelidir.

Teşekkür: Bu çalışma, BYP-2018/28570 nolu proje kapsamında İstanbul Üniversitesi Bilimsel Araştırma Projeleri Birimi tarafından desteklenmiştir.

Kaynakça

- Çemrek, M. (2016). “Kamu diplomasisinin bir yumuşak güç ögesi olarak ortaya çıkışı”. *Kamu Diplomasisi ve Uluslar arası Halkla İlişkiler*. (Ed: Barış Kılınç), Eskişehir: Anadolu Üniversitesi Yayınları
- Demir, V. (2012). *Kamu Diplomasisi ve Yumuşak Güç*. İstanbul: Beta Yayınları
- Ercan, M. (2015). *Diaspora Nedir?* (<http://www.radikal.com.tr/yazarlar/metin-ercan/diaspora-nedir-1342810/9>) Erişim tarihi: 20.06.2018
- Ekşi, M. (2014). *Kamu diplomasisi ve AK Parti dönemi Türk dış politikası*. Ankara: Siyasal kitabevi
- Kaya, T, Ö. (2016). Türkiye’de Kamu Diplomasisi. *Kamu Diplomasisi ve Uluslar arası Halkla İlişkiler*. (Ed: Barış Kılınç), Eskişehir: Anadolu Üniversitesi Yayınları
- Kalın, İ. (2012). “Türk Dış Politikası ve Kamu Diplomasisi”. *Kamu Diplomasisi* (Ed: Abdullah Özkan-Tuğçe Ersoy Öztürk). İstanbul: Tasam Yayınları
- Leonard, M., Alakeson, V. (2000). *Going Public: Deplomacy for he Information Society*. London: The Forein Policy Center
- Özkan, A. (2017). *21. Yüzyılın stratejik vizyonu kamu diplomasisi vizyonu ve Türkiye’nin kamu diplomasisi imkanları*. Stratejik Rapor, No: 70, İstanbul: Tasam Yayınları
- Sancar, A. (2012). *Kamu Diplomasisi ve Uluslar arası Halkla İlişkiler*. İstanbul: Beta Yayınları
- Signitzer, B. (2008). “Public Relations and Public Diplomacy, Some Conceptual Explorations”. Ansgar Zerfass, Betteke van Ruler, Krishnamurthy Sriramesh, (Eds.), *Public Relations Research-European and Internationals Perspectives and Innovations*, Springer.
- www.ytb.gov.tr

Eğitim ve Öğretimde Vahyin Temel Gayeleri*

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Özet

Vahyin ışığında insan, hayatının nasıl olması gerektiğini ve içinde yaşadığı toplumu nasıl şekillendireceğini öğrenmekte ve Kuran-ı Kerim'in kendisine göstermiş olduğu surette bunu yapmaktadır. İnsan aynı zamanda Kuran-ı Kerim'den kendisi Allah'a ibadet etmek ve O'nun rızasını gözetmek olan gerçek mutluluğu da öğrenmektedir. Böylelikle birey yüksek idealler olan yaratılış amacını öğrenmeli, Allah'a kul ve iyi ahlaki değerlere sahip bir insan olmalıdır. Bu suretle insan, gerçek mutluluğu elde etmiş ve içinde yaşadığı toplumun da ideal bir toplum olması için mücadele etmiş olacaktır.

Anahtar Kavramlar: Mutluluk, Vahiy, İdeal, Toplum, Ahlak

Abstract

In the light of the revelation, man learns from Quran what his life should be like and how to shape the society which he lives in. As a result he also learns from Quran to pursue the real happiness which it is to worship to Allah and to seek his sake. Man should know the purpose of his creation, be a servant to Allah and have to be a well moraled human-being to achieve these supreme ideals. In this way, man will have built his own real happiness and struggled to make the society he lives in an ideal society.

Keywords: Happiness, Revelation, İdeal, Society, Moral

Giriş

Her dinin temel bir gayesi olduğu gibi İslam'ın da Kuran-ı Kerim önderliğinde insanoğlunu Allah'ın istediği doğrultuda inşa etme ve onu Allah'ın emirleri ve yasakları doğrultusunda yaşamaya sevk etme gayesi vardır. Allah'ın emir ve yasakları doğrultusunda yaşayan¹ kişi bu sınavın neticesinde sonsuz olan cennete girecek; buna zıt bir hayat sürüp başarısız olan ise cehennemlik olacaktır². İşte bu noktada insanoğlunun önünde bir imtihan olarak duran bu süreçte başarılı olması için önünde bir önder olarak duran Kuran-ı Kerim'in ışığında bir eğitim ve öğretim şarttır. Onun ışığında şekillenen eğitim ve öğretim, kişinin bu hayatta Allah'ın kendisinden istediği bir şekilde yaşamasına imkan tanıyacak ve bu hedefi gerçekleştirmiş olacaktır.

Bu hedefi gerçekleştirmek için kişinin içinde bulunacak olduğu eğitim ve öğretim sürecinde belli başlı esasların insana öğretilmesi zaruret arz etmektedir. Zira Allah'ın, Kuran-ı Kerim vasıtasıyla insanlardan istemiş olduğu³ hususların arka planını görmekten aciz olan kişinin bu hedefi gerçekleştirme doğrultusunda bir yaşam sürmesi pek mümkün gözükmemektedir. İşte bu noktada karşımıza kişinin Kuran-ı Kerim önderliğinde eğitimi ve öğretimi noktasında belirli başlı bir kaç esas çıkmaktadır.

1. İnsanın Yaratılış Gayesini Öğretme

Kuran-ı Kerim'in önderliğinde bir eğitim öğretim sürecinden bahsedecek olduğumuz zaman karşımıza birinci mesele olarak insana yaratılış gayesinin ne olduğunun öğretilmesi çıkmaktadır.⁴ Zira insanı Kuran-ı

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¹ Ali İmran 3/32

² Ali İmran 3/12

³ en-Nisa 4/59

⁴ el-Beyyine 98/5

Kerim'in istediği doğrultuda yetiştirmek istiyorsak ilk olarak ona, yaratılış amacının ne olduğunu öğretme zorunluluğu ortaya çıkmaktadır. Nitekim yaratılma sebebinin ne olduğunun farkında olan bir kimse bu sebebin sonucuna uygun bir yaşam sürme eğiliminde olacak ve bunun doğal bir sonucu olarak da Allah'ın emir ve yasaklarına göre bir yaşam sürecektir.

İnsanın yaratılış gayesinin ne olduğunun cevabını ise Kuran-ı Kerim vermekte ve insanlardan bu gaye doğrultusunda bir yaşam sürmelerini istemektedir.⁵ Allah'ın insanları yaratmasındaki maksadın kendisine kulluk etmek olduğu gerçeğinden hareketle kişinin eğitim ve öğretiminin bu ilahi gayeye paralel olması gerçekleşmiş olacaktır. Öyle ki yaratılış gayesi Allah'a kulluk etmek olan insanın bu suretle onu tanıma imkanı elde ettiğini söylediğimiz takdirde⁶ yaratılış gayesinin farkında olan insan, Allah'a kulluk etmek suretiyle O'nu bilecek ve bu bilise uygun bir hayat sürecektir.

Bu noktada dikkate değer bir başka husus ise insanoğlunun dışında yaratılmış olan bütün varlıkların insanın emrine sunulmasıdır.⁷ Öyle ki bütün kainatın hizmetine sunulduğu gerçeğini Kuran-ı Kerim önderliğinde bir eğitim ve öğretim sürecinde öğrenen birey, Allah'ın kendisine vermiş olduğu bu nimetin farkında olmak suretiyle hiçbir yaratılmışı kötü davranışta bulunma cüretini kendisinde bulamayacak ve azgınlardan olmama imkanını elde edecektir. Nitekim yaratılmış her şeyin kendi emrine verilisinin Allah tarafından olduğunun farkında olmayan insanoğlu azgınlıkta sınır tanımamakta ve kendi cinsinden olan insanlar da dahil olmak üzere tüm yaratılmışlara karşı zalimlik yapabilmektedir. Buna benzer sonuçlarla karşılaşmamak için insanın eğitim ve öğretiminde Kuran-ı Kerim merkezli bir sürecin sarsıcı bir etkisinin olduğu muhakkak gözükmemektedir.

Öyle ki insan, Allah'ın kendisini yaratılış gayesine uygun hareket etmeyip üstüne emrine verilmiş nimetleri amacına uygun kullanmayarak yaratılmışların en şerefli olma⁸ imkanını elde edememekte ve yaratılmışların en aşağı olma durumuna düşebilmektedir.⁹

Kuran-ı Kerim merkezli bir eğitim ve öğretim sürecinin insana kattığı gayelerden bir tanesi de hiç şüphesiz yukarıda da bahsettiklerimizin doğrultusunda kendisini, Allah'a kul olma suretiyle diğer aşağılık olan insanlardan ayırma gayesidir. Zira insanın yaratılmışların en şerefli olarak kalabilmesinin şartı onun, Allah'ın emir ve yasakları yani O'na kul olma doğrultusunda bir hayat sürmesiyle mümkün olabilmektedir.¹⁰ Bu suretle insan aklını kullanmak suretiyle kendisini diğer canlılarla arasında bulunan asgari olan ortak özelliklerinin üstüne çıkarabilmekte ve farklı bir konuma gelebilmektedir.

Burada dikkat edilmesi gereken bir diğer husus ise insanın Allah'a karşı kulluk vazifesini ifa edip bu doğrultuda bir hayat sürmesinin önünde engel olarak duran yeterli bir eğitim ve öğretimin verilmemesidir. Allah'a karşı olan kulluk vazifesini yerine getirmek isteyen insanın dikkat etmesi gereken en önemli husus, bu kulluğu doğru bir şekilde yerine getirmesidir.

Allah'a kulluğun doğru bir şekilde gerçekleşebilmesi için Kuran-ı Kerim ve Hz. Muhammed (sav) önderliğinde öğrenilmiş, kalben ve aklen inanılmış ve hayata tatbik edilmiş saf bir iman olgusunun olması zorunluluk arz etmektedir. Zira gerektiği gibi iman etmeyen bir kimsenin Allah'ı hakkıyla bilip O'na karşı hakkıyla kulluk vazifesini ifa etmesi mümkün gözükmemektedir. Bu sebeptendir ki kişinin bu gayesinde başarılı olması için iman esaslarını ve gerekliliklerini doğru bir biçimde öğrenmiş olması icap etmektedir. İman esaslarını doğru bir şekilde öğrenmek için de Kuran-ı Kerim merkezli bir eğitim ve öğretim şart olmaktadır.

2. İman Esaslarını Öğretme

⁵ ez-Zariyat 51/56

⁶ İbn-i Kesir, Tefsiru'l-Kurani'l-Azim, Daru'l-Kutubi'l-İlmiyye, Beyrut. (1998). V, s. 255

⁷ el-Bakara 2/29

⁸ et-Tin 95/4

⁹ et-Tin 95/5

¹⁰ el-Bakara 2/186

Yukarıda da bahsetmeye çalıştığımız gibi kişinin Allah'a kul olup yaratılma gayesine uygun bir hayat sürmesi için inandığı din olan İslam'ın iman esaslarını bilmelidir. Bu biliş ise Kuran-ı Kerim ve Hz. Muhammed'in (sav) merkezinde olduğu bir eğitim ve öğretim metoduyla mümkündür. Zira Kuran-ı Kerim'in istediği doğrultuda bir yaşam sürmenin yegane şartı pek tabii olarak onun uyulmasını istediği iman esaslarına inanmakla mümkün olmaktadır. Nitekim insan, Allah'ın kendisini yaratma gayesini bilmek ve iman esaslarını da öğrenerek hayatına tatbik etmek suretiyle hayatına anlam katarak en güzel şekilde yaratılan insan konumuna gelmektedir.

Allah'ın kendisine kulluk etsin diye yarattığı insan, yaratılış gayesinin ne olduğunun farkında olmadığı halde O'na iman etmediğinde ahiret hayatına karşılık dünya hayatını seçerek¹¹ en nihayetinde ne dünya ne de ahiret saadetini¹² elde edemeyecektir.

Kişinin Allah'a kul olması ve iman esaslarını bilerek iman etmesi onun hayata dair görüşünde büyük bir öneme sahiptir. Zira Allah'a kul olarak yaratıldığının bilincinde buna uygun bir yaşam süren bir kimse Kuran-ı Kerim endeksli ahlaki değerlere sahip olacaktır. Onun Kuran-ı Kerim merkezli bir eğitim öğretim sürecinde edinecek olduğu bu ahlaki değerler bir takım şartlara göre değişkenlik arz eden değil, aksine dünyanın neresine giderse gitsin her dönem ve mekanla uyum sağlayabilecek mahiyete haiz olacaktır.

Allah'a iman edip kul olma bilincine sahip olan, bununla birlikte Allah'ın elçilerine, kitaplara¹³, meleklerine ve ahiret gününe iman eden¹⁴ ve bunların tümüne uygun bir hayat süren insan, kendisinden istenen hayat tarzını yerine getirmiş olmaktadır. Allah'ın kendisini kulluk etsin diye yarattığının farkında olan insan bu en yüce gayeyi elde etmek suretiyle de mutluluğu elde etme imkanına sahip olmaktadır.¹⁵

İnsan, Allah'a iman etme ve O'na kul olma doğrultusunda bir yaşam sürdüğü takdirde kendi bünyesinde ahlaki değerleri ve erdemleri toplayacak ve en nihayetinde gerçek mutluluğu elde edecektir. Nitekim bu mutluluk en yüce gayeyi elde etmek suretiyle kişinin bu hayattaki hedefini gerçekleştirmesi anlamına gelmektedir.¹⁶ O halde Kuran-ı Kerim'in merkezinde olduğu bir eğitim ve öğretim sürecinde dikkat edilmesi gereken husus kişinin Allah'a kul olma bilincini elde etmesi suretiyle gerçek mutluluğu elde etmesidir.

Allah'a kul olup gerçek mutluluğu elde etme yolunda yaşayan insanın dikkat etmesi gereken bir diğer husus ise Allah'la olan ilişkisinin yanında diğer insanlara karşı olan muamelatını düzeltmesi zorunluluğudur. Zira bu eğitim ve öğretim sürecinin sonucunda elde edilen ahlaki erdem ve değerler, kişinin hem yaratıcısı hem de diğer yaratılanlarla arasındaki ilişkiyi Kuran-ı Kerim'in evrensel değerlerine uygun bir zemine oturtmayı zorunlu kılmaktadır.

Eğitim ve öğretim sürecinde Allah'a iman edip O'na karşı emir ve yasaklara riayet etmek suretiyle kulluk vazifesini yerine getiren kişi, karşımıza yaşadığı topluma, döneme ve tüm canlılara karşı faydalı bir birey olarak çıkmaktadır. Nitekim bu süreç istenildiği gibi sonuç verdiği takdirde Kuran-ı Kerim'in inşa etmiş olduğu evrensel ahlaki değerlere bağlı olan bir toplum da inşa edilmiş olacak ve iyinin hakim olduğu bir ortam oluşacaktır.

3. Ahlaki Değerlere Sahip İnsan Yetiştirme

Eğitim ve öğretim sürecini Kuran-ı Kerim merkezli olarak ele almadığımızda da nihai hedefin ahlaki bireyler yetiştirmek olduğu apaçık ortadadır. Öyle ki bu ahlaki erdemlerin hakim olduğu toplumlar inşa etmek bütün eğitim sistemlerinde kendine yer bulmaktadır. Nitekim Kuran-ı Kerim önderliğinde icra edilen bir eğitim ve öğretim sürecinden elde edilmek istenen sonucun da farklı olması beklenemez. Zira Kuran-ı Kerim, Allah'ın insanları en güzel şekilde yarattığını söylemekte ve onların bu yaratılış üzerine kalmalarını istemektedir. Bu

¹¹ el-Bakara 2/86

¹² Yunus 10/64

¹³ el-Bakara 2/4

¹⁴ el-Bakara 2/177

¹⁵ Farabi, Kitabu't-Tenbih Ala Sebili's-Saade, Tahkik Cafer Ali Yasin, Daru'l-Menahil, Beyrut. (1987). s. 49

¹⁶ İbn Sina, Risale-fis'Saade, s. 2

yaratılış üzerine kalmak da pek tabii olarak ahlaki erdemlere ve değerlere sahip birey olmakla mümkün olmaktadır.

Hiz. Muhammed'in (sav) yüce bir ahlak üzerine gönderilmiş olduğunun ifade edilmesi,¹⁷ bireylerden ahlak sahibi kimseler olmasının istendiğini apaçık ortaya koymaktadır. Zira Allah'a kul olarak yaşamının, O'nu bilmenin ve O'na ve emrettiklerine iman etmenin doğuracak olduğu sonuç budur. Ahlak sahibi olan bireyin ise yukarıda da bahsettiğimiz gibi Allah'ın nimetlerine karşı bilinçli ve kendinden başka diğer insanlara ve yaratılmışlara karşı iyi ve güzel davranışlarda bulunan kimse olması söz konusu olmaktadır.

Kuran-ı Kerim insanoğluna, Hiz. Muhammed (sav) vasıtasıyla indirilmiş son kitap olması sebebiyle ilk olarak bu hayatı ilgilendiren bir kitaptır. Çünkü bu kitap devam eden bir zaman içinde inmiş ve insanlara Allah'ın emir ve yasaklarını bildirme görevini ifa etmiştir ki bu görev dünya durdukça devam edecektir. Bu sebeptendir ki Kuran-ı Kerim insanın hayata dair yaşantısına da karışmış ve onun daimi surette iyilik üzerine olup iyilikte bulunmasını tavsiye etmiştir.¹⁸ olmasını istemiştir. İnsan iyiliği kendisine karşı yapabilmekle birlikte iyilik yapmanın karşılıklı olan bir iş olduğunu göz önüne aldığımız zaman bunun diğer insanlara ve daha genelde de tüm yaratılmışlara karşı olması gerekliliği ortaya çıkmaktadır. Nitekim insan, Allah'ı bilmek, O'na kul olmak ve Kuran-ı Kerim'in tavsiye ettiği ve evrensellik ifade eden ahlaki değerlere sahip olmakla iyi bir birey olabilmekte ve hem kendine hem de yaşadığı topluma yararlı bir birey olma imkanını kendinde bulabilmektedir. Eğitim öğretim sürecinde Kuran-ı Kerim'in evrensellik ifade eden kıstaslarına göre yönlendirilen ve buna paralel bir kişilik kazanan birey yukarıda bahsettiğimiz özellikleri kendinde bulabilecektir. Sonuç olarak insan, cinsinden ayrı inzivaya çekilmiş bir vaziyette tek başına yaşayamamasından dolayı bu ahlaki değerlere sahip olmak zorundadır. Zira diğer insanlarla bir arada uyum içinde yaşayabilmenin yegane şartı herkesin sınırlarını bilmesi haksızlık yapmaması ve hem Allah'a hem de diğer yaratılmışlara karşı isyan noktasında bulunmamasıyla mümkündür.

Allah'ı bilmek ve O'na hakkıyla kul olmak suretiyle insan gerçek mutluluğa ve bununla beraber mutlak iyiliğe ulaşma imkanını elde edecek ve bunun sonucu olarak da kıyamet günü hesap görüldükten sonra cennete girme konusunda herhangi bir sıkıntı yaşamayacaktır.¹⁹ Bu mutlak iyiliğe ulaşmış kimsenin de cennete girmek için yapması gereken de iman ettikten sonra salih ameller işlemesidir ki ahlaki erdemlere sahip bir insandan beklenen de budur.²⁰

Ahlakın, bireyin kendisinde yer etmesi ise onun hem Allah'a iman edip kul olması hem de bunu aklen bilmesi ve farkında olmasıyla mümkün gözükmektedir. Zira akıl ve vahiyle hareket ettiği ölçüde kişinin davranışları ahlaki değerlerle uyumlu olacaktır. Bu noktada ise hayat boyu devam eden eğitim ve öğretimin başarısı için akıl ve vahiy uyumunun zorunluluğu ortaya çıkmaktadır. Burada kasıt vahyin akla uydurulması değil bilakis aklın vahiy merkezli bir eğitimle kendini ilahi emir ve yasaklar çerçevesinde bir hayata adapte etmesidir. Böylelikle kişinin ahlaklı bir birey olması yolunda karşımıza iki unsur çıkmaktadır ki bunlardan ilki vahiy ikincisi ise kendini bu vahiyle şekillendirmiş aklıdır.²¹

Kişinin hareketlerini maddi anlamda şekillendiren her ne kadar bedeni olsa da bedene yapması gerekeni söyleyip onun hareketlerini yönlendiren aklıdır. Bu noktada vahiy bilgisiyle yoğrulmuş bir eğitim ve öğretim sürecinden geçmiş insan tercihte bulunacak ve vahye uygun karar verdiği ölçüde ahlaklı bir birey olmayı başaracaktır. Bu noktada onun davranışlarının ahlaki nitelik kazanması vahiy ve akla uygun karar vermesiyle doğru orantılı olacaktır.²²

¹⁷ el-Kalem 68/4

¹⁸ el-Bakara 2/112, el-Kasas 28/54

¹⁹ en-Nisa 4/13

²⁰ el-Bakara 2/82

²¹ el-Maturidi, Ebu Mansur, Kitabu't-Tevhid, tahk. Bekir Topaloğlu - Muhammed Aruçi, İSAM Yayınları, Ankara. (2005). s. 274

²² Ünverdi, Mustafa, Ahlakın Epistemolojisi, Hitit Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, Yıl 7, Sayı 2, s. 329

En nihayetinde ahlakın gayesi ise kişiyi doğruya sevk etme ve kötü olandan ise uzak tutmaktır.²³ Bunu başardığı ölçüde insan Allah'ın emir ve yasaklarına uygun bir hayat sürme imkanı bulabilmektedir. Bu da kişinin eğitim ve öğretim hayatının aklın da etkin bir şekilde var olduğu vahiy merkezli bir süreç olmasıyla mümkün gözükmektedir.

Kişinin hayatına ahlaki değerleri tatbik etmesi ve buna paralel bir yaşam sürmesi en nihayetinde onun bu vasıflarla ve yaşam tarzıyla beraber yaratılmışların en şerefli olmasına yardımcı olmaktadır. Böylelikle insan kendisi gibi hiçbir akıl ve idrak özelliği olmayan diğer canlılardan ayrılır.

4. Düşüncesinde ve Davranışlarında Özgür İnsan Yetiştirme

Buraya kadar olan süreçte Kuran-ı Kerim'in insana, Allah tarafından yaratıldığını ve O'na kul olması gerektiğini söylemekte ve kurtuluşun sadece bu şekilde olacağını belirtmektedir. Fakat dünya hayatında bir imtihan olmadan kurtuluşa ermek mümkün değildir. Zira insan burada kendi fiillerinin neticesinde bir değerlendirmeye tabi tutulacak ve ona göre değerlendirilecektir. Bu değerlendirmenin kriterleri ise insanın iyi bir birey olup salih ameller işlemesidir.²⁴

Bu değerlendirmenin yapılabilmesi için de kişinin fiillerinde ve aldığı kararlarda özgür bir birey olması gerekmektedir. Zira özgürlüğünden bahsedemediğimiz bir kimsenin hür olmadığı bir alanda sorguya tutulması ne akla ne de ilahi adalete uymamaktadır. O yüzdendir ki Kuran-ı Kerim insanın aldığı kararlarında ve fiillerinde tamamen kendi başına bırakıldığını söylemekte ve insanın bu karar ve fiillerine göre yargılanacağını söylemektedir.²⁵ Allah'ı bilen ve O'na kul olması gerektiğini bilen birey, vahiy ve akıl endeksli ahlaki erdemlere göre şekillendirdiği hür iradesiyle bu imtihanı ya başaracak ya da başarısız olacaktır. Nitekim ahlakın en temel özelliği hür iradeye sahip bireylerin onu iradeleriyle tercih etmeleri ya da etmemeleridir. Böylelikle insan ya iyilik üzerine yaşayan ahlak sahibi bir birey ya da tam tersi ahlaksız kötülük üzerine yaşayan bir kimse olmaktadır. O yüzdendir ki vahiy merkezli eğitim ve öğretim hayatının ana gayesi hür iradeli bireyler yetiştirmek ve onların bir imtihan olan bu dünya hayatında başarılı olmalarını sağlamak olmalıdır.

Hür iradenin zorunluluğu, kişiye Allah'a kul olarak yaratıldığının söylenmesi ve bu doğrultuda bir yaşam sürmesi gerekliliğinin teklif edilmesinde ortaya çıkmaktadır. Zira bu teklifin yerine getirilmesi bireyin hür iradeye sahip olmasıyla mümkündür. Aksi takdirde bir imtihandan söz etmek mümkün olmamakta ve dünya hayatını anlamsız kılmaktadır. Öyle ki hür iradenin olmadığı bir yerde Allah'ın emir ve yasaklarına uygun bir yaşam sürmesi bireyden istenmesi bir anlam ifade etmemektedir. Ahiret günü görülecek hesap, karşılıklar, ödül ve ceza hür iradenin varlığıyla mümkün olmaktadır.

Hür iradenin varlığıyla kişi, kendi isteği doğrultusunda Allah'ın emir ve yasaklarına uygun bir yaşam sürme ya da sürmeme yönünde karar verir. Böylelikle o, hayatına yön verdiği bu kararlarla fazilet sahibi bir kimse olur ya da olamaz. Nitekim bir kimsenin değeri, fazileti ve ahlakı aldığı kararlarla ölçülür. Hal böyleyken hür iradesi olmayan bir insan güzel bir iş yapmış olsa da hiç kimse açısından bir anlam ifade etmeyeceği gibi Allah katında da yaptığı iş her ne kadar nesnel anlamda güzel olsa da bir değer ifade etmeyecektir.

Bireyin vahiy merkezli hayatında Allah'a kul olarak yaşamasının neticesinde gerçek mutluluğa erişmesinin imkanından bahsettiğimiz takdirde bunun tam aksine hür iradesi olmayan ve yapmış olduğu hiçbir fiilin sorumluluğu kendisine yüklenmemiş insanın da gerçek anlamda mutsuzluğundan bahsetmek gerekmektedir. Halbuki bu hayatın amacı, insanın Allah'a kul olmak suretiyle gerçek anlamda mutluluğa erişmesi ve vahyin de bildirdiği gibi ödül anlamında cenneti kazanması bunda başarısız olanların da cezalandırılmasıdır.²⁶

²³ İzutsu Toshihiko, Kur'an'da Allah ve İnsan, Çev.: Süleyman Ateş, Ankara. (1983). s. 62.

²⁴ eş-Şems 91/7-10

²⁵ en-Necm 53/38-41

²⁶ eş-Şehristani, M. Abdülkerim, el-Milel ve'n-Nihal, çev.: Mustafa Öz, Ensar Neşriyat, İstanbul. (2005). s. 58.

Allah'a kul olduğunun bilincinde olan ve bu doğrultuda hür iradesini kullanmak suretiyle emir ve yasaklara uygun bir yaşam süren insan bir bakıma kendi karakterini ve kişiliğini de inşa etmiş olmaktadır. Nitekim insanın en güzel şekilde yaratılmış olmasına uygun bir yaşam sürmesi, karakterinin bu minvalde şekillenip değerli olup yücelmesine de imkan sağlamaktadır. Bu sebeptendir ki vahiy merkezli bir eğitim öğretim sürecinde bireye bahsettiğimiz ahlaki erdemlerin kazandırılması vahyin insana göstermiş olduğu gayeyi gerçekleştirme konusunda yardımcı olacaktır.

Bu eğitim ve öğretim süreciyle beraber yetişen bir toplum en nihayetinde karşımıza, yaptığı fiillerin hesabını verebilen ve sorumluluk sahibi olduğunun farkında olup iyilerden olan bir toplum olarak çıkacaktır. Bu da pek tabii olarak bu hayatta insanoğlunun erdemli bir toplum inşa etmesinin yegane yolu olarak düşünülebilir.

Hür iradeleri doğrultusunda yaşayıp yine hür iradeleri ile Allah'a kul olan ve O'nu hakkıyla bilip emir ve yasaklarına uygun bir hayat süren toplum bunun tam aksine bir yaşam sürüp devamlı surette kötünün hakim olmasını isteyen topluluklar karşısında sağlam bir duruş sergileyebilecek ve hiçbir zaman zayıflığa düşme gafletinde olmayacaklardır. Nitekim Allah'ın kullarından istediği de Allah'a inanmayan topluluklar karşısında hazır ve güçlü olmalarıdır.²⁷ İstenen bu hazır olma durumu ise ancak Allah'ın emir ve yasaklarına uygun bir hayat sürüp kul olma bilincinin farkında olmakla mümkündür. Bunun için de vahiy merkezli bir eğitim ve öğretim süreci mühim bir yer arz etmektedir.

5. Aklını Kullanmayı Öğretme

Kuran-ı Kerim'in devamlı surette insanlara telkinde bulunduğu bir diğer nokta ise aklın kullanılması²⁸ ve bu bağlamda yine devamlı surette tefekkür²⁹ tedebbürde³⁰ bulunmalarıdır.

İnsanoğlu her ne kadar hür iradesiyle beraber emir ve yasaklara uygun bir hayat sürüp ahlaki erdemlere sahip olsa da Kuran-ı Kerim görüldüğü üzere ondan devamlı surette akıl etmesini istemektedir. Böylelikle vahiy insana aklını kullanmayı da öğretmek istemektedir. Sorumluluk sahibi olmanın ve ahlaki erdemlerle donanıp Allah'a kul olmanın bilincine varabilmenin ilk şartı pek tabii olarak akıl sahibi olmaktır. Aksini düşünecek olursak da akıl sahibi olmayan bir insanın hür iradesinden bahsetmek bunun sonucu olarak da işlemiş olduğu fiillerden sorumlu tutulup bunların hesabını vermesinden söz etmek mantığa uymamaktadır. O halde bireyin, vahiy merkezli bir eğitim ve öğretim sürecinden bahsedeceksek Allah'ın istediği doğrultuda aklını kullanmasından bu vesileyle de yaratılış gayesine uygun hareket edebilecek hale getirilmesinden bahsetmek mümkün olmaktadır. Zira insan, aklını Allah'ın istediği doğrultuda kullandığı takdirde hem diğer canlılardan hem de kendi cinsi arasında Allah'ın emir ve yasaklarına uymayarak isyan noktasında olan kimselerden³¹ ayrılmaktadır.

Aklını Allah'ın istediği doğrultuda kullanıp O'na karşı kulluk bilincinde olan ve emir yasaklarına uygun bir yaşam süren kimse bunun sonucu olarak Allah'ın yeryüzündeki halifesi konumuna gelmektedir.³² Bu da vahiy merkezli bir eğitim ve öğretim süreciyle mümkün olmaktadır ki bireyin Allah'ın halifesi olmak suretiyle fazilet sahibi olmasına imkan tanımaktadır. Bu sonuç da insanın en güzel şekilde yaratılmasına uygun bir hayat sürmesi anlamına gelmektedir.

İnsanın aklını kullanmak suretiyle insan olarak kalması neticesinde birey kendine biçilmiş rolü hakkıyla yerine getirebilecek ve Allah'a isyan noktasında olmayıp kulluğunun gerektirdiği bir biçimde hayat sürebilecektir. Birey sadece nefes alıp verme ve yiyip içmeyle hayatta kalması mümkün olmayan bir canlıdır. O, muhakkak ki kendisine verilen akıl cevherini kullanmalı ve bunun gereklerine uygun yaşamalıdır. Bu gerekliliklere uygun yaşamak ise sadece vahyin önderliğinde mümkündür. Nitekim aklını kullanmak suretiyle

²⁷ el-Enfal 8/60

²⁸ Yasin 36/ 62, el-Enbiya 21/10

²⁹ Yunus 10/24

³⁰ Muhammed 47/24

³¹ el-Ahzab 33/36

³² el-Bakara 2/30

insan düşünebilmekte ve Allah'ın Kuran-ı Kerim vasıtasıyla istemiş olduğu düşünme ameliyesini gerçekleştirebilmektedir. Aksi takdirde akıl sahibi olmayan bir varlığın herhangi bir olaydan çıkarımda bulunması ve başka olaylarla arasında bir bağlantı kurması mümkün olmamakta bu sebeple yapmış olduğu bütün fiiller ne yaptığı belli olmayan ve iç güdülerine göre hareket eden hayvanlardan farklılık arz etmemektedir.

Kuran-ı Kerim sadece ahiret hayatına yönelik değil aynı zamanda dünya hayatına dair tavsiyelerde bulunan ve bir sistem inşası hedefi bulunan bir kitaptır. Bu sistem inşası ise Allah'ın insanoğlundan istediği doğrultuda bir hayat sürmelerini hedeflemektedir. Bu söyleme paralel olarak Kuran-ı Kerim aklın kullanılmasını sadece soyut anlamda değil günlük yaşamda muamelat olarak karşımıza çıkan meselelerde de istemektedir. Müdayene ayeti olarak bilinen ayeti³³ incelediğimizde, borcun alıp verilmesi durumunda bunun yazılması ve şahit tutulması istenmektedir. Buna benzer istekler tavsiyeler ise pek tabii olarak akıl sahibi olan kimselerin gerçekleştirip yerine getirebilecek olduğu mevzulardır.

Aklını hem dünyevi hem de uhrevi meselelerde istendiği şekilde kullanma hasletine sahip insanlar da gerçek mutluluğa erişerek hem dünya hem de ahiret saadetini elde etme imkanına sahip olmaktadır. Aklın kullanılmasının istenmesi bu minvalde değerlendirildiğinde bir başka önem arz etmektedir. Öyle ki aklını kullanan insan gerçeklikten kopmamakta ve bu suretle de kimin kendisini kandırmaya çalıştığını neyin doğru neyin yanlış olduğunu bilecek ve hayatta temel gayenin ne olduğunun devamlı surette farkında olacaktır. Aklını doğru kullanan insan da sonuç olarak doğru düşünebilecek, doğru düşünen insan da hür iradesiyle yanlış yapmayıp Allah'ın emir ve yasaklarına uygun bir hayat sürecektir.

Aklını kullanan ve bunun neticesinde doğru bir düşünce sistemiyle iyi bir sistem inşa edip doğruyu hedefleme ve yanlıştan uzak durma gayesi güden bir toplum ideal bir toplum olarak tanımlanabilir. Böyle bir toplum her ne şart altında olsun doğrudan vazgeçmeyecek ve yanlışın peşinden gitmeyecektir. Zira bu toplum yaratılış gayesinin ne olduğunun farkındadır ve korkulacak tek varlığın Allah olduğunun bilincindedir.

İdeal bir toplum inşa edememiş insanoğlu kendi benliğini, kişiliğini, karakterini, hür iradesini dolayısıyla özgürlüğünü kaybetmeye mahkum olacak her ne kadar istese de bu doğrultuda bir yaşamdan kendisini kurtaramayacaktır. Böyle bir yaşamdan kurtulmanın yegane ilacı ise Allah'a kul olmak ve O'nun emir ve yasakları doğrultusunda yaşamaktan geçmektedir. Allah'a kul olma bilinci ise vahiy temelli bir eğitim ve öğretim süreciyle mümkündür ki bunun dışında ideal bir toplum inşa etme isteği ne kadar çabalanırsa çabalansın başarıya ulaşma imkanına sahip gözükmemektedir.

6. Sorumluluk Sahibi İnsan Yetiştirme

Yaratılış gayesini bildikten sonra Allah'a ve emrettiklerine iman eden insan aklını kullanmak ve yine aklını kullanmak suretiyle düşünerek hür iradesi çerçevesinde sorumluluk sahibi olduğunu kabul etmiş olmaktadır. Akıl sahibi olan ve hür iradesiyle yaşayan insan en nihayetinde sorumluluk sahibi de olmaktadır. Nitekim vahiy zemininde verilen eğitim ve öğretim sürecinde nihai hedef olan Allah'ın istediği doğrudan yaşamak için kişide sorumluluk bilinci olmalıdır. Bu yüzdendir ki kişiyi sorumluluk sahibi yapmak bu sürecin es geçilemez bir parçası konumuna gelmektedir. Sorumluluk sahibi insanın ise en büyük özelliği onun tutarlı olmasında yatmaktadır. Zira davranışları ve fiilleri tutarlı olmayan bir insan kendine yüklenen sorumluluklara uygun hareket etmemiş olacak bu da onun yaratılış gayesine ters bir durum teşkil edecektir.³⁴ O halde insan kendine yüklenen sorumluluklara uygun ettiği takdirde bunun karşılığını alacak ve gerçek mutluluğa ulaşacaktır.³⁵ Aksi halde davranışları tutarlı olmayan ve sorumluluklarına uygun hareket etmeyen de gerçek mutluluğa imkanına sahip olamayacaktır.

³³ el-Bakara 2/282

³⁴ el-Fussilet 41/46

³⁵ Meryem 19/76

Sorumluluklarının gerektirdiği gibi bir hayat sürebilmenin şartının fiillerin birbirleriyle uyumlu olması gerektiğini kabul edecek olursak bireyin aynı zamanda sözleriyle fiillerinin de birbiriyle uyumlu olması gerekmektedir. Zira sözleri ve fiilleri birbirini tutmayan insan en nihayetinde hayatın temel gayesi olan Allah'a kul olma noktasında da başarılı olamayacak ve gerçek mutluluğu elde edemeyecektir. O yüzdendir ki ahlak sahibi erdemli bir insan kendinde sorumluluk sahibi olmayı bir haslet haline getirmeli ve bunun sonucu olarak da davranışlarının birbiriyle uyumlu olmasını sağlamalıdır.

Kişinin hem Allah katında hem de kendi cinsi olan diğer insanlar arasında değerli olabilmesi davranışlarının tutarlı olması yani sorumluluk sahibi olmasıyla mümkündür. Bunun aksi bir durumda davranışları ve söylemleri birbiriyle tutarlılık göstermeyen bir kimse ne Allah katında ne diğer insanlar arasında bir değere sahip olamayacaktır. Öyle ki sorumluluk sahibi olmayan bir birey Allah'ın katında kurtulmuşlardan olamayacağı gibi ideal bir toplumun da bir parçası olamamaktadır. Birey, vahiy zeminli bir eğitim ve öğretim sürecinden geçtiği takdirde hem kendi cinsinin inşa etmeye çalıştığı ideal toplumun bir parçası olabilir³⁶ hem de üstün bir varlık olarak Allah'ın vaat ettiği cennete erişebilir.³⁷

Allah'ın insanı kendisine kulluk etsin diye yaratması ve insanın bu doğrultuda yaşadığı oranda kurtuluşa erecek olması her insan için muhtemel bir durumdur. Bu doğrultuda yaşayan kimse kendisi için muhtemel olan bir durumu gerçeğe dönüştürmek suretiyle gerçek mutluluğa erişmiştir. Gerçek mutluluğa erişmiş kimse olan bireyin sorumluluklarından birisi de diğer insanların da kurtuluşuna vesile olmaktır. Her ne kadar yanındakinin kurtuluşuna sebep olma durumu gerçekleşme açısından bir kesinlik arz etmese de birey üzerine düşeni yerine getirmeli ve yanında ki insanın da kurtuluşuna vesile olabilmek için çalışmalıdır ki Hz. Muhammed de (sav) insanları devamlı surette doğru yola çağırmaktadır.³⁸ İnsanoğlunun inşa etmeye çalıştığı ideal bir toplum ancak bu şekilde mümkün gözükmektedir. Zira birbirlerine karşı iyi davranmayan ve Allah'a karşı sorumluluklarının bilincinde olmayan bir toplum istediği ideal toplumu inşa edemez, kurtuluşa eremez ve gerçek mutluluğu da elde edemez. Bütün bu söylenenlerin gerçekleşmesi ise yukarıda da zikrettiğimiz gibi vahiy temelli bir eğitim ve öğretim süreciyle mümkün gözükmektedir. Nitekim her ne kadar diğer insanların hidayetlerine vesile olunması için olmasa da Allah'a kul olmanın bilincinde olan bir kimsenin yaptığı her güzel işin on katı karşılığının kendisine verileceği vaat edilmektedir.³⁹ Hal böyle olunca bu durumdaki birey yaşadığı toplumdaki diğer insanların da hidayetine vesile olma gayreti içinde olacak ve bu doğrultuda çaba gösterecektir. Zira bir kimsenin kurtuluşuna vesile olup onun da bu suretle gerçek mutluluğa ermesi güzel bir duruma sebep olduğu için hasenattan kabul edilir.

Bu noktada bireyin dikkat etmesi gereken husus ise aynı toplumda yaşadığı insanın hidayetine sebep olmak istiyorsa en temelde kendi davranışlarının, fiillerinin, sözlerinin ve hayatının birbiriyle tutarlı olması gerekmekte ve buna paralel olarak sorumluluk sahibi olduğunun farkında olmalıdır. Vahiy temelli bir eğitim ve öğretimin başarısı ise işte tam bu noktada ortaya çıkmakta ve onun başarısı da bireyleri sorumluluk sahibi olarak yetiştirme ve onların da yaşadıkları topluma ve insanlığa faydalı olmalarıyla ölçülür.

7. İnsanı Vasıf Sahibi Olarak Yetiştirme

Aklını kullanmak vasıtasıyla sorumluluk bilincinde olan, vahiyle de yaratılış gayesini bilip Allah'a kul olarak yaşayan insan hem kendine hem yaşadığı topluma hem de çevresinde bulunan bütün yaratılmışlara karşı görevlerini Kuran-ı Kerim temelli bir ahlaki değerler bütünü içinde doğru ve etkili bir biçimde yerine getirebilmek için vasıf sahibi olmalıdır ki vahiy önderliğinde ideal bir toplum düzeni inşa edebilsin.

Bu vasıfları hem ahlaki hem de günlük yaşantıya uygun olarak düşünmek mümkün gözükmektedir. Zira ahlaki anlamda eksikliği olmayan bir kimse mesleki ve günlük yaşantı anlamında hiçbir özelliğe sahip değilse insanlar tarafından dikkate alınmayacak ve dediklerinin bir etkisi pek tabii olamayacaktır. O yüzdendir ki birey

³⁶ et-Tevbe 9/71

³⁷ et-Tevbe 9/72

³⁸ el-Müminun 23/73

³⁹ el-Enam 6/160

yaşadığı toplum şartları içinde kendini geliştirmeli ve diğer insanlara maddi ve manevi fayda sağlayabilecek bir konumda olmalıdır.

İdeal bir toplum inşasında da bu noktadan hareketle kendilerini geliştirmiş ve ahlaki değerler eşliğinde sorumluluğun farkında olan insanlar olmazsa olmaz bir konum teşkil etmektedir.⁴⁰ Zira vahiy eşliğinde devam eden bir eğitim ve öğretim süzgecinden geçmiş böylece kendini geliştirmiş yetkin insanların olmadığı bir toplumun ideal bir düzeye çıkması mümkün gözükmemektedir. Nitekim en baştan yaratılış gayesinin farkında olan bu vasıflı insanların olduğu toplum gerçek anlamda mutluluğu elde etme imkanına sahiptir.

Vasıflı insanların olmadığı bir toplum, ideal bir seviyeye ulaşmak bir yana ayakta bile kalamayacak duruma gelmekte ve gerçek mutluluğu elde edememektedirler.⁴¹ O toplumda işler Allah'ın istediği gibi yerine getirilmez böylece hak, hukuk ve adaletin tesis edilmesi ise imkânız hale gelmektedir. O yüzdendir ki eğitim ve öğretim bir toplumdaki vasıflı insanların artması ve o toplumun ayakta kalabilmesi için çok büyük önem arz etmektedir. Bu yüzdendir ki verilecek eğitim ve öğretim ilahi gaye doğrultusunda olmalı ve yapılmalıdır. İdeal bir toplumun sağlıklı olması ve sekteye uğramadan tüm bireyleriyle karışıklığa gark olmaması için vasıfsız insanlar hiçbir şekilde herhangi bir göreve getirilmemelidir. Zira Allah'a karşı sorumluluklarının bilincinde olmayan ve ahlaki değerleri önemsemeyen bir kimsenin, kendisi dışında kalan insanların iyiliğini düşünerek hareket etmesi akla uygun düşmemektedir.

8. İnsana Yüksek İdealleri Öğretme ve Mutluluğu Elde Etme

Allah'a karşı yaşamındaki gayenin ne olduğunun farkında olan insanoğlu bu gayeleri gerçekleştirdiği takdirde yüksek ideallerin başında gelen mutluluğu elde etmiş olacak ve gerçek kurtuluşa ermiş sayılacaktır.

İnsanın hayattaki en yüksek ideali Allah'a kul olmak ve O'nu bilmektir. Bu ideal doğrultusunda bir yaşamı kendisine şiar edinen birey korkulacak tek varlığın Allah olduğunun bilincinde olarak yaşar⁴² ve hayatını O'nun emir ve yasaklarına göre tanzim eder. Hayatını bu şekilde tanzim eden insan kulluk bilincinde ve sorumluluklarının da farkında olmak suretiyle içinde yaşamış olduğu toplumun da kurtuluşa ermesini ister ve bunun için çaba sarf eder. Bu suretle birey kendisine yeni bir yüksek ideal bulmuştur ki bu da kendisinin de bir parçası olduğu ve içinde Allah'ın emir ve yasaklarına uygun bir yaşamın olduğu ve gerçek mutluluğun hakim olduğu ideal bir toplum inşasıdır.

Sonuç Yerine

Öyleyse baştan itibaren anlatmaya çalıştığımız şekilde vahyin ana esas olduğu bir eğitim ve öğretim hayatının ana gayesi ideal bir birey ortaya koymaktır. Bu ortaya koyuşla da her biri ideal bireylerden oluşan bir toplum inşa etme gayesi karşımıza çıkmaktadır. Allahın emir ve yasaklarına uygun bir hayat sürüp yaratılış gayesinin O'na kul olmak olduğunun farkında olan bu yüzden de vahiy temelli ahlaki değerlere sahip olan erdemli insan gerçek mutluluğa erişecektir. Bu yüksek ideali gerçekleştirmek suretiyle hem dünya hem de ahiret saadetini hedefleyen insanın yetişmesi için Kuran-ı Kerim temelli bir eğitim ve öğretim hayatının zorunluğu ortaya çıkmaktadır.

Bu şekilde bir eğitim ve öğretim sürecinden geçen insan Allah'a kul olma noktasında başarılı olacak aklını kullanarak sorumluluklarının bilincinde olup tutarlı bir insan profili çizecek ve diğer insanların da buna paralel bir gaye ve yüksek idealleri tutturması için mücadele edecektir. Bu mücadelede başarılı olması ise en başta bireyin kendisinin daha sonra da kendisi gibi olan diğer insanların uyumlu bir şekilde vasıflı ve yetkin insanlar olması sonuç olarak gereklilik arz etmektedir. Zira vasıflı ve yetkin insanların egemen olmadığı bir toplumda gerçek mutluluk olan yaratılış gayesine uygun hareket etmek mümkün olmayacak ve en nihayetinde Allah'a isyan noktasında olan bir toplum karşımıza çıkacaktır. Bu tür bir toplum ise yok olmaya ve kaybetmeye mahkum bir toplumdur.

⁴⁰ Farabi, Kitabü's-Siyaseti'l-Medeniyye, Daru Mektebeti'l-Hilal, Beyrut. (1994). s, 89-90.

⁴¹ Farabi, Kitabü Arai Ehli'l-Medineti'l-Fadıla, Neşir: A.Nasri Nadir, Beyrut. (1985). s, 127.

⁴² Nisa 4/1

O yüzdendir ki ideal bir toplum inşa çabası eğitim ve öğretim sisteminin Allah'ın insan için koymuş olduğu gayeleri gerçekleştirmeye çalışması ve vahiy merkezli bir mahiyete sahip olması gerekmektedir. Böyle bir eğitim ve öğretim sonucunda hem dünya hem de ahiret saadetini elde etmiş bir toplum ortaya çıkmış olur.

İdeal bir toplum inşası için de verilecek olan eğitim ve öğretim her ne kadar vahiy merkezli olsa da bu eğitim süreci birey daha çocuk yaşta başlamak ve bireyin kişilik ve karakterini inşa ettiği dönem içindeyken bu yüksek idealleri hedeflemesi öğretilmeli ve bu doğrultuda bir yaşam sürmesi telkin edilmelidir. Bu idealleri gerçekleştirme noktasında başarı oranı daha çocuk yaşta olan bireyin eğitim ve öğretim sürecine etki etmekle doğru orantılıdır. Bu etki ise Allah'ın istediği gibi bir yaşam olacaksa bu da vahiy temelli olmak zorundadır.

KAYNAKÇA

- el-MATURİDİ, Ebu Mansur (2005), Kitabu't-Tevhid, Tahkik: Bekir Topaloğlu-Muhammed Aruçi, İSAM Yayınları, Ankara.
- eş-ŞEHRİSTANİ, M. Abdulkerim (2005), el-Milel ve'n-Nihal, çev.: Mustafa Öz, Ensar Neşriyat, İstanbul.
- FARABİ, Ebu Nasr (1996), Kitabu't-Tenbih ala Sebilis's-Saade, Tahkik: Cafer Ali Yasin, Daru'l-Menahil, Beyrut.
- FARABİ, Ebu Nasr (1994), Kitabü's-Siyaseti'l-Medeniyye, Daru Mektebeti'l-Hilal, Beyrut.
- FARABİ, Ebu Nasr (1985), Kitabu Arai Ehli'l-Medineti'l-Fadıla, Neşir: A.Nasri Nadir, Beyrut.
- IZUTSU, Toshihiko (1983), Kur'an'da Allah ve İnsan, çev.: Süleyman Ateş, Ankara.
- İbn-i KESİR, Ebu'l-Feda (1998), Tefsîru'l-Kurani'l-Azim, Daru'l-Kutubi'l-İlmiyye, Beyrut.
- İbn-i SİNA (1353), Risale fis-Saade, Dairetu'l-Mearifi'l-Osmaniyye Meclisi Matbaasının I. Baskı.
- ÜNVERDİ, Mustafa (2014), Ahlakın Epistemolojisi, Hitit Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, Yıl 7, Sayı 2, s. 327-349.

Beyond Employability: Embedding Soft Skills In Higher Education

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Abstract

Today, higher education institutions are being evaluated by the manners in which they react to the social and economic needs of society, that is, how they are expediting social mobility and wider access to higher education, hence this leads to their actions to enhance graduate employability. Therefore, this research was designed to examine the 34 lecturers who joined the Researcher Links Workshop titled as 'Innovate Higher Education to Enhance Graduate Employability' on how they are transferring soft skills and sharing their experiences of teaching. Those workshop participants consisted of 20, 13, and one from Thailand, United Kingdom, and Vietnam respectively were selected according to the criteria given by Newton Fund in collaboration between Thailand Research Fund and British Council. A qualitative interview research method was employed. A semi-structured interviews consisting of key questions was used to define the areas to be explored, but also allowed the interviewees to diverge in order to pursue an idea or response in more detail. The results revealed that many higher education institutions have been facing the challenges head on, rethinking the role of career services, academics, and even support services in boosting employability. In addition, results also indicated that in the United Kingdom higher education system has been emphasized on the vital importance of non-academic skills to employability. Besides, participants have highlighted a list of soft skills that graduates should possess and it seemed that the place where these skills will most often be instructed is in the lecture theatre, the tutorial room or the study group. Those soft skills are depending on how lecturers to ensure that they are embedded these soft skills in their course design and delivery.

Keywords: *Employability; higher education institutions; soft skills*

Introduction

Graduate employability is often operationalized in terms of job offers, employment status and, to a lesser extent, quality of employment (Okay-Somerville & Scholarios, 2017). Therefore, past researchers perceived employability upon graduation constitutes an important indicator of graduate well-being. Rothwell, Herbert, and Rothwell (2008) distinguished internal and external perceptions of employability for graduate entrants to the labor market. The internal perception of employability refers to factors associated with perceptions of knowledge, skills and abilities, and job search. The external perception of employability is associated with factors outwit the individual's control, for example, demand for degree subject, prestige of the university, and the overall state of the graduate labor market.

As a result of the higher education experiences, graduates are expected to possess certain skills and qualities such as team-working and problem-solving, which will make them employable (CBI, 2009). Over the past decade, educational researchers and practitioners have stressed the importance of nurturing a set of non-academic attributes, so called as soft skills that including the abilities to cooperate, communicate, and solve problems in higher education institutions (Chamorro-Premuzic, Artech, Bremner, Greven, & Furnham, 2010). In order to define explicit learning outcomes of higher education programs, including outcomes in terms of certain types of transferable skill, such as communication, team-working or problem-solving.

This process has run in parallel with an increased focus among policy makers, higher education institutions, and students on the employment outcomes of higher education graduates and the extent to which higher education prepares students adequately for employability. As graduates produced by the higher education institutions are eventually expected to serve as human capital for the country, feedback from the industry is of vital importance in determining the necessary attributes that the graduates must possess in order to effectively function in a work environment (Syed Ahmad, 2013). Therefore, the idea of soft skills should be part of the set of learning outcomes so that all students are expected to acquire during their time in higher education is a logical step that should be taken.

The main objective of teaching and learning in higher education obviously outspreads beyond guaranteeing that

graduates are employable. Employability skills are those skills necessary for getting, keeping, and doing well on a job. They are the skills and attributes that enable employees to get along with their colleagues, to make critical decision, solve problems, develop respect, and ultimately become robust representatives for the organization (Yorke, 2006). Yorke further highlighted that the employability of graduates has become an aim that governments around the world have, to varying extents, imposed on national higher education systems. It is the fact that higher education institutions are arenas where students pursue their socialization and acquire and develop a range of knowledge, skills, attitudes, and attributes that affect the way they act in, and engage with, wider society.

According to Kember, Leung, and Rosa (2007), there is growing acceptance for idea that soft skills may help students to accomplish not only academic but also occupational goals after graduating. On this line of reasoning, soft skills have become increasingly critical parts of education to be embedded into teaching and learning process. This is because of employers are desperately seeking employees with a combination of skills that seem fall under this career readiness and employability umbrella. Besides, Chamorro-Premuzic et al. (2010) stated that employer surveys have reflected discontent with the extent to which these skills are foster in higher education. Employers pointed out that there is often a gap between what they require of graduates in assessment tasks and what occurs in the world of work.

Employability issues are at the very core of contemporary higher education both in the United Kingdom and Thailand. In United Kingdom, earlier debates tended to focus on liberal concerns that higher education should seek to enable the individual to better fulfill their role in society but recent discussions have focused more on the notion that all academic courses should include employability enhancing content, and also embedding soft skills (Cranmer, 2006). On the other hand, Thailand has embraced notions of graduates' work readiness as a means of ensuring competitiveness in a global context (UNESCO, 2012). In addition, various measures have been developed in Thailand, such as the Thailand Quality Framework (TQF), in consultation with education and industry specialists.

According to the report of UNESCO (2012), higher education enrolment had increased fivefold from 28.6 million in 1970 to 152.2 million in 2007. This has reflected the priority given to higher education institutions to develop a knowledge-based economy. Unfortunately, employment rates had not kept pace with this trend. The global unemployment rate increased from 5.6 percent in 2007 to 6.2 percent in 2010. It can be seen that there are a highly competitive environment for young people aged from 15 to 24 years old. For example, young unemployment rates have increased from 11.8 percent in 2007, 12.8 percent in 2009, 12.6 percent in 2010, and 12.7 percent in 2010 (UNESCO, 2012). The above statistics are worrying because the youth represent the productive labor force of the countries and majority of them are higher education graduates. If not productively involved for extended periods of time, many governments will have to deal with a host of issues and challenges facing a lost generations.

Although the number of unemployed graduates might be partly caused by imbalances in the economy such as financial crisis and economic downturns in recent years are certainly reasons for the reduction in the number of jobs, but supply-side factors also contributed to the high numbers of unemployed graduates. As a result, higher education institutions need to be clearly understood the kind of skills required for graduates to enter the labor market so that they can foster these skills in their students. Relevance of their study programs plays an important role in assisting their graduates find employment.

Literature Reviews

United Nations Educational, Scientific and Cultural Organization (UNESCO)'s call aims to ensure equitable quality education and lifelong learning for all by 2030 (Pavlova, Lee, Maclean, 2017). Concerns about the relevance of education systems to effectively meeting the economic and social requirements of countries are rising internationally (Organization for Economic Co-operation and Development OECD, 2005). Thailand government adapted educational policies to deal with these concerns include: an assurance concerning curriculum flexibility and quality across the different higher education programs offered; the engagement of different, multiple stakeholders; career guidance, matching programs to adequately meet the needs of both students and the labor market, and attempts to guarantee equity (Thanomwan, Keow Ngang, Prakittiya, & Sermpong, 2017).

Karmel (2017) used OECD country-level data to grasp whether the structure of countries' education systems, illustrated by the level of participation by age at the numerous International Standard Classification of Education (ISCED), affecting systematically the level of unemployment for the cohorts aged 20-24 and 25-29 years old including whole labor market conditions and demographic structures, were accounted for. Karmel found that the

structure of education systems does make a variance although general state of the labor market is critical.

Chamorro-Premuzic et al. (2010) examined the three United Kingdom studies on the relationship between a purpose-built instrument to assess the importance and development of 15 soft skills. Study 1 (N = 444) identified strong latent components underlying these soft skills, such that differences between-skills were over-shadowed by differences between-students. Significance and refining ratings on these skills predicted academic performance and accounted for the influences of personality on academic performance. Study 2 simulated the structure of the soft skills inventory and relationships with academic performance in a larger sample (N = 1309). Examination of mean differences across faculties (humanities, life sciences, hard sciences) revealed higher soft skills ratings in 'softer' courses. Study 3 (N = 87) merged an IQ measure, which was found to be negatively related to significance ratings of soft skills. Their results highlighted the cohesive structure of beliefs regarding various non-academic skills and their significant links to educationally relevant individual differences.

Cranmer (2006) reported on the impact of employability skills teaching and learning on graduate labor market for the Higher Education Funding Council, England. Comprehensive information gathered at university department level was drawn on to evaluate how academics perceived and engaged in the teaching and learning of employability skills. Cranmer argued that despite the best purposes of academics to enhance graduates' employability, the limitations inherent within the program would constantly produce mixed outcomes. In addition, resources would be better utilized to increase employment-based training and experience, and/or employer involvement in courses, which were found to positively affect immediate graduate prospects in the labor market and, therefore, support graduates in the transitional stage into employment.

Conceptualizing Graduate Employability

Employability goes well beyond the basic notion of significant skills, and is demonstrated in the application of a mix of personal qualities and beliefs, understandings, skillful practices, and the ability to replicate productively on experience. Students, therefore, will develop their employability in ways that reflect their particular circumstances with the hope that they will become capable graduates who have confidence in their ability to: (i) take effective and appropriate action; (ii) explain what they are seeking to achieve; (iii) live and work effectively with others, and (iv) continue to learn from their experiences, both as individuals and in association with others, in a diverse and changing society.

Employers are often seeking skills that go beyond qualifications and experience. This means that the specialist, technical skills linked with different roles may be less important than the soft skills that can be transferred between different jobs and different employment sectors. For employers, getting the right people means recognizing people with the right skills and qualities to accomplish the role and contribute to the organization's success. The Association of American Colleges and Universities released a survey which found a gap between how prepared students believe they are for their chosen and how ready employers believe those students to be. Only about a quarter of employers surveyed consider recent graduates are well prepared in critical thinking and analytic reasoning, written and oral communication, complex problem-solving, innovation and creativity, and applying knowledge and skills to real-world settings. By contrast, over 60 per cent of students rate themselves as well prepared in these areas. This finding underscores high education's need to identify new and effective ways to quantify and communicate their students' achievement. Employers told that they need comprehension into soft skills and higher education institutions must understand what employers want from their graduates (Kruger, 2015).

Ministry of Higher Education, Malaysia (2017) found that university graduates are lacking of communication and interpersonal, problem-solving, team-working, and critical and creative thinking skills. In the United Kingdom, government-funded initiatives and programs have emerged from the late 1980s onwards, designed to support the development of soft skills. The report of National Committee of Inquiry into Higher Education 1997 (in Cranmer, 2006) recommended the development of communication, numeracy, information technology, and learning how to learn at a higher level within all subjects. Further government-funded initiatives were made available to support universities in satisfying this concern.

Researcher had conceptualized soft skills that could be embedded into the course content as identified by Holmes (2014). They are communication and interpersonal skills, team-working, critical thinking and problem-solving, and personal development skills. Communication and interpersonal skill refers to job communication which includes being confident about speaking to people either face-to-face or over the phone as well as writing well enough to be understood in emails and memos. Examples of communication and interpersonal skill are writing assignments and reports; blogging or using social media; and making oral presentation. Good communication skill is the ability to communicate both verbally and in writing with a wide

variety of people, maintain good eye contact, write clearly and succinctly, demonstrate a varied vocabulary, and tailor our language to our audience are all essential skills that employers seek out. Good verbal and written communication means we can get our messages across with less unintended of misunderstanding. On the other hand, interpersonal skill is the skill we use to interact with other people. Good interpersonal skill allows us to participate effectively as a member of a team, satisfy customers and clients' expectations, negotiate, make decisions, manage our time efficiently, take responsibility, and work effectively with other employees. Good interpersonal skill allows us to emphasize and build rapport with colleagues and clients, leading to a better working environment which can be less stressful.

Team-working skill means individuals are able to function efficiently and appropriately in groups collaborate on projects and accept constructive criticism when working with others. Team-working skill is important in almost any work setting. Individuals focus on the importance of the team in the workplace. Individual is able to learn about teamwork and the different roles an individual can have within a team. Individuals will examine strengths and weaknesses they might have in inhabiting each of the roles. Individual is able to understand leadership, describing the traits that make a good leader. If an individual works on a number of group projects, he or she needs to be able to get along well with others, sharing the workload with colleagues to complete a goal.

Critical thinking and problem-solving skill means the ability to solve problem and make appropriate decisions. Critical thinking refers to one's ability to understand, analyse, and interpret information, and draw conclusions. Decision-making and problem-solving require gathering reliable information, evaluating the information for a variety of solutions and selecting the most appropriate option based on the criteria and situation. In any job, an individual will have to assess situations and solve problems. They need to be logical and make reasoned judgement. Although the ability to solve problems and make appropriate decisions are critical in any job, people with this skill are able to effectively plan and organize their team and are more likely to get the job done correctly the first time. This skill is beneficial to employers because they can save money and time. Planning and organizing also require the recording of information in a report which can be referred to when planning future projects. In addition, critical thinkers are innovative and inventive, and are more likely to develop innovative ways of doing things that adding value to the work environment, making systems and procedures more efficient. Critical thinkers can offer new perspectives about the job and the company.

Personal development is defined as all about having the right attitude towards work and the organization. The individual who is open to learning and embrace change will be more successful than the individual who is afraid of learning and resistant to changes in the organization. Personal development is concerned with how individuals evolve their working practices and attitudes to work. Self-motivation and confidence are key areas of personal development as is personal appearance and how others perceive us. Self-management skill also known as self-control is the skill we use to manage our personal feelings and how we react to challenges and problems both at work and in our private life. Personal development includes learning to avoid potentially negative emotions such as anger and stress while developing assertiveness and effective negotiation skills.

Methodology Of Research

The researcher employed a qualitative approach to gather information. A total of six focus group interviews were conducted with 34 participants consisting of 20 from Thailand, 13 from United Kingdom and one from Vietnam who participated in a Researcher Links Workshop titled as "Innovate Higher Education to enhance graduate employability" from 31st July to 3rd August 2017 in Asia Hotel Bangkok, Thailand. Each focus group comprised between five to six participants. The participants were selected based on criteria of the workshop set by the Newton Fund in collaboration between Thailand Research Fund and British Council that they have been awarded their doctoral degree not more than 10 years prior to the workshop or to have equivalent experience, with allowances made for career breaks. If a participant does not hold a doctoral degree but has research experience equivalent to a doctoral degree holder and works in a field where a doctoral degree is not a pre-requisite for established research activity, he or she can still be considered eligible. Participants must from non-profit organizations. All the participants were purposively selected according to the above criteria.

A semi-structured interviews protocol consists of several key questions that help to define the areas to be explored, but also allows the researchers the participants to diverge in order to pursue an idea or response in more detail was used in this study. The flexibility of this approach allows for the discovery or elaboration of information that is important to participants but may not have previously been thought of as pertinent by the researcher (Gill, Stewart, Treasure, & Chadwick, 2008). The questions were asked by the researcher herself who sought additional information with follow up question and the sessions were audio-taped for transcription purposes and to ensure an accurate record of what was said in the interviews. The interviews lasted one to two hours. The rationale of using this research design was to discover and pronounce the views and experiences of

higher education practitioners regarding their innovative methods to enhance graduate employability.

A key aim of this study was to understand how participants perceive employability, and for this reason researcher asked each participant to provide a definition. As mentioned, the value of these self-reports is in their usefulness for assessing the level of engagement with and the value of employability skills to academics themselves. A further aim was to understand the emphasis placed on employment-related skills in teaching and learning. For this purpose, participants were asked to indicate the degree of importance given in their teaching, ranged from academic objectives, such as teaching specialist subject knowledge and theoretical understanding, to the development of more explicit employability-enhancing skills. The soft skills were chosen to reflect those typically seen as enhancing graduate employability in higher education, including communication and interpersonal, team-working, critical thinking, problem-solving, and personal development skills. The third aim was to find out the balance between soft skills embedded in courses or stand-alone courses.

Results Of Research

The results of the six cycles of focus group interview are presented in accordance with the three main aims that indicating above. These research aims provided the structure and focus of the interviews. A number of themes are developed and some recurring themes are emerged. The initial result is the participants' understanding and expectations of employability. This is followed by the results of employment-related skills namely communication and interpersonal, team-working, critical thinking and problem-solving, and personal development skills. The final result is the embedding of soft skills in higher education teaching and learning process. The following is the summary of all the themes reflecting the key results of focus group interviews.

The importance of soft skills proficiency for today's employment

Majority of the participants stated that higher education institutions are dedicated to hard skills training rather than soft skills development. This is because most of the university courses are designed to teach students a particular expertise. All of the participants emphasized the importance of soft skills proficiency in order to be employed. This is because employers have a limited worker asset if graduates lack these behaviours. All the 13 United Kingdom participants mentioned that there is a movement in higher education institutions of United Kingdom to develop the whole person development with the completion of both hard and soft skills. Many participants mentioned that university graduates lack of soft skills.

"From the business side, the employer often sees a significant gap between the hard and soft skills that a graduate brings to the workplace." (Focus group interview 2)

"Especially the new graduates, they are lacking the soft skills needed for professional success" (Focus group interview 5)

"Many for-profit high education in Thailand have begun to integrate the soft skills into their curriculum, bringing a greater awareness to this growing of soft skills training need." (Focus group interview 6)

"Last time, we had not focused on teaching soft skills at all in higher education institution but now we have embedded those soft skills in order to make our higher education institutions being competitive." (Focus group 1)

"Many employers said that too many university graduates lack communication and decision-making ability, an understanding of how to think independently but also to work in teams, to solve complex problems and to construct arguments. They lack, we are told, an understanding of leadership, creativity, and emotional intelligence" (Focus group interview 2)

"That's not because I doubt that such a problem exists, but rather that the soft skills so much demand by United Kingdom's employers are precisely at the core of the liberal arts and sciences experience." (Focus group interview 3)

The methods of embedding the soft skills

The diversity of methods has been suggested by the participants related to effectively embedding soft skills into their course design. In general, there are four basic questions that should be answered while lecturers are designing activities for their courses. The four questions are: (i) What is the purpose of this activity? (ii) Why is it important? (iii) What soft skills are developed as a result?, and (iv) How can the student apply what she has learned in the workplace? The employment-related skills such critical thinking and communication skills can be embedded in role playing teaching activities. Team-working skill can be developed in group work teaching activities. Other than soft skills can be taught in weekly teaching courses, companies who involved as parts of the university internship program can integrate these soft skills in those activities within their internship training. Additionally, some of the participants highlighted the importance of coaching and mentoring in order to sustain these soft skills. Graduates have to be lifelong learners who recognize that education is not just a matter of what you know.

"For example, group work assignment helps our students to understand the value of teamwork and time

management” (Focus group interview 1)

“My university mission is to ensure that four years later, our graduates emerge as lifelong learners who recognize that education is not just a matter of what you know but how to ask the right questions, to develop well-supported arguments, and to apply knowledge in new and unfamiliar contexts. Education is not filling of a pail, but the lighting of a fire.” (Focus group interview 2)

“For example, role playing is an important teaching activity that can develop students’ critical thinking and communication skills” (Focus group interview 3)

“A quiet revolution at my institution is the integration of the classroom with world around university campus. For example, we recruit passionate employers to be faculty members and you will find our students are serving millions of internships in companies, non-profits, and non-governmental organizations in Thailand.” (Focus group interview 3)

“Even though sometimes if the soft skills were not effectively taught in the undergraduate education courses, I would like to suggest the companies who involved in internship training, can integrate these soft skills development activities within their training.” (Focus group interview 4)

“Coaching and mentoring can help to introduce and hone the soft skills.” (Focus group interview 5)

“Many young professionals can learn simply by modelling these behaviours.” (Focus group interview 6)

The advisory boards of each faculty in higher education institutions should include practitioners so that they can continually update their curriculum and teaching methods based on feedback from board members. In addition, faculty can build externships into their programs to develop students’ professional experiences, with the goal that students will be employed by the organizations upon graduation. A substantial follow-up such as the faculty can survey the employers regarding their students’ performance after six months of the students’ placement. The feedback about students’ preparation can be incorporated into the related courses. Co-curricular transcripts, badging options, and portfolio are the various methods to encourage students to polish up their soft skills.

“Co-curricular transcripts offer one solution by allowing students to better reflect the soft skills that they may bring to the workplace, establishing expectations for their performance.” (Focus group interview 2)

“Some badging options can be tied to assessment, which allows students to prove their claims of soft skills competency.” (Focus group interview 3).

“And portfolio allows students to share tangible examples of how and when they believe they have distinguished themselves. This will encourage them to develop their soft skills.” (Focus group interview 6)

Embedding of soft skills in higher education teaching and learning

All the participants agreed that soft skills should be embedded in the courses and cannot teach as a stand-alone subject. The importance of soft skills may vary from one sector to the other. Ultimately, every company is driving toward the same goals namely profitability and client satisfaction. However, all the four soft skills are found to be benefited by any individual in any job.

“While it depends on the industry, problem-solving, creativity, critical thinking, and communication are the core soft skills for any business.” (Focus group interview 3)

“A number of higher education institutions are developing curricula to teach the soft skills that employers have identified as so important such as communication and interpersonal skills, critical thinking and problem-solving skills, but soft skills can be taught as a stand-alone subject). (Focus group interview 4)

Discussion

The results of this research have shown that all the 34 Researcher Links Workshop participants emphasized the importance of soft skills development are consistent across a wide range of non-academic attributes to cultivate graduate employability either in Thailand or United Kingdom higher education institutions. From an applied point of view, practitioners should aware of the solid possibility that improvements on any of these soft skills are probably indicative of improvements on any other soft skills. For example, knowing that students think team-working skill is important for outstanding academic achievement may indicate that they also believe critical thinking and problem-solving skills is important for this outcome. Moreover, there are important implications for occupational psychology as the current results have highlighted the importance of equipping students with the relevant soft skills to pursue their work-related career goals. Thus, students seem aware of the need to develop soft skills in order to enhance their work prospects. On this line of reasoning, researcher hopes that the gap between academically fostered and occupationally desired skills such as soft skills is reduced.

Generally, higher education graduates stand for a stronger chance of finding a job they enjoy significantly higher earnings than those with only secondary education graduates (Organization for Economic Cooperation and Development, 2004). Yet, it is a cause for concern that while substantial resources are being committed to the development of soft skills in classroom, there was no confirmation in the study that these efforts had a significant

independent effect on graduate labour market outcomes (Mason, Williams, Cranmer, & Guile, 2003). Furthermore, previous studies showed that a degree of mismatch for some graduates between the soft skills acquired at university and the soft skills they are required to use in employment (Cranmer, 2006). This could be indicative of the limitations of seeking to develop employability outside the higher education institutions.

In addition, results of this study found that employers' involvement in degree course design was found to have positive effects on graduates' outcomes, in their ability to find graduate-level jobs within six months of graduation. However, these influences would most likely diminish rapidly over time as graduates acquire more job and occupationally specific skills and knowledge through work-based training and experience (Cranmer, 2006). As Little (2003: 22) interpreted as suggesting the 'problem' may be more than one of transitions into the labour market rather than longer-term enduring mismatches between labour market supply and demand. In the light of these findings, it would surely make sense for higher education institutions to redirect some of their resources from classroom-based initiatives seeking to develop employability skills to increasing employment-based training and experience, and/or immediate graduate prospects in the labour market and, therefore, support graduates in the transitional stage into employments.

Conclusions And Implications

Higher education is regarded as central to national strategies for securing shares in the global market and higher education institutions as the sources of valuable human capital to support national development is increasing. The fast-tracking change to high-technology industries and an information technology economy entails sustained human resource development and training. Therefore, an appropriate higher education system is critical for preparing a competent workforce. Literature reviews and results of the study indicated that graduates believed their education and skills were sufficient and higher education institutions considered their graduates to be well prepared for the transition to the workplace. Unfortunately, the employers concluded that new graduates lacked vital soft skills for employment, mentioning impractical expectations and demands for higher salaries as examples. Such incongruent perspectives must be addressed for effective solutions to enhance the employability of graduates. It can be concluded that employers are seeking for graduates who are knowledgeable and skilled and at the same time possess desirable attributes.

To name a few aspects mentioned by the participants in this Researcher Links Workshop, it can be concluded that all the lecturers should try out innovative ways of teaching and interaction, including evaluation of learning activities, and allowing students to come up with their own ideas for learning and co-designing lecture with potential employers. One of the outputs is the development of their own course modules, which they can later use again. The incentive of using classroom as learning ground for soft skills has really been effective to benefit students and lecturers (Hagmann & Almekinders, 2003). Besides, some participants tried out coaching and mentoring techniques and with potential employers with great success, and this encouraged them to advance themselves further. This implies lecturers have to try using elements of personal development in the way they interact with their students, to the extent that the students will be asked to present their learning about change in their behaviour to faculty and cross-faculty meetings.

Training and education in participatory approaches to a certain degree, is considered as effective method to generate the required soft skills development. Therefore, there is a need for the incorporation of these four soft skills namely communication and interpersonal, team-working, critical thinking and problem-solving, and personal development skills into the curricula as lecturers in higher education institutions see themselves, as disciplinary experts rather than communicators of soft skills. This is because the skills and expertise of lecturers to develop and implement curricula that interweave soft and hard skills is generally lacking and needs to develop through learning processes or training in which they engage over a time span of at least a year.

References

- CBI. (2009). *Future fit: Preparing graduates for the world of work*. London: CBI
- Chamorro-Premuzic, T., Arteche, A., Bremner, A. J., Greven, C., & Furnham, A. (2010). Soft skills in higher education: Importance and improvement ratings as a function of individual differences and academic performance. *Educational Psychology*, 30(2), 221-241.
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). *Methods of data collection in qualitative research: Interviews and focus groups*. doi: 10.1038/bdj.2008.192
- Hagmann, J. & Almekinders, C. (2003). Developing 'soft skills' in higher education. *Pla Notes*, 48, 21-24.
- Holmes, B. (2014). *Hone the top 5 soft skills every college student needs*. Retrieved from <https://www.usnews.com/>
- Karmel, T. (2017). School-to-work transitions in the OECD: Do education systems make a difference. *Educational Research for Policy and Practice*, 16, 9-26.

- Kember, D., Leung, D., & Rosa, M. (2007). Characterizing learning environment of nurturing generic capabilities in higher education. *Research in Higher Education*, 48, 609-632.
- Kruger, K. (2015). *US universities should follow UK in promoting students' 'soft skills'*. Retrieved from <https://www.timeshighereducation.com/>.
- Little, B. (2003). *International perspectives on employability*. Briefing Paper. York, The Higher Education Academy. Retrieved from <http://www.heacademy.ac.uk/>
- Mason, G., Williams, G., Cranmer, S., & Guile, D. (2003). *How much does higher education enhance the employability of graduates?* Higher Education Funding Council for England (HEFCE). Retrieved from http://www.hefce.ac.uk/pubs/rereports/2003/rd13_03/default.asp.
- Ministry of Higher Education, Malaysia. (2017). *The national graduate employability blueprint*. Malaysia: Ministry of Education.
- Okay-Somerville, B. & Scholarios, D. (2017). Position, possession or process? Understanding objective and subjective employability during university-to-work transitions. *Studies in Higher Education*, 42(7), 1275-1291.
- Organization for Economic Co-operation and Development, OECD. (2005). *Measuring the social outcomes of learning*. Paris: OECD.
- Organization for Economic Cooperation and Development, OECD. (2004). *Education at a glance. Briefing note - United Kingdom*. Retrieved from <http://www.oecd.org/dataoecd/3/32/33714534.pdf>
- Pavlova, M., Lee, J. C-K, & Maclean, R. (2017). Complexities of school to work transitions. *Educational Research for Policy and Practice*, 16, 1-7.
- Rothwell, A., Herbert, I., & Rothwell, F. (2008). Self-perceived employability: Construction and initial validation of a scale for university students. *Journal of Vocational Behavior*, 73(1), 1-12.
- Syed Ahmad, S. B. (2013). Soft skills level of Malaysian students at a tertiary institutions: A comparative case study based on gender, area of residence and type of schools. *International Journal of Asian Social Science*, 3(9), 1929-1937.
- Thanomwan, P., Keow Ngang, T., Prakittiya, T., & Sermpong, P. (2017). The effect of risk management and student characteristics on life skills of higher education students. *Pertanika Journal of Social Sciences & Humanities*, 25(2), 891-906.
- UNESCO. (2012). *Graduate employability in Asia*. Bangkok: Thailand
- Yorke, M. (2006). Employability in higher education: What it is – what it is not. *Learning & Employability, Series One*. United Kingdom: The Higher Education Academy.

Acknowledgements

The researcher would like to thank International College, Khon Kaen University for providing the internal grant to conduct this research. Special thanks to Thailand Research Fund for its financial support under the Newton Fund Researcher Links Workshop grant in collaboration with British Council to make the research a success.

Bir Toplumsal Değişim Aracı Olarak Oyunlar: Dijital Yerlilerin Oyun Oynama Pratikleri

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Özet

Dijital kültür öncesinde bireylerin düşüncelerini ifade ettikleri kültürel pratikler, televizyon izlemek, geleneksel oyunları oynamak telefonda konuşmak, fotoğraf çekmek ya da mektup yazmakla sınırlı olduğunu söylemek mümkündür. İnternetin gündelik hayata dâhil olmasıyla, eski günlük ritüeller yenileriyle yer değiştirirken şekil de değiştirdikleri söylenebilir. Dijital oyunlar da değişen/dönüşen gündelik yaşam pratikleri içerisinde değerlendirilebileceğimiz kültürel tüketim araçlarının birisidir. Bu çalışmada ele alınan temel kesişim noktası yeni medya, gençlik ve toplumsal yaşam ara kesitindeki önemli öğelerden biri olan dijital oyunlar (*digital games*)’dir. Çalışma ayrıca geleneksel oyundan dijital oyuna bir köprü oluştururken, dijital yerliler (*digital natives*) kavramından hareketle yeni nesil kuşağın dijital oyunla aralarındaki ilişkiye odaklanmıştır. Bununla birlikte dijital oyunlardaki anlatı yapılarının temel özellikleri ve dijital oyunların da bir okuryazarlık (*digital game literacy*) süzgecinden geçmesi gerektiği savunulmaktadır.

Çalışmanın sonucunda oyunların oyunların pedagojik potansiyelini arttırmaya çalışan uluslararası araştırma ve geliştirme girişimleri arttıkça, eğitim araştırmacıları oyunların nasıl işlediğine dair daha fazla temellendirilmiş kavramlar geliştirerek fayda sağlanacağına dair sonuç ve öneriler bulunmaktadır.

Anahtar Kelimeler: Dijital Oyun, Dijital Kültür, Dijital Yerliler, Dijital Oyun Okuryazarlığı, Toplumsal Değişim

Gelenekselden Dijitale “Oyun ve Oynamak”

Oyun (*Play*) ve kurallı oyun (*Games*) kavramlarının da birbirlerinden farklı ele alınması gerekmektedir. Birey küçük yaşlarda daha çok hayal gücüne dayalı, kuralları daha gevşek sınırlarla belirlenmiş ve süresi, kuralları, araçları, teması ve oyuncuları, oyuncuların onayı çerçevesinde değişebilen, daha çok hayal gücüne dayalı, daha az oyuncu becerilerini sınamaya yönelik etkinlikler içeren oyun oynarken, ilerleyen yaşla birlikte kuralları genelde üçüncü şahıslarla belirlenmiş ve süresinin, kurallarının, araçlarının, temasının ve oyuncularının çerçevesi daha sıkı örüntülerle belirlenmiş, bir mücadele içeren ve çoğu zaman oyuncuların performanslarını gösterebilecekleri ya da kendilerini diğer oyuncularla kıyaslayabilecekleri ölçütler içeren, eğlencenin yanında çoğu zaman gerilim ve hırsın eşlik ettiği kurallı oyun oranı artmaktadır (Ural, 2009).

Oyunların anlaşılmasında temel bir meydan okuma, etkileşimli bir ortam olmasıdır. Oyuncuların eylemleri olmadan, üzerinde çalışılacak bir oyun yoktur. Oyunların kültürle ilişkisini inceleyen kültür tarihçisi Huizinga’nın (2010) Homo Ludens (oyuncu insan) kuramına göre ise, insan sadece yaşamaz, yaşama biçimini ve diğer insanlarla kurduğu ilişkileri oyunsallaştırır. Oyun da anlatı gibi insan kültürünün ayrılmaz bir parçasıdır ve drama insan kültürünün oyunsal karakterinin sonuçlarından sadece biridir. Huizinga savaşın oyunsal karakterini de ayrıca incelemiştir. İnsan yaşamının bir parçası olan savaşın; tıpkı felsefe, politika, şiir, hukuk, din gibi diğer ciddi kategorilerde olduğu gibi, oyunsal niteliğine dikkati çeken Huizinga (2010)’ya göre, savaş, üyelerinin birbirlerini karşılıklı olarak eşit veya hiç değilse hak düzeyinde eşit olarak kabul ettikleri bir çevre içinde cereyan ettiği sürece, bir kültür işlevi sayılabilir. Bu anlatımı pekiştirmek adına Huizinga, “oyun ruhu yoksa uygarlık mümkün değildir” der (2010, s. 134). Akbulut (2007: 32) ise oyunun niteliklerini şöyle sıralar:

Özgürlük: Oyun oynamak zorunlu değildir.

Ayrışıklık: Peşin olarak sabitlenmiş ve tanımlanmış, ortam ve zaman sınırları içinde sınırlandırılmıştır.

Belirsizlik: Sonucu önceden belirlenemeyen, elde edilemeyen ve oyuncunun girişimine bırakılmış yeni keşifler için bir ölçüde serbestlik tanıyan bir süreç.

Verimsizlik: Oyuncularla mülk alışverişi dışında ne bir ürün, ne yeni bir çeşit öge oluşturan, oyunun başlangıcında hüküm veren bir durumda sonlanma.

Kurallarla yönetilmek: Olağan kuralları geçici olarak erteleyen kurallarla yönetilmek.

–miş gibi yapmak veya inandırıcı kılmak: Gerçek yaşama karşı olarak özgür bir gerçek; olmayanın ya da ikincil bir gerçekliğin özel bir farkındalığına eşlik eden –miş gibi yapmak.

Genel olarak oyun, anlatısallaştırma kültür, ideoloji ve özellikle ilişkisi bağlamında farklı medya biçimleri içinde okunmaya açık pek çok metin yaratsa da, dijital oyunlar çok farklı anlatı yapılarına sahip olması nedeniyle ideolojik açıdan analiz edilmeleri önemli bu çalışmanın önemini göstermektedir. Temelde oyun

oyunmak, tam anlamıyla anlayamadığımız sonuçlara sahip olan deneyimler, yaratmaktır. Dijital oyunlar, sadece fikirleri değil, tüm dünyaları, oyuncularını onları keşfetmeye davet eden belirli biçimlerde temsil eden karmaşık metinler olarak ortaya çıkmıştır (Gee, 2003, 2004; Juul, 2003). Oyunların bir bütün olarak araştırılma ihtiyacı, bir ortam olarak benzersizlikleri ve aynı zamanda oyunların kendisinden daha fazlasını içeren daha geniş bir medya ekolojisine sahip olmalarıyla bağlantılı olduğunu iddia eden araştırmacılar vardır (Fuller, 2005). Nitekim dijital oyunlarının bu medya ekolojisi, kısmen oyun oynama, yapım ve tasarımı destekleyen “parateksüel” (Consalvo, 2007) endüstrileri tarafından gösterilmiştir. “Paratext”, oyun kültürü içinde bireysel ve grup ayrımı sistemleri oluşturmada oyun sermayesinin merkezinde yer alır.

Dijital oyun teknolojisi ise ekranda görünen görüntüyü kontrol etme ve değiştirebilme olanağını kitlelere vermiştir. 70’li yıllardan başlayarak 80’lerin ilk yıllarına dek altın çağını yaşayan *arcade* oyunlar, *Pac-man* veya tanımlanamayan uzaylı istilacılar gibi temalarla kitleleri eğlendirmeye devam etti. Fakat bu yeni dijital eğlence aracının var olmaya devam edebilmesi için, oyun tasarımcıları televizyon ve sinemanın zaten sahip olduğu bir şeye, öykü’ye ihtiyaç duyduklarını fark ettiler (Brisbois, 2007). 1981 yılında Shigeru Miyamoto tarafından tasarlanan bir karakter olan *Mario* ilk olarak, Nintendo Oyun Şirketi’nin yapımcısı olduğu *Donkey Kong* isimli oyunda oyuncu karşısına çıkmış ve oyuncunun özdeşleşebileceği bir kahraman olarak dijital oyun tarihinin ilk protagonisti olmuştur. Oyunun öyküsü, ana karakter olan *Mario*’nun, *Donkey Kong* isimli dev bir maymundan genç bir kızı kurtarması üzerine kuruludur ve oyuncu ana karakteri, belirli engellerin zıplayarak, koşarak ve kaçarak geçildiği bir dizi platformdan geçirmeye çalışır. *Donkey Kong* da, Pong gibi bir *arcade* oyunudur. Fakat ilk kez bir dijital oyunda belirli mücadeleleri geçmek zorunda olan bir karakterle özdeşleşme aracılığıyla içine girilen bir öykü sunulmuştur. Buradan çıkarılan sonuç önemlidir: Tıpkı sinema gibi, dijital oyun medyası da onu kullanan kişiye öykü ve karakterler aracılığıyla, korku, heyecan, üzüntü veya neşe gibi duyguları geçirme potansiyeline sahiptir (Sayılğan, 2012).

“Dijital Yerliler” Dijital Oyun İçinde Doğanlar

Dijital yerliler, 1980 ve sonrasında doğan nesilden oluşmakta Digital Natives (*dijital yerliler*), Net Generation (internet nesli), The Gamer Generation (*oyun nesli*), Next Generation, N-generation (*yeni nesil*), Cyber Kids (*siber çocuklar*), Homo Zappiens (*zaplayan insan*), Grasshopper Mind (*çekirge zihin*)” (Pedro, 2006’dan aktaran Şahin, 2009: 156) gibi isimlerle de anılmaktadırlar. Dijital yerlilerin sahip oldukları özelliklerinin en başında, internetin keşfiyle gelişen, sosyal ağları (facebook, myspace, flickr, vb.) ve blogları (twitter, blogspot, Wordpress, vb.) etkin kullanabilmek, ulaşılmak istenilen bilgileri hiper metinler ve arama motorları (google, mozilla, vb.) aracılığıyla kolaylıkla edinebilmek gelmektedir. Çalışma örneğinde Sakarya Üniversitesi öğrencilerinin seçilmesindeki amaç, dijital çağda doğmuş bir nesil temsil etmeleridir. Söz konusu örneklem yeni medya ortamlarını aktif bir şekilde kullanan “dijital yerli”lerin tüm özelliklerini bünyesinde barındıran kişilerden oluşmaktadır. Dijital yerliler teknolojiyi öğrenme etkinlikleri ve özellikle sosyal ve iletişim amaçlı kullanmaktadırlar (Lei, 2009’dan akt.: Günüş, 2011: 2)

Dijital yerliler ve dijital göçmenler konusunda çok sayıda araştırma çalışması bulunan Prensky (2001) günümüzün genç kuşağını, yani ağ ortamında büyüyen çocukları ifade etmek üzere kullanılabilecek bir kavram konusunda zorluk yaşadığını belirtmektedir. Ancak daha sonra, bu konuda derinlemesine çalışan bir uzman olarak, en uygun isimlendirmenin, dijital dilin bu kuşak tarafından ana dil (*Native Speaker*) olarak konuşulmasından hareketle “dijital yerli” (*Digital Native*) olmasının uygun olduğunu düşündüğünü belirtmektedir. Prensky’nin yeni teknolojilerle büyüyen bu kuşak için kullandığı “dijital yerli” kavramı günümüzde bu kuşağı nitelendirmek üzere yaygın olarak kabul görmüş bir kavramdır. Dijital yerli öğrenenlerin temel özellikleri aşağıdaki şekilde listelenebilir. Dijital yerliler (Bilgiç ve diğerleri, 2011):

1. Bilgiye hızla erişmek isterler,
2. Metin yerine grafiği tercih ederler,
3. Bir makaleyi baştan sona doğrusal bir biçimde okumak yerine kapsül halinde
5. Rastgele okumayı tercih ederler,
6. Ciddi çalışmalar yerine oyunları tercih ederler,
7. Bilişsel yapıları sıralı değil paraleldir,
8. Aynı anda birçok işi yapmak isterler,
9. Keşfederek öğrenmek isterler.

Oyunların bir bütün olarak araştırılma ihtiyacı, bir ortam olarak benzersizlikleri ve aynı zamanda oyunların kendisinden daha fazlasını içeren daha geniş bir medya ekolojisine sahip olmalarıyla bağlantılı olduğunu iddia eden araştırmacılar vardır (Fuller, 2005). Nitekim dijital oyunlarının bu medya ekolojisi, kısmen oyun oynama, yapım ve tasarımı destekleyen “parateksüel” (Consalvo, 2007) endüstrileri tarafından gösterilmiştir. “Paratext”, oyun kültürü içinde bireysel ve grup ayrımı sistemleri oluşturmada oyun sermayesinin merkezinde yer alır.

Dijital Oyun Okuryazarlığı

Alan yazın incelendiğinde dijital oyunların, oyuncular üzerinde birçok olumlu ve olumsuz etkilerinin olduğu yapılan çalışmalarla ortaya konulmuştur. Özellikle gelişim döneminde bulunan çocukların bilişsel, duyuşsal, sosyal ve fiziksel açıdan bu dönemde daha kolay etkilendiği ve dijital oyunların bu gelişim alanlarını doğrudan etkilediği yapılan araştırmalar sonucunda kanıtlanmıştır. Günümüzde oyuncular giderek artan bir şekilde tüketici olarak sosyalleşmekte, metalaşma ve şeyleşme süreçlerinin objesi haline gelmektedirler. Küreselleşmenin ve neoliberal politikaların çocuk oyuncaklarını metalaştırdığı bir dönemde artık küreselleşme karşıtı bir hareketin başlaması gerekmektedir. Teknolojik gelişmelerle birlikte insan emeğinin üretkenliğinin artması, fazla sayıda çocuğun işgücünden çıkarılmasına ve okul kayıtlarının çoğalmasına yol açmıştır. Bu tür değişimlerin bir sonucu olarak da, çocuğun ailesine olan bağımlılığın artması söz konusu olmuştur (İnal, 2007). Kısaca küreselleşme ve tüketim kültürü, bir yandan Batı menşeli bir çocuk kültürünü yeniden üretirken, öte yandan çocuklara obezite, saldırgan davranışlar korku, asosyalite gibi birçok zarar getirmektedir. Sonuçta, kapalı mekânlara sıkıştırılan (ev, okul gibi) çocuklar, doğadan kopuk, elektriğe dayalı ve yalnızlık kokan bir kültürün nesneleri haline gelmişlerdir (Williams, 2012: 93-104). Küreselleşmenin ve neoliberal politikaların çocuk oyuncakları da dâhil olmak üzere her şeyi metalaştırdığı bir dönemde artık küreselleşme karşıtı bir hareketin başlaması gerekmektedir.

Dijital oyunların oyuncularına ideolojiyi aktardığı ve öğrettiği söylenebilir. Oyun tasarımcıları, kurallar ve resimler gibi kabul edilen varsayımlarla oyun oyuncularına ideolojiyi ustaca öğreten benzetilmiş modeller yaratır (Frasca 2003; Bogost 2006, 2007):

1. Militarizmin oyununu yaratan kurallar
 2. Emperyalizmin oyununu yaratan kurallar
 3. Irkçılık açısından etnik yapı oluşturan imgeler
 4. Cinsiyetçilik açısından cinsiyet oluşturan görüntüler
- Çoğu zaman, oyun oyuncuları video oyunu kurallarını ve görüntülerini eleştirmezler çünkü bu şeyler oyun normları olarak kabul edilir.

Dijital oyunla, militarizm, emperyalizm, cinsiyetçilik ve ırkçılık gibi ideolojileri içerisinde barındırdığını iddia eden bir çok çalışma vardır. Örneğin Hayse (2013: 442) “video oyunları, ilk kez göze daha çok benzeşmektedir” derken ideoloji meselesinin dijital oyunlarda nasıl temsil bulduğu ve ne sıklıkla görünür olduğuna değinmiştir. Prensky (2001), bilgisayar oyunlarının yeni bir öğrenme kültürü oluşturabileceğinden bahsederek bunun da öğrencilerin alışkanlık ve ilgilerini daha iyi karşılayacağına vurgu yapmaktadır. Bilgisayar oyunlarının sahip oldukları potansiyel dikkate alındığından dolayı, günümüz eğitimcileri ya da uzmanları öğrencilerin öğrenme kapasitelerini arttırmak ve onlara daha iyi öğrenme ortamları sunmak amacı ile bilgisayar oyunlarını sınıf ortamlarında kullanılmaktadırlar. Ancak burada bilgisayar oyunlarının eğitim amacı ile kullanılmasındaki tasarım sorunları ön plana çıkmaktadır. Eğitim için kullanılacak bir oyun tasarlanırken eğitim ve eğlence unsurları arasındaki dengenin sağlanması ve öğrencilerin oyun ortamından gerekli eğitim-öğretim içeriğini alabilmesi için tasarım aşamasında dikkate alınması gereken bir çok nokta olabilmektedir. Bilgisayar oyunları sadece öğrencilerin dikkat ve motivasyonunu yükselten birer ders materyali olarak (Kili, 2005) kullanılırken, başlı başına bir oyun da ders destekleyici materyali olarak kullanılmak yerine, dersin ana materyali olarak da kullanılabilir.

Dijital oyunların kullanıcılar üzerindeki en önemli etkisi, psikolojik ve fizyolojik bağımlılık boyutudur. Dijital oyunlar, yüzüze iletişimin yerini almadığı sürece, sosyal hayatı zenginleştirdiğinden söz edilebilir; ancak gerçek dünyadaki sosyal hayatın önüne geçtiğinde, sanal bir sosyal çevre ve sanal birleşim ile sınırlı kalmaktadır. Zaman kısıtlılığından yakınan modern toplumlar açısından dijital oyunlar, bireylerin yeni sosyalleşme ortamları olarak en uygun mekânlar olarak düşünülmektedir. Bu bağlamda araştırma bireylerin dijital oyunlar aracılığıyla sosyalleşmesi; teknoloji ve toplum arasındaki ilişki bağlamında nicel araştırma yöntemi kullanılarak ele almayı amaçlamaktadır. Bununla birlikte teknoloji karşısında edilgenleşen bir insan modelinin ortaya çıkması üzerinde tartışmayı amaçlamaktadır. Oyun insanlara eğitim, fiziksel etkinlik, sağlığın korunması, kendini gerçekleştirme, toplumsal hayata hazırlık, boş zamanları değerlendirme ve eğlence bakımından olanak sağlarken diğer yandan da şiddet yönelmelerine imkân tanımaktadır. Bu sayede de kişiler güçlü ve zayıf yönlerini kavrayarak gerçek kişiliklerini ortaya çıkarırlar.

Sonuç olarak, çocukların ve gençlerin dijital teknolojiyi kaçınılmaz olarak daha yoğun kullanması dijital oyunları da daha fazla oynamaları anlamına gelmektedir. Bu noktada neler yapılabilir diye düşünüldüğünde öncelikle dijital oyun okuryazarlığının temel seviye eğitim sürecinde olması aileler ve çocuklar için eğitim sürecinden geçmesi etkili olacaktır. Ayrıca çevrimiçi oyunların ve oyun sitelerinin yaş gruplarına göre derecelendirilmesi ve sınıflandırılması; şiddet içermeyen, yerli, eğitici, öğretici ve geleneksel oyunların dijital ortamlara taşınması gibi önlemlerin alınması da dijital oyun okuryazarlığı olgusunun içinde değerlendirilmesi gerekir.

Sonuç ve Öneriler

Günümüzde giderek gündelik yaşamın her alanında yaygın kullanım pratikleri bulan, gündelik yaşam pratiklerimizde etkili bir dönüşüm getiren dijital teknolojiler yeni medya araçlarıyla sağlanmaktadır. Yeni iletişim teknolojileri benlik haz ilişkileri içerisinde gelişmekte ve kapitalist sistemin mantığına uygun bir şekilde bu sistemi ekonomik ve ideolojik olarak yeniden üretmek için kullanılmaktadır. Teknolojinin her geçen gün hızla ilerlemesi, şehirleşme ve oyun alanlarının yetersizliği gibi nedenler çocukların oyun oynama ve sosyalleşme alışkanlıklarını

değiştirmiştir. Zamanla geleneksel oyunların yerini bilgisayar ve internet yoluyla oynanan dijital oyunlar almıştır. Şimdilerde gençlerin dijital oyunlara, geleneksel oyunlardan daha fazla rağbet ettiği söylenebilir.

Oyun yoluyla oyunların nasıl oynanacağını öğrenmek daha da önemlidir. Bu yinelemeli oyun döngüleri, eylemlerle ortaya çıkan ve gelecekteki eylemlerde kullanılan kavramlar araçlar, kavramlar üretebilir. Oyunların geleneksel eleştirileri sadece metnin kendisine odaklanmışken, oyunların sadece oyuncu aracılığıyla gerçekleştirilebildiği gerçeği, oyunu ve onun tüketim bağlamlarını kapsayan teorik modelleri gerektirir.

Görsel ve işitsel medya ürünlerinin olası sosyal, kültürel ve psikolojik etkilerini bilimsel olarak araştırma, değerlendirme kabiliyetine sahip, piyasa üzerinde denetim ve yaptırım yetkisi bulunan bir kuruluşun varlığı Türkiye açısından elzemdir. Bu kuruluşun çeşitli disiplinlerden uzmanları istihdam eden, kendine özgü maddi kaynakları bulunan, bağımsız ve görev alanıyla ilgili düzenlemeler yapma yetkisine sahip olmasının uygun olacağı düşünülmektedir. İçinde dijital oyunların da yer aldığı görsel ve işitsel medya ürünlerini değerlendirecek, sınıflandıracak ve bu ürünler hakkında tüketicileri bilgilendirici materyaller üretecek olan bu kuruluşun, kamu yönetimi sistemimizin içerisinde düzenleyici ve denetleyici kurumlar oluşturulmalıdır. Ayrıca dijital oyun ve eğitim kesişiminde yaş ve içerik denetimi video oyunlarının satış denetimi alınan önlemlerin etkinliği çevrimiçi oyunların denetimi gibi konular dikkate alınmalıdır.

Kaynakça

- Binark, M. (2005) “Kimlik(lenme), Etnik Laflama Odaları”, *İnternet, Toplum, Kültür*. İçinde Mutlu Binark ve Barış Kılıçbay. (Der.) Ankara: Epos Yayınları, 118-136.
- Caillois, R. (1961). *Man, Play and Games*, çev. Meyer Barash (Champaign, IL: University of Illinois Press
- Günüç, S. (2011). “Türkiye, Dijital Yerlilerde Çalışan Bellek Ve Çoklu Görev”, *5th International Computer and Instructional Technologies Symposium*, Fırat Üniversitesi.
- Huizinga, J. (2013). *Homo Ludens Oyunun Toplumsal İşlevi Üzerine Bir Deneme*. (Çev.). Mehmet Ali Kılıçbay. İstanbul: Ayrıntı Yayınları.
- Pearce, C. (2006). “Productive Play: Game Culture From the Bottom Up”, *Games and Culture* 1, no. 1 17-24.
- Prensky, M. (2001). *Digital Natives, Digital Immigrants*. Erişim <http://www.marcprensky.com/writing/Prensky%20%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>
- Yeni medya çalışmaları I. Ulusal kongresi (2013) Kongre kitabı [Çevrimiçi]. http://ekitap.alternatifbilisim.org/yeni_medya_calismalari-1_kongre_kitabi.html. [Erişim tarihi: 10/03/2015].

Dijital Medya ve Kültür: Sosyal Medyanın Kültür Üzerine Etkileri Ve Kültürün Dijitalleşmesi

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Özet

İçinde bulunduğumuz bilişim çağında teknoloji, iletişim ve medyanın şekillendirici gücüyle birlikte çok katmanlı bir kültürel dönüşüm sürecine girilmiştir. Dijital iletişim araçlarının, özellikle de çevrimiçi iletişim araçlarının oluşması kültürdeki kapsamlı değişime işaret etmektedir. Teknolojiyle toplumu özdeşleştiren Castells'e göre ağlar, toplumun sosyal morfolojisini oluşturmakta ve kültürel süreçleri kökten değiştirmektedir. 21. Yüzyılın kültürel oluşumunda öne çıkan en önemli gelişme internetin keşfiyle birlikte, iletişim elektronikleşmiş; toplumlar, ağ toplumuna dönüşmüş; enformasyon dijitalleşmiş ve literatüre dijital kültür olgusu dahil olmuştur. Dijital kültür, modern kapitalist yaşamın yarattığı ihtiyaçlara bir cevap olarak çeşitli alanlara yayılmış olan ve kendini yenileyen bir olgu olarak değerlendirilmektedir. Yeni medya dolayımıyla iletişim ortamları, çevrimdışı (offline) gelişen kültürel, siyasal, ekonomik ya da politik süreçlerden etkilenmekle kalmamakta aynı zamanda bütün bu yapıları da yeniden üretmektedir. Bu bağlamda bu çalışmada dijital medyanın, küreselleşmenin ve sosyal medyanın kültür üzerindeki etkileri ve değişimleri araştırılacaktır. Kültürün dijitalleşmesi, sosyal medyanın kültür üzerine etkileri çalışmanın ana sorunsalını oluşturmaktadır.

Anahtar Kelimeler: *Kültür, Dijitalleşme, Dijital Kültür, Sosyal Medya*

Giriş

İnternet teknolojilerinin gelişmesi ile birlikte ortaya çıkan yeni medya alanlarında bireyler artık dijital/sayısal olarak ifade edilmekte, kültürün de dijitalleşmekte/sayısallaşmakta olduğu dile getirilmektedir. Marx'a (1848) göre, kapitalizmle birlikte her şeyi maddi unsura dönüştüren modernleşme süreci, insanı da maddeleştirmiş, ona sayısal bir değer vermiş ve bunun sonucunda bireyler, maddi olan her şeyin sıvı hale dönüşmesi, yani akışkan bir biçime bürünmesi sebebiyle kendi varlığının dışında ait olduğu alanın biçimine bürünmüştür. Zaman, mekân ve bedensel sınırlılıkları aşarak akışkan hale gelen bireylerde olduğu gibi ilişkiler de akışkanlık kazanmaktadır. Kültürel değişimin postmodern yorumuna göre zaman ve mekân, kültürel üretimin düzenleyici ilkeleri olarak konuşlanmışlardır. Web siteleri üzerinden bireylerin bir profil hesabı aracılığıyla, müzik, video ve resim paylaşımından politikaya varıncaya kadar pek çok alanda birebir ya da grup olarak iletişimde bulunduğu çevrimiçi alanlar, pek çok kültürel etkinliğin gözlemlendiği yeni bir "mekân" olarak değerlendirilebilir. Sanal alan ya da siber uzam adıyla tanınan bu mekân içinde gerçeklik, nesnel tanıma ulaşmadaki yetisini kaybetmesi sebebiyle artık sanal gerçeklik ve sanal kimlikler üretilmektedir.

Bauman, bu kimliklerin belirsiz, kurlsız ve başına buyruk olmasına karşın, imaja dayalı ve onunla merkezleştirilen simgesel varlıklara dönüştüğünü dile getirmektedir. Sosyal medya aracılığıyla aynı zamanda kitlesel iletişimde de bulunabilen bireyler içerik üretebilmelerinden dolayı doğrudan doğruya toplumsal, kültürel ya da siyasal alanlarda anlam üretimine katılabilmektedirler.

Dijitalleşme ile birlikte kültürel hayatta bir akışkanlık söz konusu olmuştur. Bu akışkanlık sayesinde kültürel aidiyetler ulus devletin sınırlarını aşan sosyal hareketler –çevreci, feminist hareketler vs. güçlenmiştir. Bundan başka soy-sop, ırk ve dini inanışlar gibi ayrımlar üzerine bina edilmiş ve ulus devlet potasında eridiğine inanılan çeşitli aidiyetlerin yeniden gündeme gelmesi söz konusu olmuştur.

Çalışmanın amacı, değişen ve gelişen kitle iletişim araçlarının, dijitalleşmenin ve sosyal medyanın kültür üzerine etkileri olarak belirlenmiştir. Bu bağlamda çalışmanın amacının alt başlıkları şu şekilde belirlenebilir;

- Yeni iletişim teknolojilerinin gelişmesinin kültür üzerinde etkileri nelerdir?
- Sosyal medya ve sosyal ağlar kültür değişimine neden olur mu?
- Dijital kültürden bahsedebilir miyiz?
- Artık günümüzde milli bir kültürden bahsedebilir miyiz?

Bu alt başlıklar çerçevesinde çalışmanın çerçevesi oluşturulmuştur. Çalışmada bu sorulara cevap aranmıştır.

Konu ile ilgili yapılmış sınırlı çalışma olması, bu çalışmanın önemini arttırmaktadır. Literatüre konu ile ilgili olarak yeni bir bakış açısı getirmesi bakımından önem taşımaktadır.

Yeni Medyanın Gelişimi ve Küreselleşme

McLuhan'ın "evrensel köy" benzetmesiyle işaret ettiği, birbirinden giderek daha fazla haberdar olan bir dünya düzenine denk düşen küreselleşme, "küresel ölçekte işleyen ve sınırları aşarak toplumları ve kurumları yeni zaman-mekân bileşimlerinde entegre edip bağlayarak, gerçekte ve deneyimde dünyayı birbirine daha bağlı duruma getiren süreçler" şeklinde tanımlanabilir (Larrai, 1995: 207).

20. yüzyılın son çeyreğinden itibaren özellikle kitle iletişim araçlarının devasa nitelikte yaygınlaşmasıyla birlikte uluslararası ilişkiler – bağlantılı olarak kültürler arası ilişkiler- iç içe geçerek yoğunlaşmaktadır. Söz konusu yoğunlaşma, homojenliği ifade ettiği gibi, heterojenliği de içine alan bağlam içinde gelişmektedir. Önceki dönemlerden farklı olarak, sermayenin, yaşam tarzlarının, fikirlerin ve inançların daha hızlı akışkanlık göstermesi bir yana, hiç olmadığı kadar farklılıkların ve ötekinin kendisini temsil etmesi söz konusudur.

Kitle iletişim araçlarının küreselleşme sürecinde merkezi bir konumu vardır. Kitle iletişim araçlarının etkileri hem geniş hem de sınırlıdır. Küreselleşmenin olduğu tüm alanlarda önemli bir rolü olmasından dolayı geniştir, gündelik yaşamın önemli bir parçası olmasına rağmen kültürel deneyimin tek kaynağı olmamasından dolayı da sınırlıdır (Tomlinson, 2004: 37). Her ne kadar kitle iletişim araçları, küreselleşme konusunda biricik güç değilse de küreselleşme sürecinin ortaya çıkmasında ve hız kazanmasında çok etkin bir rol oynamıştır. Sahip olduğu teknolojik nitelikleri nedeniyle ulusal sınırları ortadan kaldırmış, ülkeleri (özellikle de bu teknolojilere sahip olanlar lehine) birbirleri ile daha fazla "etkileşim" içerisine sokmuştur. Sadece teknolojik değil, aynı zamanda sahip olduğu sosyal, kültürel ve ideolojik özellikleri nedeniyle de küreselleşmenin altyapısını oluşturmuştur. Yani sıra kitle iletişim araçları ile kurulan dünya iletişim şebekesi, toplumların her yerini, her alanını kuşatmıştır. İktisadi, siyasal, sosyal ve kültürel alanlarda yirminci yüzyılın sonlarında ortaya çıkan gelişmeler, küreselleşme başlığı altında değerlendirilebilir. Kuşkusuz küreselleşme sürecinin ortaya çıkmasında iktisadi, siyasi, sosyal ve kültürel faktörlerin rolü büyüktür. Yüzyılın sonuna ilişkin küreselleşmeyle ilgili kavramsallaştırma Robertson (1998: 102) tarafından "tikelciliğin evrenselleşmesinin ve evrenselciliğin tikelleşmesinin iç içe geçmesini içeren derin, ikili bir süreç" olarak tanımlanmaktadır. Hall (1998: 94) ise, küreselleşmeyi, "eklemlenmiş tikelliklerden" oluşan bir çerçevede kavrar.

Küreselleşme, başka bir deyişle, dünyanın küçülmesi ve tek bir yer olarak algılanma anlayışının yaygınlaşması olarak tanımlanmaktadır (Aslanoglu 1998: 124-125). Buradaki anlamıyla küreselleşme, dünyanın küresel köy haline gelmesidir (Robertson 1998: 22). Geniş manasıyla, küreselleşme, bugün daha çok Kuzey-Batılı zengin ülkelerin siyasal, toplumsal ve kültürel olarak yoksul ülkeler karşısındaki hegemonyacı üstünlükleri şeklinde kullanılmaktadır. Söz konusu ülkelerin koydukları kurallara uyanların küreselleşme çerçevesi içerisinde değerlendirileceği, uymayanların ise dışlanıp yok sayılacağı mantığı ağırlık kazanmaktadır (Talas 2005: 99-101). Sonuç olarak küreselleşme, pazarın mutlak egemenliği, devletin küçülmesi ve özelleştirmenin tamamlanması, uluslararasılaşmış sermayenin sınırsız hareketi şeklinde tanımlanabilir (Şaylan 1995: 208). Kuzey-Batının değerlerini egemen kılmanın bir diğer adı olarak kafalarda netleşen küreselleşmenin benzer sonuçları zorlayan, ancak sosyokültürel yapı özellikleri bakımından ülkeleri farklı problemlerle karşı karşıya bırakan yönü dikkate alınmalıdır. Şüphesiz küresel dalganın önemli problem alanlarından biri de kültürel sonuçlarıdır.

Yeni Medya ve Dijitalleşmenin Kültür Üzerindeki Etkileri; Milli Kültürden Evrensel Kültüre

Yeni medya, kültürel ürünlerin dijitalleşme sürecini başlatmıştır. Kültür üzerindeki bu önemli değişimin kökleri yeni medya teknolojilerinin öncülü olan 19. yüzyılın sonunda ortaya çıkmış olan tekniklerde bulunmaktadır. Bu teknikler kültürel ürünlerin yeniden üretimini mümkün kılarak, bunların kitleselleşmesine sebep olmuştur.

Bir milletin hayat tarzı olarak tarif edilen kültür ile küreselleşme ve dijitalleşme karşılıklı olarak birbirini etkilemektedir. Hem küreselleşme, büyük dönüşüm ve değişimlerle kültürü etkilemiştir, hem de kültür bizzat dönüşümleri meydana getirmede etkili olabilmiştir. Neticede, küreselleşme olgusuna önderlik eden toplumların kendi hayat tecrübesi ve sahip oldukları bilgileri bir kültür unsurudur.

Yaşam biçimi bakımından, toplumların gittikçe birbirine benzemesi ya da bir başka deyişle, "Amerikanlaşması" şeklinde bir değişim meydana gelmiştir. Dünya ticaret kültür ve sanayisi görünüş, doku ve ses bakımından Amerikan etkisi taşımaktadır. Levis'ler otomobillerden daha çok satış yapmaktadır. Kompakt disklerde Amerikan parçaları görüntülü olarak tüm dünyaya yayılma imkânı bulmaktadır. Yeni nesiller, ailelerinin bütçelerini zorlayarak bu yeni yaşam biçimini tercih etmektedirler. Düşünce şeklinde, münasebetlerde, eğlencede, giyim tarzında, kısaca bir bütün olarak insanların hayata bakış açıları – özellikle genç nesil içerisinde – benzeşme meydana gelmektedir. Ailelerin çocukları için aldıkları ayakkabıdan, gençlerin eğlenirken diskoyu tercih etmelerine, giydikleri kazak, tişört ve blucinlere kadar günlük hayatta baskın bir Amerikan kültürü kendini

göstermektedir. Amerikan video, plak, film, CD ve VCD'lerindeki ürünler-yapımlar, rakipsiz hâkimiyetlerini devam ettirmektedirler. Öyle ki, bu hâkimiyet otoriter yönetimlerin engellemelerini bile aşacak şekilde kabul görmektedir. Bilhassa İranlı gençlerin dipçik yeme uğruna, disko müziği dinlemeleri ve etek ve perdesü altında da olsa, blucin giymeyi tercih etmeleri, engellemeye rağmen, etkilenmenin olduğunun en güzel ispatıdır. Aynı şekilde yeme-içme alışkanlıkları da Amerikan kültürünün simgesi haline gelmiş olan "Coca-Cola", "Pepsi" ve "McDonalds"ların baskın karakterli etkisi altında bulunmaktadır (Talas 2003: 60-69).

Roland Robertson, dünyanın giderek küçülen ve tek dünya olarak tanımlanan hale geldiğini, ulusal olarak kurulmuş toplumlarınsa daha fazla çok kültürlü şekle büründüğünü ifade etmektedir. Ayrıca çok etnikliğin dışsal ve içsel zorlamalarıyla yüz yüze gelen toplumların meydana geldiğinden ve birey ile kolektif ötekilerin özdeşleşme koşullarının her zamankinden daha karmaşık hale geldiği bir dünyadan bahsedebileceğini ileri sürmektedir (Robertson 1998: 99-100).

Ritzer, küreselleşmenin ve dijital dönüşümün kültürel sonuçlarını "McDonaldslaşma" kavramıyla açıklamaktadır. Ritzer bu çalışmasında aslında özellikle Weber'in modern toplumdaki bürokratikleşmenin yükselişi temasından etkilenmiştir. Öyle ki, Ritzer kendi analizlerinde büyük oranda Weber'i çağırıştırılmaktadır. Weber'de bürokratik organizasyon rasyonalitesi çalışmasının merkezindeydi, buna karşılık Ritzer'in çalışmasının merkezinde bugünün yükselen küresel sistemindeki rasyonalite epitomesi mevcuttur. Ritzer McDonaldslaşmayı dünyanın yanı sıra Amerikan toplumundaki çok baskın sektör olarak fastfood restoranlarının kurallarının etkili olduğu süreç olarak tanımlamaktadır. McDonaldslaşmanın toplumsal hayata nüfuz etmesi dört faktörle izah edilmektedir. Bunlar; etkinlik, hesaplanabilirlik, tahmin edilebilirlik ve kontrol edilebilirlikten oluşmaktadır. Birincisi, günlük hayatta istek duyma ve doyuma ulaşma arasındaki zaman aralığının kısaldığını göstermektedir. İkinci ilke ise, paranın zaman ve harcanan emek karşılığı değerinin hesaplanmasını kolaylaştırmaktır. Üçüncü ilkeye göre, sunulan ürünler o kadar standart hale gelmiştir ki, tüketicinin aklına alternatif bir istek gelmemektedir. Dördüncü ve sonuncusu da, Mc Donaldslaşma sürecinde geliştirilen teknolojilerle tüketicinin kontrol edilebilmesidir. Tüketici kontrolü, kuyruğa girmeyi sağlayan rahatsız oturma yerleri ve arabaya yiyecek servisi gibi işlevlerle yapılmaktadır. Tüm bu ilkelerin duyurduğu temel öge zamanın kontrol edilmesi ve yoğun bir standartlaşmadır. Bu standartlaşma sadece hazır yiyecek alanında değil, çocuk bakımı-eğitimi gibi gündelik hayatın diğer alanlarında da etkilidir. "(Ritzer 1993: 7-13).

Yeni medyanın dijitalleşmenin kültürel olarak etkilerine baktığımızda ise, Yeni medyanın temel prensiplerinden kültürel kod çevrimiyle kültürel ürünler yapısal ve işlevsel değişime uğramıştır. Manovich'e göre yeni medyanın kültürel ve bilgisayar olmak üzere iki farklı katmanı bulunmaktadır. Yeni medya bilgisayarda yaratıldığına, dağıtıldığına, saklandığına göre; bilgisayarın mantığı medyanın geleneksel kültürel mantığını da etkilemektedir. Bilgisayarın dünyayı modelleyiş tarzı, verileri temsili, bunlar üzerinde işlem yapabilmemize izin vermesi; kültürel katmanın oluşumunu ve içeriğini etkilemektedir. Kültürel katman da aynı şekilde bilgisayarı etkileyerek yeni bilgisayar kültürünü oluşturmaktadır. Bu yeni kültür insanın dünyayı algılayışıyla bilgisayarın sayısal temsiline bir karışımıdır (Manovich, 2001).

Kültürün bilgisayarlaşması, bilgisayar oyunları, sanal dünyalar, web siteleri gibi yeni kültürel formların ortaya çıkmasına yol açtığı gibi; fotoğraf ve sinema gibi eskileri de dönüştürmekte ve yeniden tanımlamaktadır. Manovich yeni medya ile ilgili herşeyi ve tüm ürünleri yeni medya objeleri olarak isimlendirmektedir. Bu yeni medya objeleri aynı zamanda da kültürel objelerdir ve fiziksel olarak gerçek dünyada var olan nesneleri referans alarak, onları temsil ve inşa ederek oluşturulmaktadır. Yeni medyayla birlikte yeni kültürel formların, ürünlerin ortaya çıkması ve kültürün dönüşüme uğraması siber kültür alanının doğmasına sebep olmuştur (Manovich, 2001). Siberkültür kavramı akademik alanda 1990'ların ortasından beri kullanılmaya başlanmıştır. David Bell, giderek genişleyen bir kavram olarak gördüğü siber kültür çalışmalarını insan ve dijital teknolojilerin nasıl etkileşime girdiğini, birlikte nasıl var olduğunu düşünme yolları olarak görmektedir. Bu anlamda siberkültür bütünlük uygulama ve temsillerin matrisi olan siber alandaki yaşam tarzları ya da siber alanın şekillendirdiği yaşam tarzları olarak görülebilmektedir. Bu bağlamda siberkültür yeni teknolojilerin insan yaşamını ve yaşamındaki temsilleri, imajları, anlamları nasıl değiştirdiği üzerine düşünmeyi içermektedir (Bell, 2007).

Kültürün değişmesi toplumsal değişimi de beraberinde getirmektedir. Yeni medya bu açıdan düşünüldüğünde sadece kültürel ürünlerin dijitalize olmadığı; kişilerarası ilişkilerin de dijitalize olmaya başladığı yorumu yapılabilir. Sosyal medya olgusu bu yorumu örneklendirebilmektedir.

Dijitalleşme ile insanın yabancılaşma başladığı ve daha fazla yalnızlık yaşaması söz konusu olmuştur. Günümüzde insanların başkalarının yaptığı tercihlere tabi olarak, fazla sorumluluk almadan yaşadığı korumalı dünyanın giderek tarihe karıştığı görülmektedir. Ulagay'a göre, önceki dünyanın geçen yeni dünyada, bilgi beceri varlık sebebi olarak insanlığın karşısında durmaktadır. Ona göre, insanlar, kendi ayakları üzerine basmayı öğrendiği ilk

anda da taşıyamayacağı kadar ağır bir yükün altında kalmaktadır. Ulagay'ın tespitlerine göre, daha dar bir sosyal çevrenin (aile, komşu, köylü, mahalleli) kurallarıyla yaşamaya alışmış birinin, birdenbire kendini küresel bir ortamın rekabetçi ve acımasız kanunları içinde bulması çok büyük bir zorluk olacaktır. Onun ifadesine göre, söz konusu ortam, insanı o ana kadar hiç tanık olmadığı ölçüde büyük bir yalnızlığın ve kaybolmuşluğun içine itebilecek niteliktedir. Yine Ulagay'ın bildirdiğine göre, işte bütün bunlar, insanlığın yeni bir dönüm noktasına geldiğini göstermektedir ve bütün bunlar modern toplumun bireyselleşmiş insanının durumunu açıklamaktadır (Ulagay 2001: 35-36).

SONUÇ

Dijitalleşme ve küreselleşme hâkim kültürel kodlar açısından, kültürün üretimi ve tüketiminde, zengin bir taşıyıcılık ve yaygınlaştırma işlevi görmektedir. Kitle iletişim teknolojilerinin köken itibarıyla Anglo-sakson ve Amerikan olmaları, sadece teknolojiye sahipliği değil aynı zamanda kültür akışının yönünü gösterir. Batılı yaşam tarzının, değerlerinin ve tüketim kültürünün toplamını gösteren küresel kültür, medyalar yoluyla –özellikle de televizyon, internet ve reklamcılık- kendisini ve imgelerini dünyanın tüketimine sunar.

Sözgelimi Donald Duck (bizdeki alımlanmasıyla “Vak Vak Amca (!)” çizgi film endüstrisi yoluyla, CocaCola ve McDonald's reklamcılık ve pazarlama dünyasıyla, Levi's reklam ve modayla evrensel tüketim dünyasına sunulmaktadır. Sunulan sadece mal ve hizmet değil, aynı zamanda nesnelerin kültürel anlam ve imgeleridir.

Dijitalleşme sürecinde kültürel boyuttan bakıldığında, ileri iletişim teknolojilerini ellerinde bulunduran Batı kültürleri sahip oldukları bu teknolojik üstünlük sayesinde küresel kültür aktarım sürecinde başat bir rol oynamakta, yerel kültürlerin sahip olduğu öğeleri de bu aktarım sürecine eklemelendirerek kendi kültürlerinin diğer kültürler üzerindeki başatlığını sağlamlaştırmakta ve kendi kültürel arka planlarını taşıyan ürünleri bu kültürlerle hiç de zorlanmadan pazarlayabilmektedirler.

Çalışmayla, medyanın hem küreselleşmeyi yaygınlaştırdığı, hem de yaygınlaşan küreselleşme ile birlikte yayılan küresel kültürün medya yoluyla yerel kültürleri “yerinden ettiği”, kendine eklemlemek suretiyle yerelliği, bağlamından kopararak yeniden ürettiği, yerelliklerin evrenselleşmesi temasının hiç de kolay gerçekleşmediği aksine çağdaş kültürün yerellikleri yeniden üreterek hem ötekileştirdiği, hem de kendine eklemelendirdiği ortaya çıkartılmıştır.

Bütün bu gerçeklerden yola çıkarak, küreselleşmenin kültürel sonuçları ile ilgili olarak şunlar söylenebilir: Küreselleşmenin kültürel sonuçları ile ilgili olarak en fazla öne çıkan husus dünyada Amerikan kültürünün küresel kültür olarak yaygınlık kazanması meselesidir. “Amerikanlaşma”, “McDonaldslaşma” gibi özgün ifadelerle de izah edilen bu konu, hayat tarzı açısından dünyada numune bir kültür olma yolunda çok önemli mesafeler kat eden Amerikan yaşam biçiminin, anti demokratik toplumlar da dâhil olmak üzere, yaygınlaşmasından kaynaklanan bir husustur. Amerikan kolası, hamburgeri, eğlence biçimi, dans şekilleri, film, plak, CD ve VCD gibi somut kültür unsurlarının yoğun bir şekilde küresel ölçekli olarak kabulü böyle bir realitenin varlığını kabul etmenin zorunlu olduğunu ortaya koymaktadır.

Kaynakça

- ASLANOĞLU, Rana (1998), Kent, Kimlik, Küreselleşme, Asa Yayınevi, Bursa.
- BELL, D. (2007). *Cyberculture Theorists: Manuel Castells and Donna Haraway*, Routledge: Oxon.
- ERKAL, Mustafa (2001), “Etniklik ve Etnik Grup Kavramları Üzerine”, *Türkiye ve Siyaset*, S. 3, Temmuz-Ağustos, s. 38.
- HALL, Stuart. (1998b), “Eski ve Yeni Kimlikler, Eski ve Yeni Etniklikler”, King, Anthony D. (Der.), *Kültür, Küreselleşme ve Dünya-Sistemi*, Ankara: Bilim ve Sanat Yayınları, ss. 63-96.
- LARRAİN, George (1995). *İdeoloji ve Kültürel Kimlik*. Çev. N. Domaniç. İstanbul: Sarmal Yayınevi.
- MANOVİCH, L. (2001) *The Language of New Media*, Cambridge, Mass.: MIT Press.
- ROBERTSON, Roland. (1998), “Toplum Kuramı, Kültürel Görecelik ve Küresellik Sorunu”, King, Anthony D. (Der.), *Kültür, Küreselleşme ve Dünya-Sistemi*, Ankara: Bilim ve Sanat Yayınları, ss. 97-120.
- ŞAYLAN, Gencay (1995), *Değişim, Küreselleşme ve Devletin Yeni İşlevi*, İmge Kitabevi, Ankara.
- TALAS, Mustafa (2003), *Küreselleşme ve Türkiye’de Kültür Politikaları*, Yayımlanmamış Doktora Tezi, Malatya.
- TALAS, Mustafa (2005), “Küreselleşmenin Sonucu Olarak Türkiye’de Kimlik Krizi”, *Tabula Rasa Felsefe-Teoloji Dergisi*, Yıl: 5, S. 14, Mayıs-Ağustos, s. 99-115.
- TOMLINSON, John. (2004), *Küreselleşme ve Kültür*, Eker, Arzu (Çev.), İstanbul: Ayrıntı Yayınları.

Dijitalleşme ve Kadın: 1970 Ve 80’li Yıllarda Doğan Kadınların Yeni İletişim Teknolojileriyle İlişkisi

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Özet

İletişim teknolojilerinin dünden bugüne her geçen gün gelişmesiyle kadınların da hayatlarında değişimlere neden olmuştur. 1990’lı yıllarda kişisel bilgisayarların yaygınlaşması ve internet teknolojisinin günlük hayatta yer almasıyla kadınlarda bu alanda kendilerini ifade etmeye başlamışlardır. Cep telefonu ile birlikte her yerde, her zaman ulaşılabilir olunması, cep telefonlarının bilgisayar alt yapılı akıllı telefonlara dönüşmesi ve telefonda internet kullanımının ucuzlaması ve yaygınlaşması, sosyal medyanın oluşması kadınlarında dünyada siberfeministlerinde öngördüğü üzere özgürce dolaşmasının yolunu aralamıştır. Kadınlar, dijitalleşme hem sanal dünyada hem de onun yansıması ile gerçek dünyada daha aktif yer alması sağlanmıştır. Bu düşünceden yola çıkarak çalışmamızda 1970’li ve 1980’li yıllarda doğan kadınların hayatına da yer alan dijitalleşmeyi ve katkılarını ortaya koymak adına derinlemesine görüşme yöntemi kullanılacaktır. 1970’li ve 1980’li yıllarda doğan kadınların dijitalleşmenin hayatlarına yansımalarının ortaya konulması adına çalışan, en az lisans eğitime sahip toplam altı kadınla derinlemesine görüşme gerçekleştirilecektir. Bu konuda iletişim alanında sınırlı çalışma bulunması nedeniyle bu çalışmanın akademik boşluğun doldurması amaçlanmaktadır.

Anahtar Kelimesi: *Kadın, Dijitalleşme, Değişim, Sosyal Medya, Cep Telefonu*

GİRİŞ

İletişim teknolojilerinde dijitalleşmeyle birlikte toplumun yapısı ve günlük yaşam da değiştirmektedir. Toplumsal cinsiyet açısından bakıldığında iletişim araçlarının dijitalleşmesi kadınları da etkilemekte, günlük hayatlarında değişimlere yol açmaktadır. Geleneksel medya ataerki sistem üzerinden kadın sunumunu yeniden inşa etse de yeni medya ile birlikte bu yapılanma nasıl değişmektedir. Günümüz de ataerki, erkek egemenliğini, erkeğin kadına egemen olduğu güç ilişkilerini anlatmak ve çeşitli yollardan kadını ikincil konuma yerleştiren sistemi nitelemektedir (Bhasi,2003,1). Genel görüşe göre geleneksel medyanın erkek egemen yapıya sahiptir. Bu açıdan yeni iletişim teknolojilerinin yapısı ve etkisi tartışılmaktadır. Dijital açık, kadınlar açısından düşündüğümüz de “Dijital bölünme nedeniyle İnternet teknolojilerinin kimi kadınları güçlendirdiği, kimilerini ise ‘marjinalleştirdiği’ söylenmektedir”(Varol, 2014, 220). Dijitalleşme her kadının hayatına bir şekilde dokunmaktadır. Toplumsal cinsiyet açısından kadınlar, internetle birlikte güçlü bir iletişim alanına kavuşmaktadır. Bilgisayar ve internetin günlük hayata yer almaya başladığı, 1990 yıllardan sonra kadınlar, düşüncelerini geniş kitlelere ulaştırabilecekleri bir teknolojiye sahip olmuşlardır. Yeni iletişim teknolojileriyle birlikte kadınlar, hegemonik örüntüler ve toplumsal cinsiyet ideolojileri yeniden şekillenmekte ve kadınlara daha özgür bir alan sunulmaktadır. Böylece yeni medya kadınlara zamansız ve mekansız iletişim alanı, kendilerini daha doğru ve birlikte ifade etme şansı sunmasının yanı sıra yaşam alanlarını yavaş yavaş sanal dünyaya kayması ile yeni bir var olma alanı oluşturmaktadır. Bu çalışmada Türkiye’de kadınların yeni iletişim teknolojilerinin kısaca dijitalleşmenin kadınların hayatları etkisinin sorgulanması amaçlanmaktadır. Bu kapsamda dijitalleşmenin teknoloji yazını ile hayatlarına sonradan eklenen kadınların bu teknolojiyle tanışması ve kullanımı sorgulanacaktır. Buradan yola çıkarak 1970’li ve 1980’li yıllarda doğan kadınların dijital dünya ile tanışması ve bu dünya ile ilişkisi ortaya konulmaya çalışılacaktır. Bu konuda sınırlı çalışma olması nedeniyle bu çalışmayla akademik boşluğun doldurması ve kadınların dijital dünya ile ilişkilerinin ortaya konulması açısından önem arz etmektedir. Çalışmada yöntem olarak derinlemesine görüşme yöntemi ile 1970’li ve 1980’li yıllar da doğan kadınların dijital dünya bakış açıları ortaya konulmaya çalışılacaktır. Ayrıca bu çalışmanın 1970’li ve 1980’li yıllar da doğan kadınların dijital dünyayı katılım ve kullanımı açısından veri sağlaması amaçlanması nedeniyle iletişim bilimleri alanına önemli katkılar sağlaması açısından önem arz etmektedir.

YENİ İLETİŞİM TEKNOLOJİLERİ VE KADIN

Ataerki bir dünyada yaşadığımız düşünüldüğünde geleneksel kitle iletişim araçlarının kadın ve erkeklerin hayatına etkisi yanı sıra bu alanların yeniden üretim sürecinde kadın ve erkek sunumlarında toplumsal cinsiyet kalıplarında ataerki sistemi yeniden kurmaktadır. “Kitle iletişim araçları, sınıf ve toplumsal cinsiyet ideolojisini güçlendirip

yaymak için üst sınıf ve üst kast erkelerin elindeki çok önemli bir araçtır. Filmler ve televizyondan dergilere, gazetelere ve radyoya her yerde kadının betimlemesi propotiptir ve çarpıtılmıştır” (Bhasi,2003,1). İkinci dalga feminizm¹ öne sürdüğü gibi geleneksel kitle iletişim araçları, kitle kültürünün yansıtıcısı olarak daha çok eril söylemlere hakim olması, elit kültürde kadının dışlanması kaynaklıdır. “Kitle kültürü en nihayetinde kadın olmaktan çok erkektir, çünkü kitle kültürünün üretimi üzerinde gerçek kontrolü daima erkek sağlamaktadır... Dışılığın kitle kültürüne genelleştirici bir biçimde atfedilmesi daima kadınların yüksek kültür ve onun kurumlarından gerçekten dışlanmasına bağlıdır” (Huysen,1995, s.73). Gelişen iletişim teknolojileri sonucu bilgisayar teknolojisinin hayatımıza girmesi ve internetle birlikte küresel köyde dolaşma özgürlüğü, geleneksel medyanın kalıplarını kırmaktadır.

Bilgisayar/İnternet Teknolojisi ve Kadın

Kadınlar hem bilgisayar teknolojilerinin işlevsel olarak kullanılmaya başlaması hem de internet yoluyla yeni bir iletişim sisteminin gelişmesiyle dünden daha çok iletişim teknolojilerinin içinde yer almaya başlamaktadır. 1990 sonrası kişisel bilgisayarın ucuzlamasıyla bilgisayar kullanımı yaygınlaşmıştır.1993’den sonra ise internetin ticarileşmesi sonucu milyonlarca bilgisayar kullanıcısının bağlandığı bir alt yapı oluşmuştur (Geray,2003,132). Öncelikle çalışan kadınların iş alanlarında daha çok kullandığı bilgisayar, zamanla sadece çalışma hayatında değil kişisel bilgisayarlarla kadınlar ev ortamında bu teknolojiye duydukları ihtiyaç çerçevesinde kullanmışlardır. Fakat kadınların, bu dönemde bilgi gereksinimi, teknoloji öğrenme kapasiteleri hakkında önyargılar, bu teknolojiyle yeni tanışmasının dezavantajları ve kullanımının genel anlamda koşullar gereği kısıtlı olması bu teknolojiyi bir anda değil yavaş yavaş edinmeleri ve kullanmalarına yol açmıştır. Dery (1999,120), sosyo-biyolojik kabarma kadınların teknoloji için "genetik" yetersizliği hakkında kendi kendine karar veren dijital seçkinler olduğunu söylemektedir. Kadınların dijital dünyada erkekler kadar yetkin olmadıkları düşüncesi, kadınların bu konuda yetersiz eğitim veya eğitim koşullarına sahip olması, bu konudaki dünyadaki devlet politikalarından kaynaklanmaktadır. Gelişen ağlarla birlikte iletişim hızının artması dünyayı ve günlük hayat etkinliklerini daha fazla bu alanda yer alması kadın dünyasını da değişime sevk etmiştir. Bilgisayar ve internet teknolojisi sonucu, 1990’lı yıllar için telefondan daha hızlı bir iletişim aracı olması ayrıca görüntü, ses ve yazının hızlı bir şekilde gönderilebilmesini sağlamıştır (Şeker,2005,81). Böylece iletişimin hızlanması, ekonomik anlamda ucuzlaması kadınların bu teknolojiyi kullanması için bir teşvik oluşturmıştır. Bilgisayar üzerinden dört tür iletişim şekli; 1.e-mail vb., bir kişiden diğer kişiye eş zamanlı olmayan iletişim 2. Usenet, e-grup gibi çok kişi arasında eş zamanlı olmayan iletişim, 3.Chat vb., bir kişiden diğer kişiye, bir kişiden çok kişiye ya da çok kişi arasında eş zamanlı iletişim,4.web vb., bir kişiden çok sayıda kişiye yada çok kişi arasında eş zamanlı olmayan iletişim(Akt. Atabek,2001,118). Kadınlar internetin getirdiği bu dört iletişim yolunu zamanla fonksiyonel olarak kullanmıştır/kullanmaktadır. Elektronik yayıncılık, e-posta ve İnternet üzerinden haber alan/veren, sohbet grubu içinde yer alan ve forumlara katılan yeni bir kadın profili karşımıza çıkmasıyla kadın geleneksel kitle iletişim kalıplarından da sıyrılmaktadır. 1990’lar da internet kullanıcılarının en çok kullandığı araç e-mail ve ilk olarak kadınların e-mail ile bu alanda yer aldıklarını söylemek doğru olur. Kadınlar yeni kamusal alanda örgütlenmesi veya örgütlerin bu alanda var olması ve sesini duyurması daha kolaylaştırmak ve kadınların özgüvenini yerine getirmektedir. O dönemde kadınlar e-mail grupları oluşturmuşlardır. E-mail grubuna örnek olarak Kadın Kurultayı E-Grubu” verilebilir. Bu e-grup, o dönemde Türkiye Cumhuriyeti Kanunları ve Medeni Kanun tartışmaları sırasında kadın örgütlerinin organize etmesine katkı sağlamıştır. Bu gruba üye olmak için gruptan üyelerinin yeni üyeyi önermesi gerekirken, gruptan kendi isteği dışında çıkarılmamaktadır. E-gruba üye sayısı Mart-Mayıs 2006 döneminde yaklaşık 1100’dur. Grupta katılımcılar genellikle gerçek ad-soyadlarıyla yer almaktadır. Türkiye kadın hareketinin tarihe yazımını içinde bir platform oluşturmuştur (Göker,2007,269). Aslında kadın yazını için önemli bir tarih kaydedici olarak dijital dünya yer almaya başlamaktadır. E-mail yoluyla tek tuşla, binlerce insana ulaşabilen kadınlar, kendilerini daha doğru ve eşit ifade edebilecekleri bir kamusal alana edinmişlerdir. Bu alanda da hegemonik yapı ve toplumsal cinsiyet ideolojisiyle şekillense de kadın için özgürlük alanı sunmaktadır. Aynı zamanda dezavantaj sağladığı yerlerde olmaktadır; e -postanın gelişmesi kadınları bir araya getirirken, güçlenmelerini sağlasa da kadınlar açısından1999’da ABD’de 200’den fazla e-posta gelin ısmarlama ajansı bulunmaktaydı. Ülkelerinden kaçırılan 4-6 bin kadın bu ajanlar ile feminen olarak sunulmaktaydı (Ritzer ,2011,475).

Türkiye İstatistik Kurumu (TÜİK) verilerinde 2004-2018 yılları internet kullanımı tablosuna göz attığımızda her geçen yıl kadınların daha fazla internete daha fazla yer alması bize göstermektedir ki kadınlar bu alanda her geçen gün gelişen teknoloji ile daha fazla dahil olmaktadır. Ayrıca internet siteleri ve bloggerlar, kadınlarla ilgili birçok

¹ Feminizm, “Latince kadın anlamına gelen femine sözcüğünden türetilen feminizm Fransızca’ya 1837’den sonra, (Feme-Kadın sözcüğünden türetilerek) İngilizce’ye ise 1890’larda womanism(kadıncılık) ismini alarak girmiştir”(Sevim,2005,7). Feminizm 20.yüzyıl ilk dönem kadınların seçme ve seçilme hakkını elde etme mücadelesi, ikinci dönem 1960-1980 yasal ve siyasal mücadele dönemi, üçüncü dönem 1990-2008 birey odaklı farklı grupların yaşadığı sorunlara odaklanır, dördüncü dönem ise 2008 sonrası ben kimim sorusunu arayan cinsiyet sosyal bir davranış yansıtır. Uygulamalı cinsiyet ihtiyacı(Pratical Gender Needs -PGN), kadınlar ihtiyacına, işe nasıl ulaştığını sorgular. Burada sosyal medya kadına hem sosyal hem de ekonomik ihtiyacını karşılayabilecek potansiyele sahiptir. Stratejik cinsiyet ihtiyacı (Strategic Gender Needs-PNG), ihtiyaçların arka planı sorgulanır, sosyal medyadan parayı nasıl kazanacak, kazanılan parayı kim harcayacak, ne kadar sürede kazanılacaktır.

konuyu görünür hale getirmekte ve kamuoyu oluşturulmasını sağlamaktadırlar. 1 Ocak 2016 ve 1 Mayıs 2017 tarihleri arasında, www.change.org adresinde, kadınlara yönelik toplam 226 imza kampanyası başlatılmış, bu kampanyalardan 26 tanesi amacına ulaşarak değişim yaratmıştır. Başlatılan kampanya yüzdeleri incelendiğinde en fazla kampanya örgütlenmesi kadınlara yönelik şiddet üzerinedir (Kiraz&Kestel,2017,153). Bloglar kadınlar için yeni bir buluşma ve paylaşım alanı oluşturmuştur. Depeli(2015,271), yaşları 20 ile 40 arasında, 21 kadın bloggerin sayfasını otobiyografik anlatı ve kadın yazınsallığı açısından incelemiştir. Blog yazar kadınlar için blogosfer, hitaplar ve seslenişler, minnet, özlem, sevgi bildirimleriyle dolu, sıcacık bir sosyallik ve paylaşım ortamı gibi olduğu ortaya koymuştur. Gerçek dünyada deşifre olmaktan çok korkan, fakat öte yandan blogger arkadaşlarıyla gerçek ortamlarda buluşup yine blog isimleri üzerinden sosyalleşen genç bloggerlardan Leah, Mia Wallace, Spoti ve Maya için blog mecrası tam bir terapi yeri olarak nitelenmiştir.

Cep Telefonu Kullanımı ve Güvenli Ortam

Doksanlı yıllarda sadece internetin ve bilgisayar alt yapısının kullanılması değil her an her yerde iletişim kurulabilecek telefonların günlük hayata girmesi de kadınların hayatını kolaylaştırmıştır. 1990'lı yılların başından itibaren dijital hücresel telefon sistemi geliştirmiş sesi dijital veri haline dönüştürebilen cep telefonu/Global System for Mobile Communication (GSM) dijital hücreli mobil telefonlar kullanılmaya başlanmıştır (Atabek,2001,68). Telefonun ev veya araç dışında mobil hale gelmesi ile birlikte özellikle toplumda yaygın olan ataerkil görüş kadının korunması düşüncesi çerçevesinde kadına özgürlük sağladığı söylenebilir. Her an istediği yerde birilerine ulaşabilmek hem kadınların hem de çevresinin güven duygusunu inşa etmiştir. Bu kapsamda cep telefonu kadının zamansal ve mekânsal özgürlüğü genişlemiştir. Bu teknoloji kadınların günün farklı saatlerinde ve farklı mekânlarda kadın günlük hayatın içinde daha rahat yer almasına olanak tanımıştır. Akıllı telefonların kullanılmaya başlaması sonucu kadınların her yerde her zaman dünya ile iletişim içinde olmasına yol açmıştır. Cep telefonları ile başlayan özgürleşme, 2000'li yıllarda kadınların akıllı telefonla kullanması, dijital dünyada daha fazla yer almalarını sağlamıştır. Böylece artık kadınlar gerçek dünyadan sanal dünyaya geçmektedir. Geleneksel yapıda deneyimli kadınlardan tavsiye ve yardım almanın yerini yavaş yavaş internet siteleri, bloggerlar, fenomenler ve youtuberlar almaktadır.

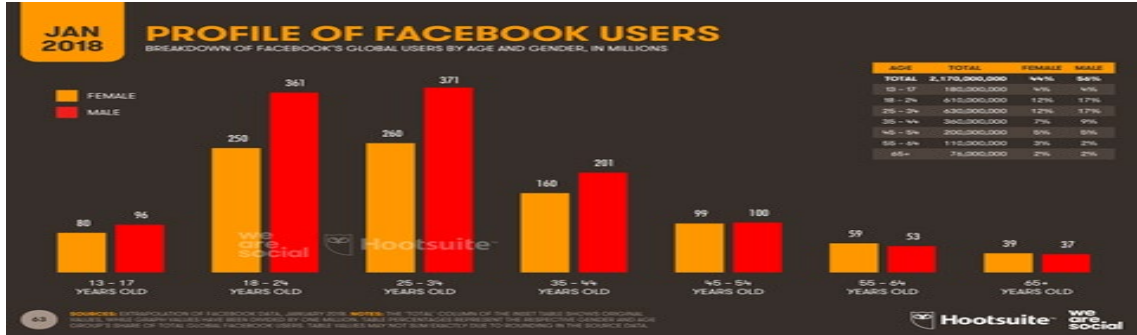
Siperfeminizm

Feminizm tarihsel süreci içinde gelişen yeni iletişim teknoloji ile birlikte farklı bir kamusal alan olarak internete yeniden kurulmuştur. "Booth ve Flanagan'a göre, siberfeminizm, belli bir odağı bulunan birleşik bir politik hareket değil, düzenli olmayan, taktik ve çelişkili kuram, tartışma ve uygulamalardan oluşan bir kümedir"(Akt. Varol,225) Dijitalleşen dünyada feminizm internet üzerinden siperfeminizm olarak karşımıza çıkmaktadır. "Genç kadınlar ve dünyadaki diğer üçüncü dalga feministleri, siyasi görüşlerini ifade etmek, sivil eylemlerde bulunmak ve baskılarına karşı harekete geçmek için giderek daha fazla web'e başvurdular" (Matos,2017) sonucu kadın ideolojilerinin anlatacakları ve kabul gördüğü yeni bir kamusal alana kavuşmuştur. "Manifesto for Cyborgs" ve Sadie Plant'ın "Zeros and Ones" adlı çalışmalar siberfeminizmin kurucu metinleri arasında sayılabilir. Ancak, Sandy Stone'un The War of Desire and Technology adlı çalışması da siberfeminizmin çıkışına önemli katkıda bulunmuştur (Galloway, t.y.). Ancak yine de, Haraway ve Plant, siberfeminist düşüncenin "anneleri" olarak kabul edilmektedir(Akt. Varol,2014,222). Siperfeminizm, yeni iletişim teknolojilerini dişil yapısına vurgu yapılarak daha etkin olduğu savunulmaktadır. "Yeni medyanın gelişimiyle birlikte, siberfeministler erilliği teknoloji, kadınsılığı ise doğa ile yan yana koyan kültürel anlayışları yapıbozuma uğratma fırsatını bulmuşlardır. Siberfeminiz, kadınların dışlanması ve baskı görmesini eleştirmek için fırsatlar arayarak yeni medyayı yeniden tanımlama ve aynı zamanda teknolojiye anlam vermemizi sağlayan fantezileri ve kültürel çerçeveleri keşfetme çabasıdır" (Stevenson, 2008,338). Feminizm düşüncesini dijitalleşmesi sonucu kadınların baskı görmesini engellemek adına bir tuşla birçok kişiye haber ulaştırabilen bir yapı kurulmaktadır. siberfeminist hareket özellikle Avrupa odaklı olarak büyümeye ve değişmeye başlamıştır. 1991-1997 yılları arasında yükselen bir düşünce olan siberfeminist kampanyası 1997'de Almanya'da gerçekleştirilen Birinci Uluslararası Siberfeminist Konferans'la birlikte pik yapmaktadır. Siberfeminizm iki farklı dönem ayrılmakta, birinci dalga daha çok cinsiyetsiz kimlikleri yaratmaya çalışırken, ikinci dalga feminizm rahatsızlık duymaya başlayan bir akımdır. "Kira Hall, birinci dalga siberfeminizmi "liberal siberfeminizm", ikinci dalga siberfeminizmi ise "radikal siberfeminizm" olarak adlandırmıştır. Hall'a göre, liberal siberfeminizm bilgisayar teknolojisini kadınların özgürleşmesi için bir araç olarak görmekte, radikal siberfeminizm ise, kendini, erkek tacizine karşı internette kurulan ve yalnızca kadınların girebildiği gruplarda göstermektedir(Akt. Varo,2014,227). Siperfeminizm iki binli yıllarla birlikte popülerliğini kaybetmektedir.

Sosyal Medya ve Kadın

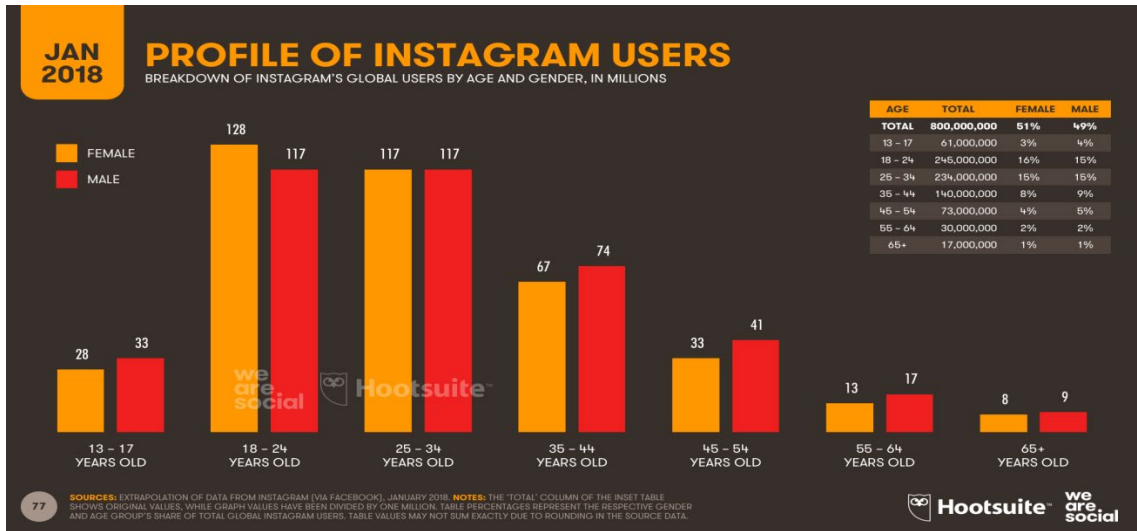
Sosyal medya, alternatif medya veya tekelleşme, küreselleşmeye karşı olan bireylerin kendi haberlerinin üretici olduğu bir kitle iletişim aracı olarak ortaya çıkmıştı(Gündüz ve Pembecioğlu,2013,318). Küresel Dijital Rapor (2018) Ocak Ayı verilerine göre dünyada en çok kullanılan sosyal medya platformu sırasıyla Facebook, Youtube,

Whatsapp, FBMessengery, WeChats, QQ, İstagram,Tumbur, Qzone, Sina Weibo, Twitter olarak sıralanmaktadır. Geleneksel medya kadını betimlemesine karşın yeni medya ile birlikte kadın kendini kurabildiği bir alana sahip olmaktadır. Web 2.0 teknolojisi kullanıcının üretici; yani üretici tüketici, tükettikleri şeyleri aynı zamanda üretmekte olmasıdır (Ritzer,2011,307). Kadın sosyal medya ile birlikte içerik üretici olmaktadır. Kadınlar “üretüketici” olarak karşımıza çıkmaktadır. Bu kadına ekonomik özgürlüğün yolunu açan sınırları da aşmasını sağlamaktadır. Kadınlar sosyal medya aracılığı ile ürettikleri birçok ürünü satmaktadır. Böylece dijital dünya kadınları ekonomik olarak özgürlüğün kapılarını açmıştır. Son yıllarda kadınlar facebook kullanımı giderek artan bir orana sahip olmuştur. Türkiye’ Facebook 43 milyon kişi tarafından kullanılmaktadır.² 18-44 yaş arası kadınlar Facebook platformunu erkelerden daha çok kullanmaktadır.



Tablo1: Dünyada Facebook Kullanımı (Küresel Dijital Rapor,2018)

Kadınlar facebook platformunda gruplar oluşturarak veya bireysel sayfalarında her türlü içerik üretebilmekte, gerçek dünya da ürettikleri birçok ürünü sergileyebilmekte veya satışa sunmaktadır. Korkuteli Kadın El Emeği, İzmir el örgüsü ve kadın dayanışma grubu vb. birçok kadın grubu kadınların ürettikleri ürünlerini Facebook üzerinde reklamını ve satışını yapmaktadır. Siyasal anlamda da kadınlar sosyal medyada aktif konumda hem kendi sayfaları hem de çeşitli siyasi oluşumlar çerçevesinde bunu gerçekleştirmektedirler. Birçok parti, il, ilçe kadın kolları gibi Çivil Ak Parti Kadın Kolları sayfası da Ak Parti Kadın kollarının çalışmalarını, kadınlarla olan çalışmalarına sosyal platforma taşımaktadır.



Tablo 2: Dünyada İstagram Kullanımı (Küresel Dijital Rapor,2018)

Kadınların en çok kullanılan platformlardan birisi “İstagram bir fotoğraf ve video paylaşım platformu olmasının yanı sıra kullanıcıların akıllı telefon uygulaması yoluyla fotoğraflara dijital filtrelerden bir seçim uygulandıktan sonra fotoğrafların paylaşılmasını ya da alınmasına olanak tanıyan bir sosyal ağ sitesidir” (Yeniçıkı, 2016, s.95). İstagram birçok kadın fenomenlerinin aynı zamanda youtuber olması dikkat çekicidir. Özellikle kadınların moda, yemek, çocuk vb. konusunda fenomen olmaktadır. Birçok kadın fenomen olarak, reklam oluşturmakta ve

² <https://wearesocial.com/uk/blog/2018/10/the-state-of-the-internet-in-q4-2018>

yayınlamakta kazanç sağlamaktadır. Bazı kadınlar ise kendi sayfaları üzerinden ürettikleri ürünlerin satışını yapmaktadırlar. Kadınlar bunu yaparken evlerini ofis gibi bir mekan olarak kullanmaktadırlar. Anne fenomenler deneyim ve bilgilerini paylaştıkları sayfaları önemli takipçi sayısına sahip iken Akasya Türkmen gibi fenomenlerin birçoğu youtube kanalı ile instagramı bir arada kullanmaktadır.



Tablo: İstagram Fenomenleri

Akıllı telefonların görüntü oluşturmak açısından kolaylık sağlaması diğer sosyal medyada yer alsa da İstagram birlikte kadınlar, hikaye ve canlı yayınla birlikte reklam üreticisi haline gelmişlerdir. Kadınlar sattıkları ürünlerin veya sayfalarına aldıkları ürünlerinin reklamını üretmektedirler. Bireysel olarak kadınlar ev ortamında hem satış hem de reklam yaparak iş ortamında yer almaları gerçek hayatlarında da birçok avantaj sağlamaktadır. “İstagramda bu kapsamda yemek fenomeni kadınların yayınladıkları reklam türü ve reklam yaptıkları ürünleri mahrem alanları evlerinde gerçekleştirmeleri veya kendi deneyimlerini paylaşmak veya ürün kullanarak sunmaları dikkat çekicidir” (Sabuncu ve Yağlıcı, 2018,168). İstagramda tanıdıkları ürünlerinin satışını Watsappla gerçekleştirmektedir. Kadınlar her türlü platformu iş açısından değerlendirmektedir. Sosyal medya ve sosyal ağlar kadınlara iş ortamında büyük bir alan yaramıştır.

Dijital Aktivizm ve Kadın

Dijital aktivizmin gerçekleşebilmesi için teknolojik altyapı, bağımsız internet, yaygın olarak bilgisayar veya alt yapıya araç sahip olmak gereklidir. Yeni iletişim imkanlarına dayalı dijital aktivist hareketler net bir organizasyon yapısı ve lider olmadan da hayatta kalabilir, Öne çıkan hesaplar, yönlendirme yapan bloglar, özenilen hacker grupları liderlik misyonunu üstlenebilir ya da paylaşılabilir” (Turhan, 2017,27). “Dijital aktivizm doğrudan internet ile sınırlı faaliyetler (internet üzerinden başlatılmış bir faaliyete destek verme) ve herhangi bir faaliyet için internet üzerinden örgütlenme biçiminde ikiye ayrılabilir. Örneğin bireyler gerçekleştirecekleri bir protesto yürüyüşünü Facebook ve Twitter gibi sosyal paylaşım siteleri üzerinden örgütleyebilmektedir”(Kiraz&Kestel,2017,153). Yeni medya ile birlikte dünyada önemli hareketleri başlatan dijital aktivizmler olarak karşımıza çıkmaktadır. Ayrıca İran’da 2009 yılındaki Cumhurbaşkanı seçimleri sırasında siber aktivizm anlatırken, 20 Haziran’da Youtube’da, *Neda Sultan* isimli aktivistin polis tarafından vurularak öldürüldüğü video görüntüleri yayınlanmıştır (Aktar,2016,23-32). Kadınlar slavitizm, hashtag aktivizmi, hacktivizm, Citizen Journalism olarak karşımıza çıkmaktadır. Slaktivizm (kltivizm), insanlar dijital platformlarda bir şey yapmış olmak için pasif eylemlerde bulunmalarıdır. Bu facebook platformu üzerinden kadınların sıklıkla kullandığı oldukça yaygın kullanılmaktadır. Slaktivizm, kadınların meme kanseri için pembe kurdele profillerinde kullanmaları, paylaşmaları örnek olarak verilebilir. Türkiye’de kadın cinayetleri sonrası taraf olma aktivizm görmekteyiz. Taciz, tecavüz veya kadın cinayetlerinde iyi hal indirimi uygulanmaması için gerçekleştirilen eylemler, kampanyalar ve paylaşımlar örnek verilebilir. Hashtag aktivizmi (Taraf olma) sosyal sistem içinde kurumların ya da kişilerin kararlarını etkilemek için bireysel ya da grup olarak yapılan aktivitedir. Hacktivizm, hack yöntemiyle bir yolsuzluk ortaya çıkarılır ve bu insanları uyarmak amacıyla yayınlanıp sosyal tepki yaratılır (Turhan,31). Yurttaş veya Vatandaş Gazeteciliği (Citizen Journalism), geniş bir çerçevede haber toplama, üretme ve dolayına sokmada gazetecilikle profesyonel olarak uğraşmayan vatandaşların mevcut teknolojik imkânlar dâhilinde yer aldığı yeni bir gazetecilik (Devran ve Özcan, 2017,153). Sosyal medya ile birlikte kadınlar hem kendi ülkelerinde hem de dünyada birçok olayda önemli rol edinmektedirler. “Yurttaş gazeteciliği kavramını teorize eden ve yaygınlaştıran isimlerden Mark Glaser kavramın arka planında yurttaşların modern teknoloji araçlarını kullanarak tek başlarına ya da birlikte haber üretebilmelerinin olduğunu belirtmiştir”(Akt. Saka,2012,41). Arap Baharı’nda kadınlar yurttaş gazeteciliğini başarıyla gerçekleştirmişlerdir. Aralık 2010’da Tunus’ta başlayan, Mısır, Libya, Suriye, Bahreyn, Yemen gibi ülkelere yayılan ayaklanmalarda kadınlar ön saflarda yer almışlardır. Mısır’da, aktivist Asmaa Mahruz 25 Ocak 2011 Ulusal Polis Günü yayınladığı video ile rejimini protesto etmek için Mısırlıları çağrı yapması ile Mısır Devrimi’ni başlatmıştır³

Gerçek Hayat Acıları Sosyal Medyada Pansuman Ediliyor

³ <https://www.youtube.com/watch?v=6-4JRwXzyle>

Kadınlar artık yaşadıkları olumsuz durumları internet üzerinde yaratılan belirli sayfalar ve kampanyalar çerçevesinde paylaşabilmektedir, böylece kadının sesi yükselmektedir. Özgecan cinayeti sonrası sosyal medyada kadınlar, #sendeanlat etiketi altında 640 bine yakın olay paylaşım gerçekleştirmişlerdir. Böylece kadınlar gerçek hayatta paylaşamadıkları taciz olayını sosyal medya aracılığıyla paylaştılar. Kadınlar gerçek hayatta rahatsız oldukları durumları sosyal medya üzerinden kampanyalarla görünür hale getirmektedir. Bunlardan biriside “#bacaklarımıtopla” kampanyası, kadınların toplu taşıma araçlarında dar alana sıkıştırılmalarına tepki göstermek ve sosyal medyayı farkındalık yaratmak amacıyla kullanmışlardır⁴

Dijital Hikaye Anlatımı Atölyesi, Kasım 2009’da gerçekleştirilen ilk kolaylaştırıcı eğitim atölye çalışması ile başladı. Üniversite ve sivil toplum örgütleriyle de ortak çalışmalar yürütülmektedir. Atölyede kolaylaştırıcı eğitimi almış akademisyen ekip üyeleri, çalışma alanlarına göre çeşitli projeler geliştirmektedir⁵ Dijital hikayelerde bir başlık olan “etek boyu” etek konusunda kadınların maruz kaldığı sözel, fiziksel ve psikolojik tacizler anlatılmaktadır.⁶

YÖNTEM

Problem Cümlesi: Dijitalleşen dünyada ve kadın ilişkisi çerçevesinde 1970 ve 1980’li yıllarda doğan kadınların dijitalleşen dünya yer almaları ve kullanımları nasıl gerçekleşmiştir/gerçekleşmektedir?

Alt Problemler:

- Bilgisayar teknolojisi ve internetle birlikte kadınlar yeni bir kamusal alana kavuşmuş mudur?
- Cep telefonu teknolojisi kadınlara özgürlük ve güven duygusu getirmiş midir?
- Sosyal medya kadınların hayatında ne tür avantajlar sağlamıştır?

Araştırma Modeli:

Bu çalışma kapsamında öncelikle araştırma sorusu oluşturulmuştur. Bu çalışma dijitalleşen dünyada ve kadın ilişkisi çerçevesinde 1970 ve 1980’li yıllarda doğan kadınların dijitalleşen dünya yer almaları ve kullanımları nasıl gerçekleşmiştir/gerçekleşmektedir sorusuna cevap aramaktadır. Bu çerçevede nitel araştırma yöntemlerinden yarı yapılandırılmış görüşme yöntemi kullanılmıştır. Bu görüşme yöntemi toplumsal konularda sıklıkla kullanılmaktadır. “Tekniğin çıkış noktası, “ ne düşündüğünü öğrenmek onlara sor” ilkesidir. Ayrıca dilin kullanımı toplumsal bir eylemdir. Görüşmelerdeki cümlelerin tamamı yanlış veya doğru olarak değerlendirilemez. Onların her biri bir toplumsal etkinlik, bir öznenin/eyleyicisinin(aktörün) eylemi olarak değerlendirilebilir” (Geray, 2006, s.164). Görüşme türleri katılımcı sayısına göre belirlenir. Burada bireysel görüşme gerçekleştirilecektir. Karasar (2005), katılan sayısına göre görüşmeler grup ve bireysel görüşme olarak ikiye ayrıldığını, Bireysel görüşmelerde görüşmeci ile kaynak dışında kimse bulunmamaktadır. Görüşülmek istenen kişiye göre üç gruba ayrılır görüşmeler; önder (lider), uzman ve halkla yapılan görüşmeler vardır. Halkla ilgili görüşme yapıldığında belli konularda genel bilgi, tutum, davranışların öğrenmedir. Görüşmeler, uygulanan kuralların katılığına göre yapılmış (formel), yarı yapılmış (yarı formel) ve yapılmamış (informel, serbest) olmak üzere üç grupta gerçekleştirilmektedir. Yapılanmamış görüşme görüşmeciye hareket alanı sağlar, sorunun kökenine inmeyi sağlayabilir. Bu yöntemde sorulacak sorular ana hatlarıyla belirlenir (166-167). Bu çalışmada yapılan görüşmelerde yarı yapılandırılmış görüşme bireysel olarak, halktan kişilerle gerçekleştirilecektir. “Bu türden görüşmeler daha önceden belirlenmiş, soru biçimi, düzeni ve sıklığı önceden düzenlenmiş soruların yer aldığı görüşmelerdir. Bu görüşme tarzında görüşülenlerin karşı karşıya kaldığı sorulardan elde edilecek verilerdeki değişkenliği en aza indirmek hedeflenmektedir” (Kümbetoğlu, 2005, s. 76). Bu çalışmada yarı yapılandırılmış görüşme yüz yüze gerçekleştirilecektir. Görüşme yapmadan önce her görüşmeci için görüşme kılavuzu hazırlanmıştır. “Geray (2006, s.170), kılavuzda görüşme için bir başlık, görüşmecinin izleyeceği talimatlar, sorulacak birkaç temel soru, temel sorulara yanıt verdiğinde açmak amacıyla sorulacak ek sorular ve görüşmeyle ilgili yorum ve notların yer alması gerektiğini belirtmektedir. Ayrıca sorular titizlikle hazırlanmalıdır ve bilgi edinilmek adına çerçeve oluşturulmalıdır. Soru sorma konusunda Karasar (2005), ilk soruların ilginç ve cevaplanması kolay ve kaynağı cevap vermeye güdüleyen bir yapıda olması gerektiğini, genelden öze doğru sırlanması, son soru kaynakta başarı duygusu uyandırması gerektiğine dikkat çekmektedir. Görüşmeciden kaynaklı sınırlılıklar vardır, konuşmacı zeki duyarlılığı yüksek bireyler olmalı, koşullanmamış, ayrımcı olmayan, konusunda uzman kişiler olmalıdır (169-174). Kümbetoğlu (2005), sorular hazırlanırken dikkat edilmesi gereken noktaları belirtmiştir;

1. Öncelikle görüşülene bir anlam ifade edecek sorular hazırlanmalıdır,
2. Görüşülecek kişilerin deneyimlerin, koşulları ve faaliyetlerine uygun soruların hazırlanması,

⁴ <https://www.youtube.com/watch?v=NwSwYqTr0mU>

⁵ http://www.iletisim.hacettepe.edu.tr/pdata/index.php?page_id=286

⁶ <http://www.digitalstoryhub.org/Etek-Boyu>

3. Görüşülecek kişilerin ihtiyaç ve haklarına duyarlı soruların seçilmesi,
4. Görüşülenlerle bir etkileşim ortamı yaratacak ve bu ortamın doğal akışı içinde gelişmesine imkan yaratacak soruların hazırlanması
5. Araştırma sorunsalına odaklanmış soruların hazırlanması ilke olarak uygundur.(s.86)

Bu çalışmada bu kurallara uygun toplam altı soru hazırlanmıştır. Yarı yapılandırılmış görüşme çerçevesinde gerekli görülen noktalarda ilave sorular sorulmuştur. Sorular demografik özellikler, kadınların dijital dünyada yer alma durumlarını ortaya koymak adına 1990 ve 2000 yıllarında bu teknolojinin içine doğan kadınlar değil bu teknolojinin öncesi ve sonrasını değerlendirebilecek 1970’li ve 1980’li yıllarda doğan kadınlarla görüşme gerçekleştirilmiştir. Teknoloji bilgisi sahip olma adına en az üniversite mezunu ve çalışan kadınlar evren olarak belirlenmiştir. Böylece dijitalleşmenin kadınların hem iş hem de özel yaşamlarında açısından değerlendirmeleri sağlanmıştır.

Evren:

Türkiye’de yaşayan 1970’li ve 1980’li yıllarda doğan, en az lisans mezunu ve çalışan kadınlar evreni oluşturmuştur.

Örnekleme:

1970’li yıllarda doğan üç ve 1980’li yıllarda doğan üç kadın olmak üzere toplam altı, en az lisans mezunu ve çalışan kadın örneklem olarak seçilmiştir.

Veri Toplama Analizi:

Çalışma kapsamında altı kadınla yarı yapılandırılmış görüşme yüz yüze gerçekleştirilmiştir. Yüz yüze gerçekleştirilen bu mülakatlarda elde edilen veriler tarafsız bir şekilde çalışmada yer alacaktır. Görüşmeler 1-11 Ocak 2018 tarihleri arasında gerçekleştirilmiştir.

Varsayımlar:

- Yeni medya kadınlar ataerkil düşünce kalıplarını yıkarak daha geniş bir söz söyleme alanına sahip olmuşlardır.
- Kadınlar cep telefonu teknolojisi ile gerçek hayatta daha rahat ulaşılabilir olmaları onların güven duygusunu geliştirmiştir.
- Sosyal medya ile birlikte gerçek hayatta veya sanal hayatta ürettiklerini kadınlar özgürce sergileyebilmeleri ve pazarlayabilmeleri sonucu kadınların çalışma hayatına katılmasında ve ekonomik özgürlüğünün gelişmesini sağlamıştır.
- Kadınların hayatında bloglar, fenomenler, youtuberlar gerçek hayattaki deneyimli insanların yerini almışlardır.
-

Sınırlılıklar:

Bu çalışmada görüşmecilerin en az lisans mezunu olması, çalışan olması, 1970’li ve 1980’li yıllarda doğan kadınlar oluşması sınırlılıkları belirlenmiştir.

Bulgular

Bulguların raporlanması aşamasında katılımcılar; kişilerin zarar görmemesi adına ve verdikleri cevapların anonimliğinin sağlanması adına görüşmecilerin doğum tarihleri ve isimlerinin baş harfleri ile bir rumuz oluşturularak düşünceleri çalışmaya aktarılacaktır. Soru formunda ilk iki soru demografik bilgileri elde etmek adına yer almaktadır. Diğer sorular ise görüşmecinin hayatındaki dijitalleşme tarihi ve katılımı üzerine yoğunlaşmıştır.

Bu çalışmada görüşme yapılan kadınların ilk bilgisayar deneyimleri hakkındaki düşünceleri genellikle iş hayatına adım atmalarıyla paralel olarak görülmektedir. 1974G, çalışma hayatına başladığım yıl kendine ait kişisel bilgisayar kullandığını belirterek, daha önceki dönemde bilgisayar merkezli işlerini babası tarafından yapılması dikkat çekicidir. 1977 K, ise ilk bilgisayar teknoloji deneyiminin 1999 yılında komşularının bilgisayarını kullanarak, lisans tezini yazmakla başladığını belirtmiştir. Bilgisayar “çok pahalıydı” demesi aslında kadınların maddi anlamda kişisel bilgisayar ulaşmasının önündeki engellerden birinin oluşturduğu görülmektedir. 1977A, ilk bilgisayar teknolojisi deneyimini hemşire olarak çalıştığı hastanedeki bilgisayarla olduğunu belirtmiştir, “2003’de Word dosyası kullanıyordum” demektedir. 1980Ş, ilk kişisel bilgisayara “2002 yılında babamın aldığı bilgisayarla sahip oldum” demektedir. 1981A, ilk bilgisayar teknolojisi deneyimin 1999 yılında okul bilgisayarını kullanarak gerçekleştiğini belirtirken “araştırma, ödev sebebiyle tanıştım” ve kişisel bilgisayarını “2003 yılında ailem aldı” demektedir. 1981C, “Üniversite birinci sınıfta ilk kez üniversite laboratuvarında bilgisayar kullandım” demektedir. Kişisel bilgisayar edindiği 2000 yılında bilgisayar konusunda eğitim aldığını belirtmektedir.

Cep telefonlarının hayatlarına girme hikayesi ise hepsinin farklı, 1980Ş, “gazete kuponu biriktirerek Nokia 5110 telefonu” ‘nun ilk telefonu olduğunu belirtmiştir. Cep telefonun hatlı olduğunu belirtmekte ve cep telefonundan mesaj ve çağrı atmayı daha çok kullandığının daha çokta çağrı bıraktığını, sayısına göre çağrı bırakmanın

nasılsın, seni hatırlıyorum gibi anlamlara geldiğini söylemektedir. Cep telefonu “güven sağladı, her an ulaşılabilir olmak, evet dışarı daha rahat çıkabiliyorsun, iyi hissettiriyor” demektir. 1981C, cep telefonu ulaşılabilir olmak “öğrenciydim ailem açısından iyiydi ama benim için iyi değildi” demektir. 1977A, cep telefonu “aradıklarında ulaşıyorlardı anne ve babam, o dönem çok yoğun çalışıyordum” demektir. 1974G ise ilk telefonum “29 yaşında, Motorola, Persil’in hediyesi” olduğunu “öğretmen hattı aldık bedavaya konuşuyorduk” demektir. Cep telefonu “daha güvende hissetmemi sağladı, herhangi bir problem anında” demektir. İlk telefonunu 1999 yılında aldığını belirten 1977K ise telefonunun hatlı olduğunu belirterek “çok pahalıydı ayda 45tl gibi bir fatura ödüyordum. O zaman çok etkilemiyordu, maaşım yetiyordu. Evlendikten sonra kontrorlüye geçtim. Ailemle iletişim kurmak daha rahatlaştı, dışarı rahat çıkıyordum, o dönem Hürriyette oturuyordum, gece ikide gelip terminalden eve dönmek o dönem koşullarında zordu, herhangi bir durum olsa ev arkadaşımı arayabilirdim” demektir.

Görüşmecilerin sosyal medya platformlarında hesap açmaları ve tercihleri birbirine bazı noktalarda benzerlik göstermektedir. 1974G, ilk sosyal medya hesabını Facebook platformunda açtığını belirterek, “Mehmet açtı, o söyledi, arkadaşlarını bulabiliyorsun dedi”. Twitter hesabı olmayan 1974G “Twitter hoş eğlenceli kızımдан gördüm çok kısa ve vurucu ifade istiyor. Instagram hesabında var. Paylaşım yapmıyorum, kızımı görmek için, instagramın yokken kızımın takipçileri bende daha fazla haber alıyordum, kızımın bütün paylaşıtlıklarına bakıyorum. Whatsapp’ı 5-6 aydır kullanıyorum, hayatımın bir parçası oldu. Kızımın Whatsapp’tan konuşuyorum” demektir. Ayrıca öğrencileriyle grup kurarak buradan iletişim kurduğunu belirtmektedir.

1977K ise Facebook katılması “hatırladığım kadarıyla 2008’de baktım herkes açtı, becerebilir miyim diye düşündüm, açtım. Facebook’um hep açık olur, her an ulaşılabilirim. Öncelikle iletişim kurmak için kullanıyorum, uzun süredir görüşmediklerimle online iletişime geçiyorum, boş vakitlerimde de eğlence olsun. Instagram’da varım, bir yıl önce açtım, ama hiç alımadım, facebook bana yetiyor. Youtube da çocukların izlediklerini kontrol etmek için kullanıyorum” demektir. 1981C, sosyal medyada 2016’ya kadar hesabının olmadığını, yurtdışına giderken arkadaşlarının fotoğraf paylaşmasını ısrarla istemeleri sonucu Whatsapp üzerinden zor olacağından, Instagram sayfası açtığını, burada da arkadaşları dışında sadece astroloji fenomenlerini takip ettiğini, Youtube da kanal takip etmediğini, sadece kızımın ilgisini çeken yayınlara baktığını söylemektedir. 1977A, “2009’da Facebook’a üye oldum, önce çevredekiler kullanıyordu bana ne faydası var diyordum ama bir araya gelince Facebook üzerinden sohbetlerden, paylaşımlardan bahsedip gülüyorlardı. Muhabbetin, sohbetin dışında kalıyordum. Kalmak istemediğim için açtım. Eşimi de buradan takip ediyordum eşim paylaşımlarımdan rahatsız oldu Facebook’u kapattı. Bende Facebook’ta tek başıma hissettim kendimi eşim olmadığı için. Bir dönem çok rahatsız oluyordum istemediğim ortamda çıplak geziyor gibi hissediyordum kendimi, bir cümle yazsa biri bana mı söylüyor diyordum, bende paylaşım yapıyordum insanların psikolojilerini bozuyordum” demektir. Twitter kullanmıyorum o alanı bilmiyorum diyen 1977A, “twitter’ı özgür bulmuyorum, söyleyemiyorum özgürce, sahte buluyorum. Instagramda sanatsal içeriğin yoğun olduğunu belirten 1977A, magazin dünyasını da buradan takip ettiğini “Gülben gazetesi felan, tanıdıklarımı takip etmiyorum, toplumda ne oluyor haberdar olmak için takip ediyorum” demektir. 1997A, “telefon elimdeyken her şeyi biliyorum gibi hissediyorum, bazen de internete güvenilir kaynaklar onaylanmalı diye düşünüyorum, hakemli dergiler gibi, her şey yalan gibi geliyor” demesi önemlidir. Youtube kanallarını ise 1977A, yemek, makayaj yapmak gibi bilgiler için kullandığını söylemektedir. 1981A, Facebook’a 2005’de erkek kuzenimin tavsiyesiyle katıldım. Twitter’a ise 2016 üye olduğunu belirterek “duyuru anlamında devlet kurumları, halkla ilişkilerle ilgili takip ediyorum, daha bilgiye dayalı bir yer” demektir. Youtube’u çocuklar izlerken güvenlikleri için baktığını belirterek “youtube’den yemek yaptım tutmadı” demektir. 1981A, Instagram’da “ekonomik gelir sağlıyor kadınlar, alışveriş yapıyorum, patik aldım el örgüsü, çocuk kıyafeti aldım, Instagram’dan kadın gruplarını da takip ediyorum” demekte ve 2014’den beri Whatsapp kullandığını, kişisel ilişkiler için ve kadın arkadaşlarıyla gruptan yazışmak için kullandığını belirtmektedir. 1980Ş, 2009’da Facebook’a üye olduğunu şiir, şarkı vb. paylaşımlar yaptığını, uzun zamandır görüşmediği arkadaşlarıyla iletişim kurduğunu söylemektedir. Twitter’a ise 2011 katıldığını belirten 1980Ş, “çok hızlı akışı var, olaylara anında erişim, dolaşım var. Haber sitelerini ve esprili bulduğum hesapları takip ediyorum” demektir. Instagrama 2014’de fotoğrafı çok sevdiği kullandığını söyleyen 1980Ş, “kadın fenomenler için alternatif bir satış yolu, ekonomik yapıya eklemlemede ekonomik kazançta” demektir. Whatsapp’ı aktif kullanan 1980Ş, burada Kadın çalışmaları, Altın kızlar gibi kadın gruplarına katıldığını söylemekte “kadın olarak konuşarak ifade edemediğim şeyleri yazarak ifade ediyorum” demektir. 1974G, görüşmede özellikle bilgisayar teknolojisi konusunda eski eşinin internet üzerinden kendisini aldattığını belirtmesi önemli bir detaydı.

SONUÇ

Kadın ve dijitalleşme konusunda kadınların 2000’li yıllarla birlikte daha aktif hale gelmesi, hem akıllı telefonların hem de sosyal medyanın oluşmasının sonucu olarak görülebilir. 1970 ve 80’li yıllarda doğan görüşmecilerin düşüncelerinden yola çıkarak cep telefonlarının onlara güven ve özgürlük sağladığını onaylamışlardır. 1970 ve 80’li yıllarda doğan kadınlara baktığımızda Facebook’ta dün veya bugün aktif oldukları görülmekteyken, Twitter’ı ise çok tercih edilmediği görülmektedir. 1974G, Twitter’ı sınırlı kelime sayısı olması nedeniyle, 1977A sahte bir ortam olarak görmesi nedeniyle tercih etmezken sadece 1980Ş Twitter’ı hızlı haber almak adına önemli bulmaktadır. Görüşmeye katılan kadınların hepsi en az bir sosyal medya hesabına sahip olduğu görülmektedir.

Katılımcıları tamamının Whatsapp'ı diğer platformlardan farklı görmekte kolay ve kişisel iletişim açısından telefona benzetmekteyken aynı zamanda burada grup iletişiminde de kullandıklarını söylemişlerdir. Görüşme yapılan kadınların dijital teknolojiyi kullanırken kendilerini bu konuda yetersiz ve eksik bulmadığı sadece 1977K'nın Facebook'a üye olurken bu alanda olma konusunda teknik anlamda tedirginliği olduğu görülse bunun kısa sürede yendiği görülmektedir. Kadınlar her geçen gün gelişen ve değişen dijital dünyada farklı platformlarda ihtiyaçlarına göre yer aldığı yapılan araştırmada ortaya konulmuştur. Görüşme yaptığımız kadınları fenomen değillerdir ve sosyal platform üzerinden ekonomik gelir elde etmemektedirler. Fakat kadınların bu alanlardan satış yapmasını ekonomiye katılmaları olarak görmektedirler. Katılımcıların tamamı da internet üzerinden tacize uğramadığını belirterek bu alanı güvenli olarak gördükleri anlaşılmıştır. Sosyal medyanın kadınların hayatının önemli bir parçası olduğunu 1977A'nın eşinin olmadığı bir platformda kendini yalnız hissetmesi, 1977K'nın ise Facebook'un açık olması ortaya koymaktadır. Kadın artık dijital dünya ile bütünleşmiştir. Katılımcıların tamamı internetin iş ve genel anlamda hayatlarını kolaylaştırdığını belirtmiş, katılımcılar kadın olarak avantajları konusu da bir ayrıma varamamaları yeni medyanın kadın ve erkek eşitliğini sunduğunun göstergesidir Bu da geleneksel medyanın ataerkilliğinin yeni medyada üzerinden kırıldığı görülmektedir.

KAYNAKÇA

- Atabek(2001), Ü., *İletişim ve Teknoloji*, Seçkin Yayıncılık, Ankara
- Bhasin(2003), K., *Ataerkil Sistem*, (Çev: Ayşe Çoşkun), İstanbul, Kadınlar Dayanışma Vakfı Yayınları
- Depeli(2015), G., Kadın Bloggerlar: Yeni Dil, Yeni Kadınlık, Yeni Tartışmalar, <http://dergipark.gov.tr/download/article-file/255552>
- Devran(2017), Y. & Özcan, Ö. F. *Habercilikte Hegemonya Mücadelesi: Yurttaş Gazeteciliği: Fırsat mı Tehdit mi* https://www.researchgate.net/publication/317050822_Habercilikte_Hegemonya_Mucadelesi_Yurttas_Gazetecili_gi_Firsat_mi_Tehdit_mi [accessed Jan 05 2019].
- Geray, H. (2006), *Toplumsal Araştırmalarda Nicel ve Nitel Yöntemlere Giriş*, Ankara: Siyasal Kitabevi
- Geray, (2003) H., *İletişim ve Teknoloji*, Ankara, Ütopya Yayınları
- Göker(2007), G., İnternet'in Türkiye Kadın Hareketi Üzerindeki Etkisi: Kadın Kurultayı E-Grubu Örneği, http://inet-tr.org.tr/inetconf12/kitap/Bildiriler/51_123_inet07.pdf
- Huyssen (1995), A., *Kadın Olarak Kitle Kültürü Modernizmin "Öteki"si*, Derleyen ve Çeviren Süleyman İrvan ve Mutlu Binark, Kadın ve Popüler Kültür, Ankara, Ark yayınevi
- İnanç Sabuncu(2018), A. & Yağlıcı, M., Mahrem Mekânlarını Reklam Alanına Dönüştüren Kadınlar: Instagram'ın Yemek Fenomenleri Üzerine Bir Araştırma, <http://dergipark.gov.tr/injoss/issue/38864/429271>
- Karasar, N. (2005), *Bilimsel Araştırma Yöntemleri*, Ankara :Nobel Yayınları
- Kiraz, (2017) S. & Kestel, S., Kadınların Madun Sorunsalı ve Bir Alternatif Olarak Yeni Medyada Dijital Aktivizm: Change.org, <http://dergipark.gov.tr/iuifd/issue/33559/321654>
- Kümbetoğlu, B. (2005), *Sosyolojide ve Antropolojide Niteliksel Yöntem ve Araştırma*, İstanbul: Bağlam Yayıncılık
- Küresel Dijital rapor(2018) Erişim Adresi: <https://digitalreport.wearesocial.com/>
- Küresel Dijital rapor(2018) <https://wearesocial.com/uk/blog/2018/10/the-state-of-the-internet-in-q4-2018>
- Matos, (2017), C. Yeni Brezilya feminizmleri ve çevrimiçi ağlar: Siber feminizm, protesto ve kadın 'Arap Baharı', <https://journals.sagepub.com/doi/full/10.1177/0268580917694971>
- Saka(2012), E., Siber Medya Sonrası Kamusal Alan ve Gazetecilik Pratikleri, <http://dergipark.gov.tr/download/article-file/255409>
- Sevim(2005), A., *Feminizm*, İstanbul, İnsan yayınları
- Stevenson, (2008) N., *Medya Kültürleri*, Çev: Göze Orhon & Barış Engin Aksoy, İstanbul, Ütopya
- Şeker-Bektaş(2005), T., *İnternet ve Bilgi Açığı*, Konya, Çizgi Kitapbevi
- Ritzer (2011), G., *Küreselleşen Dünya*, (Çev: Melih Pekdemir), İstanbul, Ayrıntı yayınları
- TUİK(2018), <https://dijilopedi.com/tuik-turkiyenin-internet-kullanim-aliskanliklari-raporu>
- Turhan(2017), D. G., Dijital Aktivizm, Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi Yıl: 2017/1, Sayı: 26, s. 26-44
- Varol Fügen (2014), S., Kadınların Dijital Teknolojiyle İlişkisine Ütopik Bir Yaklaşım, https://www.jasstudies.com/Makaleler/1566310267_15%20Yrd.%20Do%C3%A7.%20Dr.%20Sibel%20F%C3%BCgan%20VAROL.pdf
- Yeniçıkıtı T. N. (2016) Halkla İlişkiler Aracı Olarak Instagram: Sosyal Medya Kullanan 50 Şirket Üzerine Bir Araştırma, <http://dergipark.gov.tr/download/article-file/178283>

Factor analysis of Constructive Culture in the small schools: Northeastern Thailand

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ABSTRACT

Constructive cultural that behavior reflects the ideas, beliefs, values, and practices of people who represent collaboration to achieve creative goals. If a small school is built, it will affect the quality of the small school education more effectively and can develop students' potential to be accepted by parents and community. The purposes of this research were to studies the components of constructive cultural of small schools in Northeastern Thailand. Data was collected by 2methods were using: 1) analysis the constructive cultural 101documentary sources; and 2) field studies in the 3 school models that Northeastern Thailand's small school the best practice. The research found that : constructive cultural of small school consisting of 5main components which are 1) Innovation creation behavior consisting of 4 indicators are: 1.1)Personal Creativity 1.2) Personal Innovation 1.3) Aggressive behavior 1.4) Opportunity exploration behavior 2)Shared value consisting of 3 indicators are: 2.1) Shared vision setting 2.2) Positive value 2.3) Co-practice 3) Creative Communication of 3indicators are: 3.1) Deep listening 3.2) Reflecting 3.3) Advocacy 4) Open atmosphere consisting of 3indicators are: 4.1) Positive Satisfaction 4.2) Freedom in Creativity 4.3) help and support 5)team work consisting of 3indicators are: 5.1) Collaboration 5.2) Skills and Creation 5.3) mutual goal

Key words: constructive cultural, small school, northeastern Thailand

Introduction

After decades of the emergence of the 21st century, the world has been shrunk together via support of telecommunication technology. In this fast-changing world, working cultures in offices must be retuned according to the changing communicative culture of the world. The dormant shared orientations of the office that do not benefit the effectiveness of the work should be shredded, while a new culture that works under the changing conditions should be cultivated. The latter, which can be characterized by the attempt to; create work commitment among the workers, allow freedom of thought, and collective achievement, is an ideal working culture that should be established (Natida Choojalearnpipat, 2012). Organizational working culture is a crucial factor in the achievement of the office. A successful workplace should encourage teamwork, staff satisfaction, and good career atmosphere. In general, a successful office pays close attention to the 4 dimensions of targeted working behaviors including; outcome base working, self- reliability, individualization, and interactive value (Ganiga Pholungka, 2014). The development of these four working behaviors should be exercised to guarantee the organizational achievement. Organizational culture is necessary for school administration since it yields participation and intimate relationships among the school's staff while good school cultures are a base for the school transition to higher educational standards (Thippapron Mahapolpiasan, 2010). The school administrators must find measures to make the schools survive in the changing world. The schools should be propelled with good governance which encourages the creation of good working culture, values, and norms. Organization cultures are interrelated with the teachers' desirable behaviors such as teacher's harmony, school work commitment, and loyalty. The good organizational culture is a key factor for the school survival since it is associated with the creation of teachers' work satisfaction, teacher and school developments, and it helps reduce the teacher's relocation and resigning rates. Under the good organizational culture, the teachers are collaborative in moving the school toward its optimal goals (Cook & Lafferty, 1989). Steer (1979) found that creative organizational cultures were helping obtain the desirable working atmosphere which enhances high office achievement. Jiraphan Dangdech (2012) conducted a research into the organizational cultures that affected the state enterprise transformation in Thailand. Research into working cultures of different Thai government offices was reviewed and it was found that the organizational culture in the Thai offices was about the

system and the people. It was suggested in this research that the constructive culture should be used to solve the problem of the organizational culture in Thai offices. Mettha Chaitirakoon (2008) suggested that the creative organizational culture could yield higher achievement for the office while creating enthusiasm and creativity among the workers. The problems of the organizational cultures of the small schools in Thailand were found similar to the problems observed in a study by Patterson et. al on the extent that the organizational cultures should be conducted in order to increase the schools' achievements, empower decisive power, increase interpersonal reliability, and generate recognition and trust among the school members. One of the reasons for the organizational culture development among the small schools is to alter the teachers' working cultures. The school teachers lose hope in their careers since they have been asked to do a lot of work in addition to their regular teaching. The additional tasks take most of the teachers' time from the classroom, they are overwhelmed with the tasks and finally lose their inspiration to work for the schools. This research supports the idea that the development of the creative organizational culture in the small schools can help create good teachers who can make the schools establish their names and become well accepted by the community.

Research Objective

This research is aimed to investigate the components of creative organizational cultures in the small schools in the northeastern region of Thailand.

Literature Review

Constructive Culture

Constructive culture has been defined by a number of scholars. Cooke and Lefferty (1989) said constructive culture is an appropriate balance between people and work, which is a condition that promotes ultimate interpersonal relationships among the workers. Under creative culture setting, the individual achievement is associated with the organization's goals while participation from all people is emphasized and the collective achievement is well driven. ChakriyaTamakhan, MootithaPhonpaipan, and Udomrat Sa-gnuansiritham (2013) said an organization with the constructive organizational culture has a good overall working condition, under which its people share the same working objectives and values. People in this type of organization reflect how they have exercised the values of their work. The individual's satisfaction at work and good interpersonal relationships are emphasized. Worarat Thepmatee (2015) said the constructive culture is reflected in an office that; respects the staff satisfaction, encourages good interpersonal relationships and harmony, and provides advocates for individual's work succeed. Ganiga Pholungka (2014) said the constructive culture is a work condition that is supportive of the workers' harmony, achievements, and satisfaction. The creative culture postulates four dimensions of development including, outcome-based working, self-reliability, individualization, and interactive value. Mookda Kam-amna (2014) explained that the constructive culture involves making the people be aware of the organization and work values. The members were encouraged to work together to achieve the goals of an organization. Natida Choochalearnpitak (2012) said that the organizations with constructive cultures encourage their people to take a part in problem-solving and contributing to the group success via the collective work process. Pornrat Ratanasiriwong (2008) said the constructive culture encourages people to be aligned with the outcome-based performance via collaborating enthusiastically with peers. Under the constructive culture, people take the challenges of their work as the pathway to professional growth. Wijarn Panich (2007) said that the constructive culture emphasizes on the working value which promotes interpersonal collaboration that is a key to organization's success.

It can be concluded that the constructive culture represents behavioral patterns of people at schools which reflect thought, beliefs, and values that people hold on to at their work. The constructive culture helps increase work performance of the staff and it is a standard that has been passed down from generation to generation.

The Importance of constructive culture

Many academicians have shared their ideas about the creation of constructive culture. Fernando Triad de Bas & Philip Kotler (2011) said the constructive culture is generated when there is support from high rank administrators. It can also be fueled by the suggestion of the lower rank operators. However, the definite decision on constructing the constructive culture is based solely on the administrators. Tony Schwartz (2010) said that the creation of the constructive culture takes place under 6 scenarios. 1) Personnel's need awareness, 2) Systematic teaching of thinking development, 3) Openness to creative opinions, 4) Proper task allocation and the matching of a task to individual's interest, 5) Allotting of time for creative thinking, 6) Supportive working environment. Amabile (1996) said that there are five factors for the creation of the constructive culture including; 1) The support from all level officers ranging from administrators to lower rank operators, 2) Freedom at work, 3) Sufficiency of

materials and information, 4) Positive and Negative pressures, and 5) Free from creativity's obstacles. Robert Cooke (2015) advocated that the creation of the constructive culture is simple as long as all operators are allowed to do things that they like. The foundations for the creation of the constructive culture are; 1) Achievement, 2) Excellence, 3) Self-actualizing, 4) Affiliation, and 5) Trust. In conclusion, the creation of the constructive culture is based on a creative working system, outcome-based work, personnel satisfaction at work, teamwork, enthusiasm, relationships with coworkers and valuing the challenges at work.

The analysis of the constructive cultures in the small schools in the northeastern region of Thailand is based on the review of related literature: Cook and Lafferty Cook and Lafferty (1989), Amabile (1996), John Winsor (2006), Eric Bryn (2009), Tony Schwartz (2010), Jonathan Feinstein (2011), Marquardt (1996), Cameran and Quinn (1999), WijarnPanitch (2011), Pornrat Ratanasiriwong (2008), Danai Tianpoot (2009), Sombat Kusuwalee (2009), Chakriya Tamakhan (2013), Mookda Kham-Umna (2014), Ganika Pholangka (2014), Roongrawan Sakoonmalaithong (2014), and Worarat Thepmatee (2015).

Research Methodology

This research is framed around the qualitative research discipline which is divided into two working phases; 1) Reviewing of 108 studies on the constructive culture to obtain data about the components of the constructive culture. The types of components were placed under the categories based on their meaning and concept similarities. 2) Doing data collecting with 3 of the small schools that gained public recognition as the schools of excellence. These schools were selected via the purposive random method. The data collecting process involves; fieldwork data collection, decoding practical codes to trace the key factors for the schools' success, which involved interviewing the school stakeholders, making conclusions about the school practices at all areas under focus. The percentile and frequency were used for the conclusion of the data about the constructive culture obtained from the three schools as presented in Figure 1.

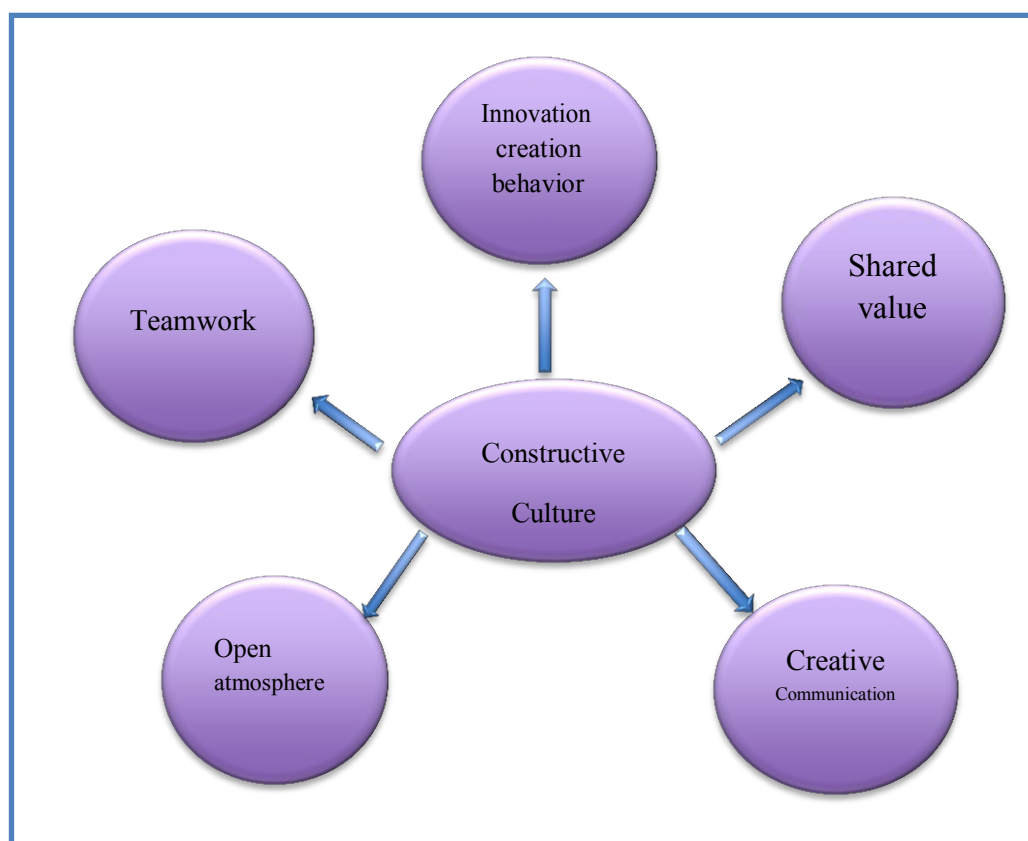


Table 1 Indicator of the Innovative Schools

Component	Practical Definition	Indicators
1. Innovation Creating Behaviors	The individual's attempt to invent something new, and introducing the new idea to the teaching practices, and the new objective-based teaching methodology.	1. Changing of the working process. 2. Innovation in teaching and school creative projects. 3. Finding ways to a higher chance of success. 4. Creation of a leadership
2. Shared Values	Actions/practices that reflect the organization's shared values that all members based their performance on.	1. Taking part in the vision establishment 2. Taking part in the issuing of the regulation
3. Creative communication	Relaxing communication, openness to other people's opinion, inspiring and respectful conversations	1. Listen to other people's opinion mindfully 2. Contemplating the received piece of information 3. Generating new knowledge 4. Transmitting of an idea via speaking informatively
4. Open atmosphere	Collaborative working atmosphere, proud of one's own job, administrators are open to different opinions and allow freedom at work, work flexibility, supportive working atmosphere	1. Working with happiness 2. Being able to work and choose working methods freely 3. Interests and skills based on job allocation
5. Teamwork	Team working behaviors, bringing out an individual's specialty for the success of the school's tasks	1. Taking part in tasks 2. Being a part of the success of work

Results and discussion

Five components of the constructive culture were observed in this research.

1. Innovation Creating Behaviors: This behavior is reflected by the teachers and the school personnel struggling to create something new or to introduce something new to the teaching and working. This idea is supported by De Jong (2007) Parker, Williams, & Turner (2006) on the extent that staff with innovative work behaviors tend to; try something new, think of a new working strategy, and be decisive in introducing new methods to good production and services. The staff with innovative work behaviors also focuses on the objectives and success of the work. Siwanan Siwapitak (2011) said the workers with innovative work behaviors are those who purposively aim to introduce new ideas and methods deemed beneficial for the development of their product to the performing of their tasks. Siwanan also proposed four components of innovation creating behavior, which includes; 1) Staff's creativity, 2) Staff's possession of innovation, 3) Progressive working behavior, and 4) Quest for opportunity.

2. Shared Value: Shared value means behaviors showing attempt to set a shared value which is a norm that describes desirable practices preferable by all the people in the office. Peter Senge (1990) said the creation of a vision is proposing a set of goals that all members of the office agree to achieve in the future. Wijarn Panitch (2007) said a shared vision is about being harmonic, which helps create incredible strength that psychologically propel all of the organization members to contribute to the organization's success. There are three components

of the shared vision including; 1) The allocating of shared vision, 2) Positive Value, 3) Path of collaboration.

3. **Creative Communication:** This is a dialogue that is based on the friendly and respectful atmosphere in which the conversation is completed via a deep listening and inspiring an idea for work. Katherine Tyler Scott (2010) supported that creative communication is based on the equality of idea, which means that all the proposed ideas are listened to with respect. Creative communication is driven unprecedentedly by the dominant idea of the administrators. It has three components including; 1) Deep listening, 2) Deliberating of received idea, and 3) Presenting of idea.

4. **Open Atmosphere:** Open atmosphere means working conditions that; are supportive of a free opinion, encourage teamwork, work satisfaction and pride. The regulations are made flexible under an open atmosphere. A similar idea is observed in Frederickson (1982) on the extent that under an open atmosphere, the staff should have intimate relationships and positive thoughts toward their coworkers and their missions. The staffs are happy and creative at work, which leads to higher organizational achievements. Konwiga Promjuang (1998) said in an autonomous climate, the staffs have freedom at work, in which the workers are happy to create good relationships with their colleagues rather than the achievement of their tasks. The open atmosphere, however, is better in the way that the administrators are more supportive at work. They also set a good role model for their lower rank workers. The open atmosphere has three components;

1) Creating satisfaction, 2) Freedom to create work, 3) Providing helps and support.

5. **Teamwork:** It is a working principle that brings out an individual's ability for the completion of school's work under team working. Levi (2007) supported that team is an arena for an individual to exercise his or her ability under interpersonal relationships with other members of the school to achieve the set goals. Malcolm (1982) said teamwork is a collaboration of all members of the office or social group in achieving the goals that the group has set. Teamwork is driven by both the individual desire to collaborate or by the instruction posted upon the individuals by their supervisors. Team behaviors can lead to the creation of new thoughts and practical clues for the ongoing problems. The quality and the proficiency of the team's members are two important factors that affect the quality of the teamwork. Teamwork has three components; 1) Collaboration, 2) Integrated skills and Creating of products, and 3) Shared objectives.

Conclusion

It can be concluded that there are five components of the constructive culture observed in the small schools in the northeastern part of Thailand including; 1) Innovation Creating Behaviors, 2) Shared Values, 3) Creative Communication, 4) Open Atmosphere, and 5) Teamwork. The constructive culture reflects the teachers' behavioral patterns in relation to their thoughts, belief, and school practical norms. The teachers in the schools with the constructive cultures apply their creativities in succeeding the school's missions. The constructive culture is a key factor to success that helps schools to create its credit and accountability for the school's development.

Acknowledgements

This research was well supported by Department of Educational Administration, KKU's Faculty of Education the Graduate School of Khon Kaen University. The researcher would like to thank all parties who have geared us toward the success of this research.

References:

- GanigaPholungka. (2014). **An investigation of individual straits, creative organization cultures and external factor affecting the officers working in offices around Asok areas in Bangkok.** Independent Study of the Master of Business Administration, Bangkok University.
- KhemtatSripipatkoon. (2010). **Suggestive measures for the school' cultural change in the small schools in PhranakonSriayudhaya Educational Service Area Office 1 and 2.** Thesis of the Master of Education in Educational Administration, Department of Educational Administration, PhranakonSriayudhayaRajabhatUniveristy.
- NatidaChoojalearnpipat, (2012). **Organizational cultures and their effect on the performances of the Thai Panich Bank's staff in Nakonsawan province.** Master of Business Administration in General Business Administration, Faculty of Business Administration, Thanyaburi University of Technology.
- Metta Tirasakoon. (2008). **The relationship between organizations's constructive culture and the commitment to nursing occupations of the nurses working in the hospitals under the jurisdictions of the Ministry of Interior and National Police Bureau.** Thesis of the Master of Nursing Sciences, Department of Nursing, Sukhothaimathirath University.
- RoonglawanSakulmalaitong. (2014). **Strategies for the creation of constructive cultures in higher education institutes of Thailand.** Doctoral Degree Thesis, ChulalongkornUniveristy.
- WoraratTepmatee. (2015). **The relationship between an organizational culture and the creation of teamwork in the schools in Prathoomthani Primary Educational Service Area Office 2.** <http://e-jodil.stou.ac.th>. Year 5, Issue 2 July – December 2015.
- WijarnPanitch. (2007). **A decades of being the institution of professional learning of Thai government's offices.** Retrieved on 16 December, 2017 http://www.medicalrtaf.com/images/1153985687/col_04018.doc
- SombatGusumawalee (2009). **Toward creative organization in the crisis time: KTC style.** [Online]. <http://www.gotomanager.com/news/details.aspx?id=79155>

From #Metoo To #Miracomonosponemos: Social Media And The Visibility Of Gender Violence

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Abstract

Nowadays, social networks are an important part of daily life due to the variety of uses and facilities they offer us. Mobile applications and websites offer their user's different ways of interacting, communicating and grouping according to interests, ideologies, tastes, among other things.

But social networks today have also created support networks against gender abuse and violence, creating movements and groups in which thousands of people around the world can tell their stories and feel supported and listened to or simply, listen and search in one way or another, make visible the different forms of gender violence. This has been the case of #metoo, a hashtag that was generated in social networks after the denunciations of several Hollywood actresses against the producer Harvey Weinstein for sexual harassment and that sparked a chain reaction throughout the world, on the one hand, with stories of people counting some type of gender violence that has suffered and, on the other, people who have offered to listen and become a support network.

Beyond the relationship of these movements with feminism, this work will try to observe the scope of social networks to make gender violence visible, create support networks and mobilize thousands of people around the world.

Keywords : *Social media - #MeToo - #MiraComoNosPonemos – Gender violence.*

Introduction

In a hyperconnected world, like the one we live in, there is nothing that goes unnoticed and even hundreds of situations become viral and go around the world in a few hours. Thousands of videos, challenges, and games are produced and travel through all corners of the earth with a single click, as well as information, news and topics of local, regional or national interest and become topics of global interest thanks to networks.

In the second half of 2017, several accusations against producer Harvey Weinstein for harassment and sexual abuse of several Hollywood actresses generated outrage around the world and also set off the alarms, putting the issue of gender violence on the table. In this way, the hashtag #metoo appeared on social networks, motivating thousands of people around the world to tell stories and even make complaints about cases of abuse and violence.

With the hashtag #metoo, a movement of the same name was made visible, which was founded in 2006. This movement, according to its website, was created with the purpose of “help survivors of sexual violence, particularly black women and girls, and other young women of color from low wealth communities, find pathways to healing.”²

After the big media boom that was #metoo in 2017, various movements have been generated in the world in order to expose situations of gender violence and create social impact. This is how other hashtags like #BalanceTonPorc, #NiUnaMenos, #YoReconozco and, currently #MiráComoNosPonemos have appeared on different social networks with the same purpose.

In this way and with this example, it is possible to see that some of these initiatives have been promoted by movements or groups that already have years of work but that, through social networks, create awareness and call for collective indignation and cooperation against cases of gender violence. In the same way, with these initiatives, movements and organizations set

² “Me too movement” website. History & visión. Taken from <https://metoomvmt.org/about/#history>.

off alarms and open discussions about everyday situations that can be considered as gender violence. But how have they been generated, how have they grown and what impact have these movements had on the world? In order to resolve these questions, this work will initially review what is considered gender violence. Next, it will analyze the largest movements that have been organized through hashtags against gender violence, the most important complaints and how these hashtags have become support networks for those who report violence. It is necessary to understand that most of these initiatives are linked to feminist movements, which is why, for the purposes of this work, gender violence will be understood mainly as violence against women. Although in some countries of Latin America it is recognized that some men are also victims of violence, these complaints are not common and, to try to analyze how the different movements act against these complaints, it would be important to consider other types of factors and development for the analysis.

Gender Violence

The concept of gender violence has been understood as an ambiguous concept of which there are many understandings. In the various legislations, a connection has been given to the gender violence. However, the UN in resolution 48/104 of 20 December 1993 explains that:

Article 2

Violence against women shall be understood to encompass, but not be limited to, the following:

- (a) Physical, sexual and psychological violence occurring in the family, including battering, sexual abuse of female children in the household, dowry-related violence, marital rape, female genital mutilation and other traditional practices harmful to women, non-spousal violence and violence related to exploitation;*
 - (b) Physical, sexual and psychological violence occurring within the general community, including rape, sexual abuse, sexual harassment and intimidation at work, in educational institutions and elsewhere, trafficking in women and forced prostitution;*
 - (c) Physical, sexual and psychological violence perpetrated or condoned by the State, wherever it occurs.*
- (1993)³

This document, as a document of international standards, has become a guide for what different countries have conceptualized in their legislation as violence against women, allowing a concept of violence to be acquired beyond the family and domestic and also opening a debate and discussion around everyday situations at work, school, and even the streets, which can be considered as gender violence.

However, the visibility of the rights and guarantees that must exist to protect women against gender violence has not been sufficient to establish policies or real rules that allow equal rights and freedoms between men and women in the world. It is important to note that since 1920, different movements have been generated in order to give women a position equal to that of men, and there is still a long way to go.

In 1995, ECLAC published a document in which it states that gender-based violence should be considered a violation of human rights, while, in a certain way, equality of rights and freedoms has been achieved. Gender puts women in a position of inferiority to men, in which they can not make decisions or feel free to develop as a subject or exercise their citizenship by living in a context of subordination. In this way, the text states that:

It has begun to recognize that gender violence constitutes a violation of the right to identity, since it reinforces and reproduces the subordination of women to men, as well as the distortion of the human being; of the right to affect, because violence is the antithesis of any manifestation of that nature; of the right to peace and enriching personal relationships, since it is a negative form of conflict resolution; of the right to protection, because it creates a situation of helplessness, which does not come only from the husband and the family but also from the State, which denies protection to women, and from society that makes the problem invisible; of the right to personal development, since the victims suffer a psychological paralysis that

³ Resolution 48/104 of 20 December 1993 issued by the General Assembly of the United Nations under the title of *Declaration on the Elimination of Violence against Women*. This statement makes it possible to understand the concept of violence against women not as something exclusive to the private and family sphere (which is understood as domestic violence), but also as a concept extended to the public and social sphere. In the same way,

this document is translated as a guide document of international standards, turning it into a central document to understand what violence against women is. The complete document can be read on the website <https://www.ohchr.org/EN/ProfessionalInterest/Pages/ViolenceAgainstWomen.aspx>.

prevents them from developing their creative potential; of the right to social and political participation, due to the fact that it limits the performance of extra-domestic activities (with the exception of the minimums related to traditional roles), such as participation in organizations, groups or meetings; of the right to freedom of expression, and of the right to optimal physical and mental health. (Rico, 1995)

Gender violence can be reflected in different forms of violence that can range from physical, psychological and sexual violence, to economic or social violence, all of which constitute ways to limit, subordinate and enrage women.

According to the report *Hechos y cifras: Acabar con la violencia contra mujeres y niñas*

(Facts and figures: End violence against women and girls⁹, of the UN Women: (UN Women)

- *Approximately 35 percent of women around the world have suffered physical and/or sexual violence (does not include harassment)*
- *The total number of femicides in Latin America and the Caribbean rose in 2017 to 2,554*
- *There are approximately 650 million women and girls who married before they turned 18.*
- *One in ten women in the European Union declares to have suffered cyberbullying since the age of 15 years.*
- *According to a study in Australia, two out of every five women of 15 or more years of age who have participated in the labor market during the last five years have been victims of sexual harassment in the workplace.*⁴

Hashtags and tenders.

As already discussed in the previous chapter, there are a whole series of situations that are considered gender violence. However, it is important to understand that, even though over time, efforts have been made to eradicate these forms of violence and raise awareness about them, it is not until some years ago that the issue of gender violence became in a central issue in the citizens' agenda.

And this is where we can understand social networks as a factor that generates awareness about this issue. Feminist movements that for years had worked to identify forms of violence against women and raise awareness about them, found social networks important allies to get the message to hundreds of women who, without really understanding it, suffered some form of violence and already had normalized.

1. #MeToo movement.

The #MeToo movement was born in 2006 to help women victims of violence against women in the United States. However, thanks to the wave of complaints of harassment and abuse that several Hollywood actresses made since the end of 2017, the movement, through the hashtag #MeToo, became a global phenomenon. Initially, there was exclusive talk about sexual violence, however, over time, the discussion opened up to other forms of gender violence.

Some Hollywood actresses, like the actress Alyssa Milano⁵, popularized the hashtag and opened the conversation for hundreds of women around the world to make visible the experiences of violence they had experienced at some point in their lives. This hashtag ignited the alarms in the whole world, in the first place, for being a denunciation in a sphere as public as it is Hollywood and, in second place, by popularizing a theme that, for years, had generated in the victim's feelings of shame and guilt.

The tweet published by Alyssa Milano quickly began to receive hundreds of responses with comments such as “I thought it was my fault”, “I never told anyone”, “I talk about it but

⁴ These are some of the figures indicated in the document. To see the figures and the complete facts, you can go to the link: <http://www.unwomen.org/es/what-we-do/ending-violence-against-women/facts-and-figures>

⁵ On October 15-2017, the actress Alyssa Milano shared on her personal Twitter account an image that said: “Me too. Suggested by a friend: “If all the women who have been sexually harassed or assaulted wrote ‘Me

too' as a status, we might give people a sense of the magnitude of the problem." She accompany this image with a comment saying "If you've been sexually harassed or assaulted write 'me too' as a reply to this tweet." https://twitter.com/Alyssa_Milano/status/919659438700670976?ref_src=twsrc%5Etfw.

they said I deserved it", "*People called me liar*"⁶ realizing how normalized and incorrectly understood was the violence of gender in our society and our daily life.

This hashtag had such a global impact, that versions were even created in some languages like *#YoTambién* in Latin America and *#BenDe* in Turkey to expose their own cases of gender violence.

2. *#NiUnaMenos movement*

The *#NiUnaMenos* (*Not one less*) movement was born in Argentina as a slogan against "femicides", murders of women because of their gender, which in Argentina began to gain relevance in 2015. Several mobilizations were held in the country to put on the national agenda the issue of femicide and to demand justice in Argentina for women and girls who had been victims of femicide.

This movement began to cross borders, becoming a general movement in Latin America, which not only seeks to raise its voice against the femicides of which thousands of Latin American women and girls are victims each year and to make visible the problems and shortcomings of justice in these countries to deal in a timely manner with complaints of various forms of violence against women before committing femicides, but also seeks to raise awareness in the region about institutional failures to guarantee the rights and protection of women and girls.

The central clamor of this movement is clear: do not kill us. This is the way in which the movement has expressed its purpose and has spread throughout the region. Throughout Latin America, this movement has been driven by writers, journalists, actresses, musicians, presenters and is especially effective in national areas with the news of murders of girls and women. Although the topics of the internal agenda of the movement have expanded⁷, the clamor continues to be for the visibility and awareness of femicides in the region as one of the causes of death in girls and women.

3. *#BalanceTonPorc*

In October of 2017 and following the *#MeToo* movement, the French journalist Sandra Muller urged her followers to report cases of aggression and gender violence in workplaces with the hashtag *#BalanceTonPorc*, indicating the name of the abuser and the details.⁸

With this hashtag, many women reported cases of abuse they had lived in their workplaces, which showed that hierarchical positions and power, in many cases, ended in comments or violent acts against women. (AFP, 2017)

⁶ These are general ideas about the hundreds of response messages to the Alyssa Milano tweet.

⁷ Currently the *Ni Una Menos* movement was organized around the legalization of abortion in Argentina, setting its voice in favor of the slogan "sexual education to decide, contraceptives not to abort, legal abortion to not die".

⁸ "*#BalanceTonPorc !!! toi aussi raconte en donnant le nom et les détails un harcèlement sexuel que tu as connu dans ton boulot. Je vous attends*" https://twitter.com/LettreAudio/status/918810180879515653?ref_src=twsrc%5Etfw%7Ctwcamp%5Etweteembed%7Ctwterm%5E918810180879515653&ref_url=https%3A%2F%2Fwww.elmundo.es%2Fsociedad%2F2017%2F10%2F15%2F59e39b60ca4741df438b45e8.html

4. #MiráComoNosPonemos.

The hashtag #MiráCómoNosPonemos (Look how we get) was born in Argentina as a support of the Actrices Argentinas collective to the denounce of the actress Thelma Fardín against the actor Juan Darthes for sexual abuse. It has been the last movement promoted in social networks and has generated hundreds of women in Latin America to show solidarity, become aware of the forms of violence and even encourage them to denounce judicially.

Through a press conference on December 11, 2018, Thelma Fardín, along with actresses belonging to the collective, publicly released the complaint with a video in which she recounted how the violation occurred, generating a whole discussion in the country and, in general in Latin America, about the abuses and the sexual harassment in labor fields and how, the violence of gender acts affecting the life and the labor development of the women.⁹

This denunciation generated a whole movement and a wave of indignation, not only because of the judicial denunciation and public denunciation interposed by the actress, but by the constant abuses and violations that are being lived in Argentina and Latin America and that have become visible thanks to this type of movement and dozens of collectives that have exposed the cases.¹⁰

Conclusions and final considerations

Despite all the advances in equal rights and freedoms of women that have taken place for approximately 100 years, gender violence is something that is still latent in our societies due to the naturalization and normalization of attitudes and behaviors that affect the physical and psychological integrity of women in daily life.

Although hundreds of movements and organizations around the world have been fighting against gender violence and gender inequalities for decades, social networks have allowed not only a visibility but also an awareness of the different forms of gender violence, causing that attitudes and daily habits that affect women are broken and deconstructions of behaviors and imaginaries are created around the way of seeing and relating, not only between men and women but also between women and women.

Most of the movements promoted or made visible by the exposed hashtags have something in common: they are used and promoted by public figures, which allows an even broader scope to recognize gender violence as a social problem and to raise awareness of the behaviors and hostile environments for women.

Various criticisms have been made to the movements exposed in this work. Most of these critics consider that these movements are exaggerated and that they are, in one way or another, demonizing any type of demonstration of men towards women. With regard to this, it is considered necessary to clarify that, in this work, although it has been sought to present gender violence as a social problem of global relevance at present and that mainly affects women, it is not unknown that there is also violence of gender against men and that there is a part of the male population that has been a victim of it. However, as mentioned at the beginning of this article, gender violence was taken as violence against women.

Social networks have become support networks in cases of gender violence. Spaces where the discussion is open to make complaints, warnings, mobilizations in favor of women's rights, motivate the victims to speak and offer them not only to be heard but also support in various ways. However, new questions remain at the end of this work: 1. What are the governments and the justice of the different countries doing to confront gender violence? 2. How inefficient must justice and society be for social networks to become support networks among victims of gender violence?

⁹ Full video of the Actrices Argentinas press conference on the case of Thelma Fardín on GQuitoNoticias youtube channel. <https://www.youtube.com/watch?v=moQjH5BUICo> (GQuitoNoticias Youtube Channel., 2018)

¹⁰ Ibid. In the video of the Argentine Actrices press conference reference is made to the shortcomings of the Argentine justice system in the cases of femicide and gender violence, exposing the case of Lucía Pérez, in which the victim's femicides were left on freedom. According to the actresses, justice and the state "*hinder, dismiss, delay, stigmatize the victims, or fail aberrantly in favor of the perpetrators, as in the case of Lucía Pérez*"

References And Sources

- AFP. (15 de October de 2017). Las mujeres francesas denuncian en redes a los otros 'Weinstein' que las acosaron. Paris: El Mundo. Obtenido de <https://www.elmundo.es/sociedad/2017/10/15/59e39b60ca4741df438b45e8.html>
- Bachor, M. (12 de December de 2018). De qué se trata el movimiento "Mirá cómo nos ponemos" contra el abuso en Argentina. Mujer. Obtenido de <https://www.mujer.com.pa/enterate/de-que-se-trata-el-movimiento-mira-como-nos-ponemos-contr-el-abuso-en-argentina>
- Burgués, A., Oliver, E., Redondo, G., & Serrano, M. Á. (s.f.). Investigaciones mundiales sobre violencia de género en la universidad.
- Channel, G. N. (11 de December de 2018). EN VIVO | Conferencia de Prensa de Actrices argentinas. Obtenido de <https://www.youtube.com/watch?v=moQjH5BUICo>
- EFE. (4 de October de 2018). *Un año del #MeToo: ¿Cómo se originó este explosivo movimiento?* Prensa Libre. Obtenido de <https://www.prensallibre.com/vida/escenario/un-ao-del-metoo-como-se-origino-este-explosivo-movimiento>
- Infocielo. (03 de June de 2018). Cómo y por qué comenzó el Ni Una Menos: el movimiento que visibilizó la lucha de las mujeres. Infocielo. Obtenido de https://infocielo.com/nota/92198/como_y_por_que_comenzo_el_ni_una_menos_el_movimiento_que_visibilizo_la_lucha_de_las_mujeres/
- Lino, E. (15 de December de 2018). Mirá como nos ponemos: El grito de actrices que se convirtió en movimiento colectivo. Buenos Aires: Indie Hoy. Obtenido de <https://indiehoy.com/teatro/mira-nos-ponemos-grito-actrices-se-convirtio-movimiento-colectivo/>
- Lorenzo, J. (15 de February de 2018). Breve recorrido del #NiUnaMenos: el movimiento de mujeres avanza hacia un nuevo paro. La Izquierda Diario. Obtenido de <https://www.laizquierdadiario.com/Breve-recorrido-del-NiUnaMenos-el-movimiento-de-mujeres-avanza-hacia-un-nuevo-paro>
- Milano, A. (1 de December de 2017). Alyssa Milano on the #MeToo movement: 'We're not going to stand for it any more'. (N. Sayej, Entrevistador) The Guardian. Recuperado el 3 de January de 2019, de <https://www.theguardian.com/culture/2017/dec/01/alyssa-milano-mee-too-sexual-harassment-abuse>
- Milano, A. (15 de October de 2017). *Twitter*. Obtenido de https://twitter.com/Alyssa_Milano/status/919659438700670976
- Movement, M. T. (s.f.). *Me Too Movement*. Obtenido de <https://metoomvmt.org>
- Naranjo, J. (5 de October de 2018). El #MeToo choca en África con las violencias toleradas contra las mujeres. Dakar: El País. Obtenido de https://elpais.com/elpais/2018/10/04/planeta_futuro/1538640782_858834.html
- Oficina del Alto Comisionado de Derechos Humanos de las Naciones Unidas. (21 de November de 2016). El movimiento NI UNA MENOS se adelanta al problema: El Estado debe ponerse a la par e intensificar sus esfuerzos por evitar los femicidios y otras formas de violencia de género contra las mujeres y niñas. Buenos Aires. Obtenido de <https://www.ohchr.org/sp/NewsEvents/Pages/DisplayNews.aspx?NewsID=20901&LangID=S>
- Pflum, M. (16 de October de 2018). NBC News. *A year ago, Alyssa Milano started a conversation about #MeToo. These women replied*. Obtenido de <https://www.nbcnews.com/news/us-news/year-ago-alyssa-milano-started-conversation-about-metoo-these-women-n920246>
- Rico, N. (1995). *Violencia de género: Un problema de derechos humanos*. ECLAC. Obtenido de <https://www.cepal.org/mujer/noticias/paginas/3/27403/violenciadegenero.pdf>
- UN Women. (s.f.). *Hechos y cifras: Acabar con la violencia contra mujeres y niñas*. Obtenido de <http://www.unwomen.org/es/what-we-do/ending-violence-against-women/facts-and-figures>

Marginalization Of Female Athletes Body In The Media In Terms Of Gender

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Abstract

The media plays an essential role in changing the perception in the society by reinterpreting and shaping the phenomena. With the increasing interest in sports, the importance of sports media has also increased. Although historically the sport has been seen as a masculine field, the success of women athletes has made them visible. In parallel, the number of women in sports media has also increased. However, when we look at the news in the media, women's sports identity is overshadowed by gender stereotypes. In this manner, the media have been marginalizing the female athletes by framing their attractiveness, sex appeal or private lives' rather than accomplishments they have. The female athletes are placed in the "other" position. The aim of this study is to examine the perception of sports media, in terms of gender stereotypes. The study focuses on the image of women in sports and the reflection on the media. Women athletes whose achievements stay in the background of their femininity are pressured in the psychological and sociological sense. It is suggested that sports media should behave more egalitarian and fair attitude.

Key Words: sports media, gender stereotype, female athlete, masculinity, femininity

1. Introduction

On the one hand, while studies continuing for the woman to be more active in sport and social life, on the other hand, the woman is taken to the second place in the media and used as sexual object or entertainment material.

Over the centuries, the media first entered our lives as a newspaper, then radio, television and finally the internet. But the only thing that does not change that is the power of the media and its use in the design of society. Bernstein (2002) asks in his research; "Why should the media be discussed in relation to women and sport?" The fact that, the mass media, which are part of our lives, continue to disseminate both their own codes and codes of modern thought or culture, and in this sense, the mass media direct the society (Türkdoğan, 2015). The role of media, especially the portrayal of men and women with regard to how the sport is presented as a socially constructed reality in the ongoing construction of gender can not underestimate (Koivula, 1999).

The general finding of studies and related research is that the news media consistently contributes to the reproduction of traditional expectations of men and women and to the construction of a social stratification which enhances and naturalizes gender differences (Büyükbaykal, 2011; Koivula, 1999; Popa & Gavrilu, 2015; Türkdoğan, 2015; Ünsal & Ramazanoğlu, 2013). This social stratification is reflected in the attitude of the media. The approval of female, in other word, acceptance of the success in sports comes from the social system itself. We see that the media is on the side of the social system rather than the success of the woman in sports. While the sexist language is legitimized over the female body in the media, women could only take part in the gender roles in the media. While the fields such as economy, sports, politics and finance are mostly shown as men's expertise, women can be the subject of news, especially when it comes to shopping, health, magazine, home and dining.

Nowadays, women's participation in sports is not at a level comparable to men, but developments cannot be underestimated. In recent years, women have truly advanced in organized, competitive sport (Bernstein, 2002). Although social perceptions of women's participation in sports do not completely disappear, observed that they have started to change. While women were only seen in the sports fields that were under the control of the male, they became competing with men. It is now possible to see women in many sports branches that we are not used to see before, or where only men compete (Bernstein, 2002; Noordegraaf & Çoknaz, 2014; Shaller, 2013; Yüksel, 2014).

While sports news, which already include a small number of women, should emphasize the relevant performance, rather than women's sporting aspects, gender roles are more prominent (Arslan & Koca, 2015; Türkdoğan, 2015). But what is important is not the numerical increase of women's sports news in the media, but the content of presentation forms (Özsoy, 2008; Tiryaki, 2014). For example, Öktem conducted a survey in the newspapers about Süreyya Ayhan, a Turkish national athlete. As a result of the research, it was found that the Turkish press highlighted the emphasis on femininity before identity. It has been observed that the success of the woman in sport is defined as an unusual or a random situation and thus the woman is put into a secondary position in sports (Arslan & Koca, 2006; Özsoy, 2008). As Bernstein (2002) explained: "Visibility is certainly important but a closer look is required at the type of coverage of women's sports and female athletes get from the media" (p. 420).

“To deepen our understanding of the cultural values embedded in sports and to explore current values and power structures regarding men and women, it is necessary to investigate the potential effect that mass media may have in influencing beliefs about gender-appropriate sports behaviour” (Koivula, 1999, p. 589). There are many different studies about the presentation of women athletes in the media (Akkaya & Kaplan, 2015; Arslan & Koca, 2006; Bakan, 2013; Bernstein, 2002; Cooky, Wachs, Messner, & Dworkin, 2010; Fink, 2015; Knight & Giuliano, 2001; Koca, 2011; Koivula, 1999; Noordegraaf & Çoknaz, 2014; Özsoy, 2008; Shaller, 2013; Suiçmez, 2018; Tiryaki, 2014; Tuggle, 1997). In the majority of these studies, it was revealed that female athletes were less represented in the media than male athletes and that the representations had gender content.

Limiting women's coverage in social and cultural interpretations of gender role has revealed the necessity to analyze. Female athletes are often framed by the media in terms of their private life, sexual appeal etc. rather than their accomplishments. Based on the *Frame Theory* proposed by Goffman, a literature review was conducted on the status of women athletes in the media. The basis of framing theory is that the media focuses specific attention on particular events and then places them within a meaning (Goffman, 1974). In this study, the gender roles of female athletes in the media, the way of representation of them by the media, the process of influence not only female athletes also society discussed in terms of gender.

2. Gender Stereotypes and Sports Media

Media; has a strong power to change economic, political and social dynamics. Therefore, this study examines the representation of the media, which is an important tool for the determination and internalization of gender roles, on women athletes.

Gender is a major social and intellectual category that along with the social class, race, age, ethnicity and others, must be incorporated into all theoretically based social analysis of sport (Koca & Bulgu, 2005). To study sport in media would increase our understanding of the cultural values embedded in sport, as well as the social structures and values based on and linked to gender and perceived gender differences (Koivula, 1999). The media has the potential to produce, change and re-establish these roles as well as reflect the gender roles in society.

The world we are creating from representations is divided in gender, race, ethnic, class, age, disability, sex or origin area, where advantages, disadvantages, exclusions are mostly linked with these categories (Popa & Gavrilu, 2015). The only concept that divides people into two categories is the gender, that is, women or men. Social gender and sex are often confused. Sex is a term used to reveal the biological differences of women and men. In other words, this term basically refers to the differentiation of female and male according to chromosomes as XX in females, XY in males.

Social gender is a concept that includes many different approaches (Yüksel, 2014). Gender identity is not only biological. There are socially constructed identities and this has revealed the concept of gender. Gender is a notion about how society perceives us as men and women, how they think and expect to behave. Gender refers to social and cultural social roles and responsibilities of women and men. The meaning of gender equality is the lack of discrimination in the separation of opportunities or resources due to gender (Arslan & Koca, 2006; Özsoy, 2008).

According to findings of the research, there are significant gender role differences between men and women as expected. Men had more masculine characteristics than women did, whereas women had more feminine characteristics than men did (Koca, Aşçı, & Kirazcı, 2005). The concept of gender is used by feminists to emphasize inequalities and discrimination between women and men. Gender roles should be interrogated for both sexes but gender studies centre are mostly women because gender stereotypes and sexist behaviours based on these prejudices such as bodily weakness, bodily appearance are mostly carried out through the female body (Akkaya & Kaplan, 2015; Yüksel, 2014).

By imposing a female model that conforms to the expectations of the society, a perception is created that the female body is beautiful or delicate. On the one hand, the woman struggles against the social values created by the patriarchal tradition and the psychological pressures it creates, while on the other hand, it strives to comply with the dimensions of the ideal body imposed by the consumer culture. In accordance with gender stereotypes that portray women as the weaker sex physically, mentally and emotionally, the sport domain has been thought for centuries an exclusively masculine affair, not suited to the delicacy of a woman (Gentile, Boca, & Giammusso, 2018). Gentile and friends' meta-analysis reveals that gender stereotype influences the sport activities of women and that this is particularly true for sports typically thought suited to men (2018). Again, the position of women in the social structure is determined in terms of social, economic and political aspects (Büyükbaykal, 2011). This special struggle has continued throughout history (Özsoy, 2008; Suiçmez, 2018).

Discourse which constrains women from sports and physical activities or restrains them to certain limits is based on the biological difference between the power of men and the weakness of women (Akkaya & Kaplan, 2015). Women are often framed in terms of their social position, for example, as girlfriends, wives, or mothers (Bakan, 2013; Koivula, 1999).

2.1. Hegemonic Masculinity in Sports Media

Mankind tries to understand the other entities he sees around by marginalizing. A belief, denomination, gender or thought outside us can easily be the *other*. In addition to religious and ethnic marginalization within social life, sexist othering is also frequently seen. The media are also accepted the ideal beauty of women by the supporting this othering with the giving the place on screens, newspapers, magazines. In this manner, the female body transforms into entertainment then present to the audience (Suiçmez, 2018). Marginalizing women in sport is the fact that certain sports branches are closed to women and excluded. This type of marginalization is based on the desire of the man to see the woman below him and establish a domination over him in societies dominated by patriarchal culture (Arslan & Koca, 2006; Koca & Bulgu, 2005). Sport continues to be viewed through the prism of male domination that traditionally requires masculine gender role characteristics (Bernstein, 2002; Gentile et al., 2018; Hall, 1988; Koca, 2011; Shaller, 2013; Sherry, Osborne, & Nicholson, 2016; Yüksel, 2014). Superior sporting performance is considered equivalent to masculinity (Arslan & Koca, 2006). In particular, competition sports give very strong messages about masculinity and femininity.

Many studies in the fields of sociology, psychology and sports emphasize the importance of the equal participation of men and women in sports-related publications (Özsoy, 2008). As a good example of this situation may be shown the article of Bahar Toker who is licensed basketball player. In the article, she shared her player experiences and said that;

"I would like to discuss the results of sports sexism more than the 'women do not understand football' or 'men do not water ballet' over my own experiences. While the men played basketball on the street, I would say that 'I don't play like a girl' to be accepted into their games (Toker, 2010)."

Taking into account the bodies of women, they are seen as weak beings that cannot handle heavy sporting activities (Akkaya & Kaplan, 2015). It has been accepted by many studies that the definitions of the position of women in sports are not on an equal basis in terms of two sexes and are discussed in terms of success, power and gender perception on the discriminatory and sexist basis towards women (Bakan, 2013; Gregg & Gregg, 2017; Hall, 1988; Koca & Bulgu, 2005; Özdemir, 2018; Yüksel, 2014). According to Özdemir's research, the idea that sports are a male-owned field is widely accepted even by sports teacher candidates both female and male (Özdemir, 2018). It would not be wrong to say that this approach is reflected in sports media and is also valid in institutions.

Another area that is dominated by men, such as sports, is the media. In the 1980s and especially in the 1990s was revealed that the media mainly included male athletes (Bernstein, 2002). Surely, sports participation among female athletes is currently greater than all time, and they achieve remarkable athletic performances. Nevertheless, female athletes and women's sport still receive starkly disparate behaviour by the sport media commercial complex compared to male athletes and men's sport (Fink, 2015; Shaller, 2013). Media often allude or explicitly refer to a female athlete's attractiveness, sensuality, femininity, and weakness. All of them effectively transmit to the audience that her stereotypical gender role is more marked than her athletic role. Women most often refer to as ladies, young ladies, or girls, whereas men more commonly refer to as men or guys. Male athletes are portrayed as powerful, independent, dominating and precious (Bakan, 2013; Knight & Giuliano, 2001; Koivula, 1999). Several researchers (Arslan & Koca, 2006; Bakan, 2013; Cooky, Messner, & Hextrum, 2013; Knight & Giuliano, 2001; Noordegraaf & Çoknaz, 2014; Tuggle, 1997) found that most studies of dominant sports media, discussions about gender that compare the amount and type of coverage given to male and female sports. In short, sport is one of the basic areas in the social construction of masculinity. Looking at the history of sports, the male-dominated structure, which can be easily seen, is now being reproduced through the media (Akkaya & Kaplan, 2015). According to Özsoy research findings, it was seen that the rate of following the sports pages of the newspapers among men was 61 percentage and it was 18 percentage among women (2008).

Media and sports, which are two areas that need and complement each other, have been dominated by men more than in many areas of life. Due to the fact that most of the news about sports is made up of men, duties such as reporters, writers and editors in sports media are mostly carried out by men (Akkaya & Kaplan, 2015; Arslan & Koca, 2006; Koca & Bulgu, 2005; Özsoy, 2008)

The reason why the news of women athletes is less in the media may be that the most followed sport is male football (Bakan, 2013). The fact that football, with its masculine structure, is the most popular sports branch, therefore, sports journalism and television, makes news about women less popular (Akkaya & Kaplan, 2015; Özsoy, 2008). Media, therefore, frame female sports as less deserving of coverage than men's sport (Tuggle, 1997). Özsoy revealed that the number of news about male athletes who do sports out of football is less than the news involving male athletes in general (2008). The results of this study clarify the existence of male hegemony due to the fact that the sport with the most interest is football.

This long-term differentiation between men and women has affected not only the participation in sports but also the conversation about sports, which is seen as a male-specific activity (Yüksel, 2014). Women are given the place with the purpose of passive and image which can only be considered as a mannequin in sports media where men are largely dominated (Akkaya & Kaplan, 2015). As a one of important example may be given the sports program is called as *"İddialı Yorum."* Program published in the *Show TV* channel in the year 2006. While

the three male football commentators discussed the games to be played in that week, the female server in the program only watches the comments and could speak when given the right. In the program mostly followed by men, the server was physically placed in a place where the camera could get the best view (Akkaya & Kaplan, 2015). Nowadays, it is possible to say that women become a visual object on television (Büyükbaykal, 2011).

Even in a country where there are significant gains in equality between men and women, it may not be possible to see the same equality in an institution where men are more such as media (Arslan & Koca, 2006; Yüksel, 2014). In this context, the secondary position of the woman in the media will continue to be discussed on the basis of inequality (Türkdoğan, 2015). Mass media has become one of the most powerful institutional forces in society (Bakan, 2013). Not only in Turkey, almost every country in the world, the negative representation of women in the media, humiliation, subordination is seen as a problem area (Arslan & Koca, 2006; Özsoy, 2008). Here we see that the attitude of the media is not based on the success of women in sports but on the social system (Arslan & Koca, 2006).

2.2. Women in Sports Too

In the western world of the 19th century, women said that *I am in too* and they began to reap the fruits of their struggles in the twentieth century. As a natural extension of this process, women participated in sports too (Noordegraaf & Çoknaz, 2014). For the last 30 years there has been a rapid increase in the participation levels of women in sports, with factors such as the creation of new opportunities and regulations in recent years all over the world (Shaller, 2013). While the male-dominated structure in the sport was felt more aggressively in the past century, there is an increase even in women's interest in watching sports (Özsoy, 2008).

There has been a significant increase in women's participation in sport since 2002. In addition, there has been an increase in the level of women's participation even in the types of sport that have been traditionally limited to men such as wrestling, weight-lifting, kick-boxing, bodybuilding in many countries around the world (Bakan, 2013; Koca et al., 2005; Arslan & Koca, 2007, p. 317). Although the number of women taking part in traditionally male sports has been growing, gender stereotype continues in media.

Over recent years women have absolutely advanced in organized, competitive sport (Bernstein, 2002). Women athletes, from wushu to windsurfing, from judo to table tennis in many branches with the pioneers and the achievements they began to take their deserved place. For example; female athletes who participated in the 2012 Olympics took part in the media because of pioneered many firsts such as the number of female athletes being more than the number of male athletes and being the pioneer in the Islamic world in terms of Turkish sports history (Noordegraaf & Çoknaz, 2014). The 2012 London Olympic Games were heralded as the year of the woman as every delegation sent a female athlete to contest in the games, and nearly 45% of all athletes were women (Fink, 2015; Noordegraaf & Çoknaz, 2014). According to Yüksel research (2014), although women's participation in sports is lower than men, it was concluded that women engaged in sports do more regularly than men. Woman athletes are not the woman that behind a successful man anymore; they became the symbol of the success. It should be noted that this growing interest in the press will encourage women athletes (Arslan & Koca, 2006; Noordegraaf & Çoknaz, 2014).

In an era in which men's professional sport is becoming portrayed by multimillion-dollar contracts, player's union lockouts, illegal steroid use, and an individualistic mentality, disgruntled sports fans are increasingly turning to women's professional sport for entertainment (Knight & Giuliano, 2001).

This has not been successfully portrayed in journalism. Because women have sprung into the mainstream sports world at a high rate in the last decade, one would assume they would receive an increased amount of media coverage. The media chooses to depict female athletes in a differing manner than their male counterparts; therefore women suffer the consequences of being forced into socially acceptable traditions (Shaller, 2013, p. 50).

Despite the fact that recent researches prove a shift toward the more respectful representation of women's sports in some media outlets, this is typically found in smaller media markets or in corner markets where the focus centres on women's sports (Cooky et al., 2013). In several studies, it has been underlined that the cause behind the submission of female athletes in the media is the ideology of gender dominant in the society.

3. Representation of Female Athletes: Sex Appeal Image

This world is equally saturated by media, information and communication technologies (Popa & Gavrilu, 2015). In the media, especially in daily newspapers, the involvement of sports is increasing and many newspapers have started to publish sports supplement, along with sports pages (Arslan & Koca, 2006).

As Bernstein said that although women have achieved some ground as far as media visibility is concerned, especially in major sporting events, it is far too early for a victory lap (2002). The media could not be expected to remain indifferent to the sport, which is an important element of life, however, the problem of the lack of news about women's sports in the media compared to men's sports is similar in all around the world (Özsoy, 2008). But what is important is not the numerical increase of women's sports news, but the content and quality of presentation forms (Arslan & Koca, 2006; Bernstein, 2002; Büyükbaykal, 2011; Knight & Giuliano, 2001). As in all sectors, women should be strengthened in the field of media too.

For example, Talk radio host, Don Imus in their examination of the mainstream print news media frames of the 2006–2007 Rutgers University Women's Basketball Team, reference to the team as “nappy-headed ho’s” (Cooky et al., 2013; Daniels, 2009).

Arslan and Koca research in which examined sports media visuals, revealed that instead of the performance poses of the female athletes, the photographs containing the meaning of sexuality were published in the media (2006).

For another instance, Yüksel Aytuğ, a Turkish journalist, is one of the most important examples to understand the point of some media perception. Aytuğ said in his article which is called *Womanhood is Dying at Olympics*;

“Big shoulders, tiny hips, and flat breasts like wood... If they weren't wearing swimsuits in different shapes, I'd think they were all men. Breasts; the symbol of womanhood, maternity, fertility. (...) as if it was pruned. (...) Should not be satisfied with the women athletes' results of the stopwatch. When sorting, plus and minus points should be added according to the ratio of physical appearance of athletes to women similarities (Yüksel Aytuğ, 2012).”

Today, most of the women are still considered as the topics of the news about sexuality, indecency, unfaithfulness, jealousy etc (Büyükbaykal, 2011). Female athletes have often been defined in terms of their physical attributes in the print and television media, which is argued to sexually objectify women, devalue their performance and reassert traditional notions of femininity (Sherry et al., 2016). The presentation of women athletes in the media is an important issue for feminist research in relation to the process of reproduction of gender ideology in the sports institution (Arslan & Koca, 2006; Bernstein, 2002; Popa & Gavrilu, 2015; Yüksel, 2014).

For example, in 2012 London Olympics, where most women's athletes participated, some media tools, preferred to report on the list of *The Twenty Sexiest Women of The London 2012 Olympics* instead of mentioning the achievements of athletes (‘Photos: The 20 sexiest women of the London 2012 Olympics’, 2012).

Although female athletes are becoming more accepted in the media, there is still a stigma encircling female athletes such as a sex appeal image. Written and visual mass media are increasingly highlighting sexuality on female athletes. In the mass media, seeing the body as an object and presenting it will lead to a burdensome cost such as the use of the body as an object (Taşkaya, 2009). Moreover, this situation is not only seen in sports media, but also in advertisements. For instance, Lanis and Covell research indicate that males who see print media advertisements in which women are presented as sex objects are more likely to evidence increased sex role stereotypic (1995). The constant direction of the media to the desire, legitimizes the transformation of the body into the object of consumption (Taşkaya, 2009).

3.1. Does Look Matter?

The best answer to this question is the two well-known tennis players: Serena Williams and Maria Sharapova. The general idea is that someone who is better than someone else should have a more in endorsement money. There was the disparity in endorsement pay between Serena Williams (\$13 million) and Maria Sharapova (\$23 million) in 2015. At this point, we should bring into this question;

Why does Maria Sharapova earn much more while Serena Williams more successful? Or else, does look matter?

With 23 Grand Slam titles, Serena Williams continues to be the most successful tennis player of all time, but the whole world focuses on; Serena Williams' body. Being in the spotlight as a superstar tennis player has made Serena Williams a target for attacks over her body, her gender, and the colour of her skin, in a nutshell, her appearances. There are sexism and racism on the basis of comments for Williams. Thus, it is possible to say that the appearance of the female athletes overshadows their many accomplishments in the media (Knight & Giuliano, 2001).

In the consumption society created by the capitalist system, the female body is rediscovered in the context of pleasure and sexuality (Suiçmez, 2018). It seems that this has nothing to do with being more successful, but it has to do with selling more products and more advertising. However, capitalism does not take into account such things like equality. Williams told the *New York Times Magazine* (Rankine, 2015);

“If they want to market someone who is white and blond, that's their choice.”

As a result of the sports club's efforts to increase revenues, the popularity of sports organizations and the interest of the media as well as sports organizations, the marketing-oriented structuring has started in the sports sector. Although sport is a new field within the marketing field, sports have been either marketed or used as a marketing tool for centuries (Ekmekçi & Ekmekçi, 2009).

Without the beauties or sexual aspects, the female athletes who think that they cannot attract attention by the media, unfortunately, front different ways. For example; Lori Susan "Lolo" Jones - an American hurdler and bobsledder who specializes in the 60 meter and 100 meter hurdles - in 2009, Jones posed nude for *ESPN the Magazine*. Lolo Jones criticized by the “Today” in “The New York Times” for marketing her sex appeal (Longman, 2012).

"Judging from this year's performances, Lolo Jones (...) no possibility of winning gold. Still, Jones has received far greater publicity than any other American track and field athlete competing in the London Games. This was based not on achievement but on her exotic beauty and on a sad and cynical marketing campaign. (...) So she has played into the persistent, demeaning notion that women are worthy as athletes only if they have sex appeal. And, too often, the news media have played right along with her."

Women's attractiveness can make the most ordinary product or news interesting, so the use of women in mass media is rapidly increasing. Nowadays it has become very natural to meet a beautiful woman in commercials, newspapers, television and magazines. In this way, women become material for the media (Büyükbaykal, 2011).

3.2. The role of media

Today's society now exists as a demonstration society. As a result of this situation, the media is the most important or even the only important dynamic of this visuality world to direct the masses (Türkdoğan, 2015; Ünsal & Ramazanoğlu, 2013). "Instead, media production entails a complex process of negotiation, processing, and reconstruction. It, not only offers us something to see, but also shapes the way in which we see by creating shared perceptual modes" (Koivula, 1999, p. 589).

Production of media is not based solely on facts instead requires a complex process of negotiation, processing, and reconstruction. This is may be the most important role of the media. The media has a significant impact on the spread of sports branches with the words and visuals that it uses. Especially in recent years, the increasing number of media coverage of women athletes' success has encouraged families and young people (Arslan & Koca, 2006; Noordegraaf & Çoknaz, 2014). Turkish volleyball player, setter, Arzu Göllü said in an interview (Albay, 2008); "The recent achievements of the national team and their reflections on the media make families more positive in encouraging their daughters to sports.

It is not only what the media says, but also what it does not say (Özsoy, 2008). According to Bakan's research findings, female athletes gender roles such as "mother", "grandmother" and "wife" were emphasized in one-third of the news in which their names were mentioned (2013). Also, Türkdoğan research revealed that the dominant sexist language used by the media during the reproduction of the patriarchal system was carried out through a divinity in motherhood (2015).

At this point, the media has something more important than the male dominant sports new; women are the objects in visual and written media which emphasize sexuality. The media displays a continuous thin female body in this manner forces the society to enter into standard patterns. The media gives women a specific concept of thin body sizes by manipulating them visually (Suiçmez, 2018). With the desire of reaching the body sizes determined by the media, women apply various sports activities and nutrition programs organized by dieticians (Suiçmez, 2018).

This situation affects the athletes as well as the society. For example Suiçmez study is particularly concerned with the ways in which the idealization of beautiful female bodies in the media has led to the public disregard for non-standard female body sizes (2018). When media coverage is afforded to women's sports, it tends to involve humorous stories of nonserious women's sports, such as the nude calendar, and the sexual objectification of women athletes, such as commentary on tennis player Anna Kournikova's physical attractiveness (Daniels, 2009).

Although researchers suggest that the media should be cognizant of the harmful and erroneous impressions that can result from portraying athletes in terms of their personal attributes rather than their athletic accomplishments, the media continuing its behaviour in this direction (Knight & Giuliano, 2001; Lanis & Covell, 1995). The fact that the media is behaving to the athletes in this way may create serious effects on their success.

The weightlifter Holley Mangold has been criticized for her physique. Ms. Jones had the most direct emotional response, said to the media;

"I just thought that was crazy because I worked six days a week for 4 years for a 12-second race and the fact that they just tore me apart is heartbreaking (Carter, 2012)."

Serena Williams explained what it means to be a female athlete. In a recent interview, she talked to *Motto* -an offshoot of *Time Magazine*- about the many body-shaming comments she's faced throughout her career (Segarra, 2017);

"It is not always easy to be on the stage playing a tournament and have someone making a comment about your body, that it's too strong."

The gymnast Gabby Douglas was scrutinized over her uniform choice and the way she kept her hair, in a few words over her appearance. Ms Douglas, who failed to medal in any individual events, and said she had been reading about herself online and had not slept well (Carter, 2012). It is quite difficult to say that the media had not any effect on her psychology in this defeat. Thus people under stereotype threat might underperform because their attention is focused on actions that are usually unconscious.

4. Conclusion

Even though it cannot be compared with the level of male sports it is obvious that there are significant improvements in female sports. We see women athletes in many branches even that require men power or masculinity which we are not accustomed to seeing. Although gender equality in sports has come a long way, it still has not come far enough. At this point, the media reinforces this gender inequality in the sports with the attitudes it exhibits. The media is framing the female athletes with their appearance, private life etc. except their sports achievements in this manner, somehow marginalizing them.

Although the news about female athletes is rapidly increasing, non-objective representation is continuous to marginalizing them in the sports media. Instead of the strong and successful female athletes, beautiful and sexy female athletes attract more attention in the sports media. In this direction women athletes who are not more successful but more beautiful and attractive becoming more marketable. This situation pushes the female athletes to use femininity to attract attention by sports media.

Female athletes who are mostly presented in sports media with their physical attractiveness or private lives may face strong psychological and sociological consequences when the achievements that they endeavour throughout their lives overshadowed by. This may affect even the athletes' career. Demonstration of the fact that sports can be done successfully by both sexes and besides this, construction of the sports media, in which sportsmen's identities are at the forefront rather than gender roles may increase the motivation of female athletes. Female athletes who would love to be presented no longer with their beauties, sex appeals or with their muscular bodies, overweight should be represented with their achievements in the media. Not the more beautiful one but the more successful one should earn more. We should become a pioneer to demonstrate gender equality in sports media. Time to *fair play* for sports media.

References

- Akkaya, C., & Kaplan, Y. (2015). Toplumsal cinsiyet bağlamında spor medyasında kadın. *International Journal of Science Culture and Sport*, 2(2), 177–182. <https://doi.org/10.14486/IJSCS189>
- Albay, S. (2008, April 5). Voleybolcu Arzu Göllü ile 'Kadın ve Spor' Üzerine. Retrieved 27 December 2018, from <https://www.bianet.org/biamag/spor/106014-voleybolcu-arzu-gollu-ile-kadin-ve-spor-uzerine>
- Arslan, B., & Koca, C. (2006). Kadın sporcuların yer aldığı günlük gazete haberlerinin sunum biçimine dair bir inceleme. *Spor Bilimleri Dergisi*, 17(1), 1–10.
- Bakan, Ö. (2013). Türk medyasında kadın sporcuların temsili: Üç gazetenin içerik analizi. *Selçuk Üniversitesi İletişim Fakültesi Akademik Dergisi*, 7(4), 129–139. <https://doi.org/10.18094/si.11566>
- Bernstein, A. (2002). Is it time for a victory lap? *International Review For The Sociology Of Sport*, 37(3–4), 415–428. <https://doi.org/10.1177/101269020203700301>
- Büyükbaykal, C. I. (2011). Medyada kadın olgusu. *Istanbul University Faculty of Communication Journal*, (28), 19–30. <https://doi.org/10.17064/iuifhd.77157>
- Carter, B. (2012, August 8). For Women at the Olympics, the Spotlight Can Be Harsh. Retrieved 28 December 2018, from <https://mediadecoder.blogs.nytimes.com/2012/08/08/for-some-olympians-physical-appearance-brings-criticism-in-media-and-online/>
- Cooky, C., Messner, M. A., & Hextrum, R. H. (2013). Women play sport, but not on TV: A longitudinal study of televised news media. *Communication & Sport*, 1(3), 203–230. <https://doi.org/10.1177/2167479513476947>
- Cooky, C., Wachs, F. L., Messner, M., & Dworkin, S. L. (2010). It's not about the game: Don Imus, race, class, gender and sexuality in contemporary media. *Sociology of Sport Journal*, 27(2), 139–159. <https://doi.org/10.1123/ssj.27.2.139>
- Daniels, E. A. (2009). Sex objects, athletes, and sexy athletes: How media representations of women athletes can impact adolescent girls and college women. *Journal of Adolescent Research*, 24(4), 399–422. <https://doi.org/10.1177/0743558409336748>
- Ekmekçi, R., & Ekmekçi, A. (2009). Sport Marketing. *Pamukkale Spor Bilimleri Dergisi*, 1(1), 23–29.
- Fink, J. S. (2015). Female athletes, women's sport, and the sport media commercial complex: Have we really "come a long way, baby"? *Sport Management Review*, 18(3), 331–342. <https://doi.org/10.1016/j.smr.2014.05.001>
- Flowers, C. L. (2017). Coming on strong: Gender and sexuality in women's sport, by Susan K. Cahn. *The International Journal of the History of Sport*, 34(3–4), 293–295. <https://doi.org/10.1080/09523367.2017.1362538>
- Gentile, A., Boca, S., & Giammusso, I. (2018). 'You play like a woman!' Effects of gender stereotype threat on women's performance in physical and sport activities: A meta-analysis. *Psychology of Sport and Exercise*, 39, 95–103. <https://doi.org/10.1016/j.psychsport.2018.07.013>
- Goffman, E. (1974). *Frame analysis: an essay on the organization of experience*. Harvard University Press.

- Gregg, E. A., & Gregg, V. H. (2017). Women in sport. *Clinics in Sports Medicine*, 36(4), 603–610. <https://doi.org/10.1016/j.csm.2017.05.001>
- Hall, M. A. (1988). The discourse of gender and sport: From femininity to feminism. *Sociology of Sport Journal*, 5(4), 330–340. <https://doi.org/10.1123/ssj.5.4.330>
- Knight, J. L., & Giuliano, T. A. (2001). He's a laker; she's a "looker": The consequences of gender-stereotypical portrayals of male and female athletes by the print media. *Sex Roles*, 45(3/4), 217–229.
- Koca, C., Aşçı, F. H., & Kirazcı, S. (2005). Gender role orientation of athletes and nonathletes in a patriarchal society: A study in Turkey. *Sex Roles*, 52(3–4), 217–225. <https://doi.org/10.1007/s11199-005-1296-2>
- Koca, C., & Bulgu, N. (2005). Spor ve toplumsal cinsiyet: Genel bir bakış. *Toplum ve Bilim Dergisi*, (103), 163–184.
- Koca, C., & Hacısöftaoğlu, İ. (2011). "Delikanlı gibi yaşayın, delikanlı gibi oynayın": Eril bir alan olarak spor medyası üzerine bir inceleme. *İlker Erdoğan (Ed.) Medyada Hegemonik Erkeklik ve Temsil. Kalkedon Yayıncılık: İstanbul*, 1–25.
- Koivula, N. (1999). Gender stereotyping in televised media sport coverage. *Sex Roles*, 41(7), 589–604. <https://doi.org/10.1023/A:1018899522353>
- Lanis, K., & Covell, K. (1995). Images of women in advertisements: Effects on attitudes related to sexual aggression. *Sex Roles*, 32(9–10), 639–649. <https://doi.org/10.1007/BF01544216>
- Longman, J. (2012, August 4). For Lolo Jones at the Olympics, Everything Is Image. *The New York Times*. Retrieved from <https://www.nytimes.com/2012/08/05/sports/olympics/olympian-lolo-jones-draws-attention-to-beauty-not-achievement.html>
- Noordegraaf, M. A., & Çoknaz, D. (2014). An evaluation of the participation of Turkish female athletes in the 2012 London Olympics and its press coverage in the written media. *Journal of Human Sciences*, 11(2), 1351–1365. <https://doi.org/10.14687/ijhs.v11i2.3135>
- Özdemir, N. (2018). Geleceğin beden eğitimi öğretmenleri sporda kadının yerini nasıl tanımlıyor? *Spormetre*, 16(1), 119–124.
- Özsoy, S. (2008). Türk spor medyasında kadın. *Spor Bilimleri Dergisi*, 19(4), 201–219.
- Özsoy, S. (2015). TÜRK SPOR MEDYASINDA KADIN. *Spor Bilimleri Dergisi*, 19(4), 201–219.
- Photos: The 20 sexiest women of the London 2012 Olympics. (2012, June 20). *Canada.Com*. Retrieved from <http://www.canada.com/sports/2012-summer-games/Photos+sexiest+women+London+2012+Olympics/6818821/story.html>
- Popa, D., & Gavrilu, D. (2015). Gender representations and digital media. *Procedia - Social and Behavioral Sciences*, 180, 1199–1206. <https://doi.org/10.1016/j.sbspro.2015.02.244>
- Rankine, C. (2015, August 25). The Meaning of Serena Williams. *The New York Times*. Retrieved from <https://www.nytimes.com/2015/08/30/magazine/the-meaning-of-serena-williams.html>
- Segarra, L. M. (2017, September 7). Serena Williams on Dealing With the Haters. Retrieved 30 December 2018, from <http://time.com/4925648/serena-williams-tennis/>
- Shaller, J. (2013). Female athletes in the media: Under representation and inadequacy. *The Review: A Journal of Undergraduate Student Research*, 8(10), 50–55.
- Sherry, E., Osborne, A., & Nicholson, M. (2016). Images of sports women: A review. *Sex Roles*, 74(7–8), 299–309. <https://doi.org/10.1007/s11199-015-0493-x>
- Suiçmez, M. (2018). Medyada kadın bedeninin ötekileştirilmesi: Victoria's Secret modeli. *Middle Black Sea Journal of Communication Studies*, 3(2), 67–84.
- Taşkaya, M. (2009). Kitle iletişim araçlarında kadın bedeninin nesneleştirilmesi: ürün ve marka fetişizminde cinsellik kullanımı. *Toplumbilim Dergisi*, (24), 121–132.
- Tiryaki, S. (2014). Kadın sporcu fotoğraflarıyla bedenin pazarla(n)ması. *Selçuk Üniversitesi İletişim Fakültesi Akademik Dergisi*, 8(2), 218–237. <https://doi.org/10.18094/si.88297>
- Toker, B. (2010, June 12). Basketbol ve Bir Kadın: 'Kız Gibi Oynamam Ben'. Retrieved 27 December 2018, from <https://www.bianet.org/biamag/spor/122689-basketbol-ve-bir-kadin-kiz-gibi-oynamam-ben>
- Tuggle, C. A. (1997). Differences in television sports reporting of men's and women's athletics: ESPN SportsCenter and CNN Sports Tonight. *Journal of Broadcasting & Electronic Media*, 41(1), 14–24. <https://doi.org/10.1080/08838159709364387>
- Türkdoğan, Ö. (2015). Ana akım medyada annelik miti. *Kadın Araştırmaları Dergisi*, (13), 0.
- Ünsal, B., & Ramazanoğlu, F. (2013). Spor medyasının toplum üzerindeki sosyolojik etkisi. *Journal of Research in Education and Teaching*, 2(1), 11.
- Yüksel Aytuğ. (2012, August 8). Kadınlık olimpiyatlarda ölüyor. Retrieved 29 December 2018, from <https://www.sabah.com.tr/yazarlar/gunaydin/aytug/2012/08/08/kadinlik-olimpiyatlarda-oluyor>
- Yüksel, M. (2014). Cinsiyet ve spor. *Journal Of History School*, 7(19), 663–684. <https://doi.org/10.14225/Joh581>

Social Media Phenomena On Social Change: Effects Of Picture & Text-Based Social Media Platforms On Loneliness & Happiness

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Abstract

The use of social media continues to grow and especially widespread among young adults. It is unexpected then that, despite this active and ongoing connectivity among individuals, young adults may be lonelier than other age groups, and maybe the current generation is the loneliest ever. It is to consider that the age people born into, plays an important role in their relation with technological new founds. People, born in a time where technology plays a crucial role in daily life, are getting used to the social life, which seems unthinkable without technology. People, born in a time frame where technology had not such a playful role in daily life, are more sensitive onseeing the differences in social and overall daily life, thus, making the integration with the technology really difficult for them, consequently.

It seems that, only image-based social media platforms (e.g. Instagram) have the potential to decrease loneliness because of the improved intimacy they offer. In the contrary, platforms that are overwhelmingly text-based (e.g. Twitter) offer little of giving away an individual's intimacy due to their format. Therefore, text based social media platforms should have no effects on decreasing loneliness.

Based on the Uses and Gratifications framework (U&G), we aim to identify and describe if there is any effective difference between text-based and image-based social media platforms, as far as the mental health (i.e. happiness and loneliness) is concerned.

Keywords: Social Media, Loneliness, Happiness, Instagram, Twitter, Intimacy, Social Presence

Introduction

Human species have the opportunity of connection among themselves like never before, thanks to the communication channels that today's technology provides them. Social media can be roughly defined as platforms that individuals build networks and communities on in the cyberspace where they have the ability to create and share content with their social networks (i.e., friends, followers, etc.). This form of media revolutionized the way individuals communicate and interact with each other. And young adults are the ones using this new phenomenon enthusiastically.

The Pew Research Center (2017) found in a recent study that, younger Americans (especially those ages 18 to 24) stand out for embracing a variety of platforms and using them frequently. According to The Pew Research Center (2017), some 78% of 18- to 24-year-olds use Snapchat, and a sizeable majority of these users (71%) visit the platform multiple times per day. Similarly, 71% of Americans in this age group now use Instagram and close to half (45%) are Twitter users (Smith & Anderson, 2018). According to Thayer & Ray (2006), young people are more harmonious with the current technology, therefore the age of the users is determining the quality and frequency of social media usage. Monica & Jingjing (2018) found that, the popularity of picture based social media platforms such as YouTube, Instagram and Snapchat are increasing rapidly under teens, ages 13-17, whereas the use of text-involved social media platforms is not anymore dominant, as it was the case a few years ago. This might be an indication of a shift on technology landscape in next generations, where it will have possibly some effects on people's emotional and social anticipations.

The availability of technology is higher in developed countries (e.g. USA, UK etc.), where individuals have easier access to internet. Thus, this intensifies the interconnectivity of individuals through social media and therefore the emotional well-being of these people can be regarded as

likely to increase. However, the loneliness problem of these societies is continuing firmly whereas the use of social media is at its highest, compared to undeveloped countries.

According to a survey, conducted nation-wide in the United Kingdom, by the Mental Health Foundation, 48% of adult research participants believe that people in the UK are getting lonelier as time proceeds, 45% are reporting being lonely at least some times, and the rate of people feeling depressed due to being alone is reported as 42% (Griffin, 2010). According to Griffin (2010), 24% of people worry about feeling lonely, from which the critical part of it is that, this worrying is commonly felt by people aged 18-34 compared to people aged over 55.

In some ways similar to this research, Nicolaisen & Thorsen (2014) conducted a nation-wide survey in Norway, analyzing different factors related to loneliness among different age group 18-81. They found that, 21% of research participants experience loneliness often or at least some times. From which the oldest group aged 65-81 is the one feeling most lonely, followed by the youngest group aged 18-29 (Nicolaisen & Thorsen, 2014). The factors associated with loneliness vary in different age groups obviously, but the interest attracting point in this research is that the youngest group is pointing significantly differently compared to other age groups close to it. Olds & Schwartz (2011) argue that, in the twenty-first century, Americans are using technology to stay connected, more than any other society in history, whereas studies are showing that Americans “feel increasingly alone” (p.1). The consequences of this trend in the direction of loneliness is to be considered. Where social isolation, therefore loneliness has significant effects on physical body health and even life expectancy.

A research, conducted by Brigham Young University researchers, found that loneliness increases the odds of mortality by 26%, in the case of social insulation it is 29% and 32% for living alone (Holt-Lunstad, Smith, Baker, Harris, & Stephenson, 2015). According to Holt-Lunstad et al.

(2015), loneliness and social insulation is comparable with other health issues like obesity and substance abuse which are risk factors for premature mortality.

Every time period in human history contain different variables that can affect the psychology of people. Modern social science researchers have a serious function in identifying the causes and cures of loneliness, considering today's factors. This research aims to play a part in this matter by focusing on certain types of social media, particularly image-based social media, to find an answer to the possibility, that these types of social media may affect the mental health of people.

The term “loneliness” might seem easy to define, because everybody experienced it in some ways or another. But, like many seemingly simple things, the term “loneliness” is not easy to define. Eisenman (1983) argues that there are different perspectives about this term, where it can be considered partly as subjective. For instance, according to Eisenman (1983), a person might feel lonely even surrounded by friends and in contrast, on certain situations, one might be objectively lonely, but cannot experience the feeling of any loneliness. Perlman & Peplau (1981) define loneliness as “unpleasant and distressing inconsistency between someone's desired and achieved level of social relationships” (p. 31).

It is yet to be determined whether this newly in people's lives entered communication technologies can deflect the issue of loneliness. It is also significantly important to capture how people build their social relations via the newfound ways of socialization opportunities enabled by the internet, in a way that makes them feel less lonely and therefore psychologically healthy.

According to Hughes, Waite, & Cacioppo (2004), social relations are vital among humans to have the fulfillment of emotions, behavioral attitude and cognitive functionality. That is however, rather than for purposely preventing negative outcomes of the individual's psychology (e.g. loneliness, grief), a person's social relations contain some potential to provide positive outcomes (e.g. satisfaction, happiness). But Allen, Ryan, Gray, McInerney, & Waters (2014) argue that, still, the role of social media's motion in this sense is undiscovered.

Advancements and innovations in communication technology enabled people from any socio-economic status, to benefit from these opportunities. Additionally, the innovations in bandwidth technology and the reachability to mobile cell phones, started from SMS (short message service) texting and came to a point, where people can record and send high definition videos, pictures or even stream live events with affordable financial offsets (Pittman & Reich, 2016). Superficially, it appears that widespread different ways of communication through various social media platforms should allow people to feel more connected to each other. The rate of newcomer social media platforms and the adoption, popularity and (sometimes) obsolescence of these platforms makes it difficult to find out which kinds of them has which effects on loneliness and overall human psychology. The style of each social media platform (image or text-based) might create a clue about its effects on loneliness. It is to consider also that, the age people born into, plays an important role in the relation with technological new founds. People, born in a time where technology plays a crucial role in daily life, have the tendency of getting used to the unusualness's (e.g. unusual social interactions) that newfound technology creates. People, born in a prior time frame then those, are more sensitive on seeing the differences in social and overall daily life, thus, making the integration with the new

technology really difficult, consequently. The discussion about this issue expands into more broader disciplines going far into sociology, psychology and social- psychology.

Nasaescu, Marin-López, Llorent, Ortega-Ruiz, & Zych (2018) argue that, newfound technology brings different issues with itself, where it has effects on social and emotional states in younger generations. According to Siciliano et al. (2015), new generations are most affected and unprepared by these issues the newfound technology brings with itself, also the intensive internet use leads to concerns about problematic internet use. According to Altın & Kivrak (2018), in age groups which have linkage to an education institute (e.g. university), there are also aspects which can't be overlooked, in terms of the social media use and its effects on human mental well-being. The reachability to social media, made an enormous shock to people's sense of social relations and has paved the way of diversifying the perception of each individual, even in a nuclear family. The widespread use and availability of electronics, enabled people to spend time on the internet, more than in their real lives and thus, making it easy for them to review and change their perceptions about the world. The communication through mobile cell phones, and other digital media brought up the issue of "technoference", a word that is used for describing the interference, disruption and intrusions in social relations, as a result of using new ways of communication channels provided by technology (McDaniel & Coyne, 2016). According to McDaniel & Coyne (2016), this term refers to the phenomena that, the option of using communication channels via electronic media, caused challenges in family life and overall relation between parents and their children, which opened the way for new challenges in nurture of children, adolescents and teens.

Therefore, it is important to notice the variables in social life interactions and relationships, which occurs with the influence of newfound ways of communication channels provided by electronic devices and internet.

Goal of the Study

To consider the role of social media in everyday life, and the potential negative outcomes of loneliness (i.e. mental health), the objective our research is to identify the correlation between the use of certain social media platforms and their effects on people's mental well-beings. We focus particularly on the relationship between loneliness and both of text-based and image based social media platforms.

As subject to text-based social media platform, our main focal point will be Twitter, since it is the most popular platform of its kind. In the case of image-based social media platform, we will center Instagram and Snapchat on our focus. Which are also two popular platforms of their kinds. The far-reaching social media platform, which integrates components of both image-based and text-based social media, namely Facebook, is included as the fourth social media platform in this research. In correlation to the possible uses and satisfactions provided by these four social media platforms of approach, we review the literature of communication.

Social media is usually being used as a tool for compensating the needs of social interaction, that users don't or can't have the opportunity of experiencing in their physical lives. The virtual social presence of these interactions differ relevant to which platform is used. The image-based social media platforms (e.g. Instagram and Snapchat), should theoretically offer the maximum level of artificial social presence. Conclusively, leading to our research's hypothesis that these sorts of social media platforms will be most efficacious at counteracting loneliness.

Text-based social media platforms, primarily Twitter in the case of our research, appear to provide a lower level of virtual social presence. As well as mixed social media platforms, which include the aspects of both image-based and text-based properties (e.g. Facebook), seem also to offer a poor-quality degree of virtual social presence.

Importance of the Study

Understanding the dynamics of human behavior and psychology has been a noteworthy part of research areas in human healthcare. According to Conner & Norman (2017), researchers with considerable amount of researches have proven that, a healthy lifestyle behavior is effective on sustaining health and hindering diseases, whereas risky lifestyle behaviors (e.g. sleep disorder, unhealthy diet, physical inactivity) are accountable for the probability of diseases and untimely mortality. Helbostad et al. (2017) concluded that, investigating and observing human behaviors can play a role on sustaining an active and healthy aging of humans, which is a complicated process that is dependent on social, psychological and physical changes. According to Helbostad et al. (2017) the newfound advancements in technology have enabled the identification of human behavior, inconspicuously.

Since smartphones are playing a crucial role in people's daily lives, this opened the way for smartphones to become a tool for detecting and tracing human behavior. In the US, 75% of people own a smartphone (Smith, 2014). And in the UK, about 50% used internet, which is estimated to rise up to 90% by 2020 (Green & Rossall, 2013). Additionally, according to Statista (2018), worldwide use of smartphones has reached to 2.1 billion people in 2016, and this number is projected to rise up to 2.5 billion by 2020.

As an example of how smartphones became a tool for detecting and tracing human behavior, one can focus on

smartphones hardware's which include sensors such as gyroscope and accelerometer, which can track users' body movements, position and orientation. Additionally, software, that can detect user interaction with the device, such as keyboard and screen lock/unlock applications are also to be taken into account. These aspects of newly advanced technological devices have therefore the potential of gathering all sorts of data about individuals, which in the end can lead to the fact that, these devices will be playing a crucial role at analyzing and interpreting different variables, that affect human psychology.

Considering above mentioned statistics, the widespread use of smartphones has the potential to pave the way of widening the use of social media platforms. Eventually, this prevalence of mobile smartphones will lead social live to a position, where these social media platforms will be the overwhelmingly the source of influence in human behavior.

Kagan, Bornstein, & Lerner, (2017) describe human behavior as "the potential and expressed capacity for physical, mental and social activity during the phases of human life" (p.1). Through technological devices gathered data about a user's behavioral lifestyle, contain information about the person's daily activities, psychological abilities, and social interactions, which can be useful for identifying and having a presentiment about emotional, physical and social behavior. Consequently, providing a trace about emotional, physical and social health of individuals, as well as social groups.

To deliver an example, physical behavior of an individual is related to physical health problems (e.g. heart failure and obesity). Emotional behavior interrelates with mental health problems (e.g. depression, anger, suicidal feelings and sleep problems). Social behavior interrelates with user's social interaction problems (e.g. loneliness). So, the gathered data about people's behavioral lifestyle through widely used smartphones, consequently through social media usage, can shed light on a broad variety of aspects about human behavior (physical, emotional and cognitive etc.).

From this standpoint, the importance of this research is related to these aforementioned visions. We herewith focus on different varieties of social media platforms (i.e. picture-based and text-based platforms) and their potential effects on loneliness and happiness. From this point of view, we have a well-balanced approach to analyze and interpret the behaviors and emotions of certain social groups and to provide potential assist for future research directions.

Theoretical Background

As an approach to a study related to media, The Uses and Gratifications (U&G) framework (Katz, Blumler, & Gurevitch, 1973; Rubin & Haridakis, 2001; Sundar & Limperos, 2013) is a fine- established pathfinder for our research. This approach of idea is moving along the way, that consumers of media have the awareness of choosing the types of media, which are capable to effectively fulfill their particular needs and satisfactions.

Main aspects of newfound technologies, for instance the freedom of choosing which media a consumer wants to use and the option of active interaction between individuals, are considerable reasons for users to be attracted to these technology-based new media, which was not the case by the traditional media of 20th century (Ruggiero, 2000). According to Pittman & Reich (2016), present U&G research has shed light on the question, why individuals are in favor of using certain technologies, and yet, researches which focus particularly on social media are limited.

In regard to this context, Katz et al. (1973) acknowledged that behavior of media consumption is generally canalized by gratification needs. The existing literature of U&G about social media may shed light on understanding possible relations between social media usage and its effects on loneliness and happiness.

Methodology

We use the descriptive method in this research, with the aim of collecting information without altering any variables in the research process. Moreover, we aim to obtain information, concerning the current state of text and image-based social media and if there is any correlation with the aspects of mental health (i.e. loneliness, happiness) of the users.

According to Ethridge (2004), "descriptive studies may be characterized as simply the attempt to determine, describe or identify what is" (p. 24). Also, Fox & Bayat (2008) acknowledge that descriptive research is "aimed at casting light on current issues or problems through a process of data collection that enables them to describe the situation more completely than was possible without employing this method" (p. 45).

The main characteristic of a descriptive study is that it describes different aspects of certain phenomena. In other words, descriptive studies are used to describe the behavior of a sample population. Main purpose of a descriptive research can be interpreted as describing, explaining and validating the findings of the research.

Social Media Platforms

The most popular social media platform worldwide, in 2004 founded Facebook lets its users share text, photos and videos with each other. According to Facebook, as of 2nd quarter of 2018, it has 2,23 billion monthly active users and 1,4 daily active users. Nadkarni & Hofmann (2012) reported that motivating factors of Facebook users are primarily the need of belonging and the need of self-presentation. Also, compared to direct messaging, which is often used for preserving relationships among individuals, Facebook is more oriented in the direction of getting updates about one's entire social network and having fun (Quan-Haase & Young, 2010). According to Skues, Williams, & Wise (2012), lonely people have more the tendency of using Facebook as compensation for their poor social relationships in physical live. Additionally, Malik, Dhir, & Nieminen (2016) acknowledged that Facebook users are sharing photos on the platform, because this satisfies their needs of attachment, seeking attention, sharing of information and for the purpose of social influence, which are leading reasons among many other reasons. However, according to Pittman & Reich (2016), it is unclear what kind of effects photos and videos have in gratifying needs of people socially and emotionally, and if fulfilling these needs might decrease the feeling of loneliness.

Among other popular social media platforms, Twitter, founded shortly after Facebook, lets users post text messages with a limitation of 280 characters per post (also known as *tweet*), this social media platform also supports image and video posting, but is mainly designed for mediating short messages. Concerning the statistics of popularity, Twitter's numbers have a quite considerable gap in comparison to Facebook. According to Twitter, the platform accommodated an impressive 326 million active user per month, in the 3rd quarter of 2018. In connection to U&G approach in the case of Twitter, Chen (2011) concluded that, the more a person uses Twitter, the more this usage gratifies a need for connection.

Another popular social media platform Instagram, was founded in 2010 and features aspects of design properties of Twitter. It is just more focused on image and video sharing, rather than primarily text postings, which is the very opposite way of Twitter.

Snapchat was released in 2011, functions more like an anonymous and temporary version of Instagram. On this platform, users have the ability of posting videos or images, limited to 3-10 second views per post. Users therefore have the limited time of 3 to 10 seconds per click, to have a look at a posting. These postings than, are deleted automatically after 24 hours.

With their differences in design, all of above-mentioned social media platforms do commonly serve the same purpose, namely the need of interaction and communication between individuals. The question is, which effects do these platforms have, regarding the loneliness status of individuals and their satisfaction with live? Afterall, the U&G of each platform concerns to meet the needs for social interaction to an extent. But the approach of each platform to fulfill these needs, differ from each other, in terms of interaction format. It appears to be that, the social media platform which contains the highest degree of characteristics of daily-life communication, would be most efficient in decreasing loneliness. Because that particular platform would be effectively imitating physical-life social interactions.

This degree of characteristics of daily-life communication is entitled in communication literature as "social presence" (Gunawardena, 1995; Short, Williams, & Christie, 1976) and requires simultaneously both immediacy and intimacy whilst the communication occurs. In this context, social presence is at its highest level, when the interaction on social media happens both immediately and in intimacy, simultaneously. Therefore, in examining which social media platforms might be affecting loneliness and satisfaction with life, it might be useful to consider the platforms, which provide both immediacy and intimacy to their users.

Hypotheses and Research Questions

Visual images are concrete and are most likely to invoke the emotions in the receiver, that the sender of that particular image has intended. In the sense of social presence, images seem to deliver intimacy and immediacy simultaneously, which are both important parts of social presence, as explained above. On the other hand, text messages or posts, seem to deliver only one side of the aspects of social presence, which is only the immediacy side. In conclusion, image-based communication seems to be more likely to satisfy people's emotions, as this kind of communication provides relatively closer to reality, and interpersonal communication experience. In contrast, text-based communication seems to be less satisfying in comparison to real live social presence aspect, which in the end, could affect the users emotional and psychological well-being negatively.

Hypotheses

- **Hypothesis 1 (H1):** Social Media affects one's mental health, feelings.
- **Hypothesis 2 (H2):** There is a difference in effectiveness between image- and text-based social media, when the effectiveness on mental health/feelings are concerned.

Research Questions

- **Question 1 (Q1):** Does social media use predict mental health (i.e. Happiness, Loneliness, Satisfaction with Life)?
- **Question 2 (Q2):** Does image- and text-based social media differ from each other, as far as their effects on mental health are concerned?
-

Literature Review

The aim of our research is to examine the effects of social media platforms, on happiness and loneliness. In more detail, we examine if there is any correlation between the different formats of social media platforms and their effects on happiness and loneliness. Furthermore, there is a strong relation between human psychology, which clearly affects the communication between individuals, and social changes that occurred with advancements in technology. So, the communication behaviors and mental health of individuals are overwhelmingly determined by variables in social life, which in today's case, is very relevant to technological advancements and communication technologies being accessible to everyone. We aim to review the literature in this context.

In the research "*Loneliness, social networks, and health: A cross-sectional study in three countries*", Rico-Uribe et al. (2016) investigated the association of a person's social network and subjective feeling of loneliness with health. The scientific community spent considerable time to document the association between health and social relationships. At first, this association was approached by the earlier literature with simple concepts, such as "feeling lonely, living in a single household, having few social contacts or a small social network, or not having people to trust" (Rico-Uribe et al., 2016, p. 2). But recent studies produced considerable advancements by including different dynamics and dimensions of social relationships and moved beyond simple indicators by analyzing the case of loneliness and health.

This particular study was conducted in three European countries (Finland, Poland and Spain) with different health-characteristics, socio-economic quality and welfare system. The study also analyzes if there is any differentiation between these three countries, which have distinct properties. It is documented by international studies that, the health status of populations differ across countries, when the welfare systems of these countries are each different. According to Rico

Uribe et al. (2016), also earlier studies which were conducted in countries with different welfare- systems, acknowledged differences in loneliness and social network grades, because of the different socio-economic and welfare systems of those countries.

The relationship between health and loneliness was very similarly strong in these three countries, although these countries have very different social and economic properties. The results of the study show that, people in Finland scored somewhat lower scores in loneliness than the people in Poland and Spain. A result, which is in the line with different studies, suggesting that people in northern European countries have the tendency of feeling less lonely, in comparison to people in central and south Europe.

In the study "*Mobile voice communication and loneliness: Cell phone use and the social skills deficit hypothesis*" Jin & Park (2013) investigated the relation between mobile voice communication and loneliness. Nowadays, social media has become a place for people to build and maintain social relationships. The mobility of smartphones enabled people to communicate with each other, anywhere and anytime. This particular research in that context, is focusing on instant voice communication.

The study was based on the social skills deficit hypothesis, which states that poor social skills are strongly correlated with "incompetence in communication", "difficulties in building intimate relationships" and "satisfying relationships", which are also strongly associated with loneliness. Mobile voice communication tends to occur between people which have close relationships and it also helps increasing the intimacy of social relationships. Other studies examine the case generally in the context of face-to-face communication. Because face-to-face and mobile communication occurs in similar contexts, how people communicate in person should be similar to how they communicate through cell phones. This may be a distinct feature of cell phones as compared to other social media. Therefore, this particular study differently, focuses on mobile voice communication. The aim of this particular study was to find out briefly, if the social skills deficit hypothesis for loneliness is true in the case of mobile voice communication.

Poor social skills were in relation with less face-to-face communication and also less mobile voice communication, which had linkage to a greater degree of loneliness. In that case, the survey results of the research came to conclude that, poor social skills were related to less involvement in face-to-face communication and therefore causing a greater degree of loneliness. However, the increase in mobile voice communication was associated with a greater degree of feeling in loneliness. But, another regression analysis in this particular research came to conclude, that there is a positive relationship between loneliness and mobile voice communication, for person's who have a greater circle of friends, then those with less friends.

In the study *"Instagram Use, Loneliness, and Social Comparison Orientation: Interact and Browse on Social Media, But Don't Compare"* Yang (2016) investigated the relation between Instagram activities of the user and loneliness. Since social networking sites (SNSs) like Instagram open the way of social comparison between users, it is important to consider the level of user's orientation to social comparison.

In this context, this particular study considers the social comparison orientation (SCO) of users. SCO refers to, when individuals lack objective criteria to determine their abilities and opinions, so they compare themselves with others as a natural process of self-evaluation. To make their self-evaluation accurate, individuals tend to choose those who they perceive to be similar to themselves as the targets for comparisons. People vary in their tendencies of making comparisons with others, for example there are people who have more tendency to SCO, which have certain personality traits and there are also people with less tendency to SCO, which also shows their particular personality traits. This study was focused on determining the association between loneliness and specific SNS use, primarily Instagram.

Results showed that, interactions on Instagram and simply browsing on the platform were related to decrease in loneliness, whereas broadcasting on the platform was found to be associated with increase in loneliness. In the case of SCO, interactions on the platform were in relation with lower loneliness, only by users with low SCO. The conclusion of this particular research is, in order to prevent negative effects of SNSs on mental health, it is crucial that users consider their approach of using those platforms, in accordance with their personality traits.

In the study *"Activity in social media and intimacy in social relationships"* Sutcliffe, Binder, & Dunbar (2018) examined the association between online and offline socializing, and groups of social ties were. This association was examined by using the as Social Brain Hypothesis (SBH).

SBH suggest that people may naturally form only a small number of very close friendships. And that people have only a small amount of really intimate friends in their lives. SBH also suggests that, the number of friends one has, doesn't necessarily indicate that all of them have the same degree of intimacy and closeness to that person. This research aims to investigate the effect of social activity and social media use on the size of SBH-like social network layers, social satisfaction and loneliness. This study was conducted at the University of Manchester and the participants were divided in three groups which had different social network layers. In more detail, the groups were categorized into groups, in the order of their intimacy level. The first group with the most intimacy was consisted of ~5 persons, the lesser intimate group was consisted of ~15 persons and the least intimate group was consisted of ~150 people.

Analyses of this particular research showed that, the group with the most intimacy (~5) was more closely connected with offline social activities, and social media influenced their relationships not considerably. Social media use influenced the groups, which had less intimacy (~15) and also the group which was a pure network with no any intimacy (~150). In conclusion, this research showed that, spending time on offline social activities affected the feel of social satisfaction by the group, which had the highest degree of intimacy, and spending time on social media was also associated positively, but it was related to offline relationship intensity. Whereas spending time online has affected the two groups with lesser intimacy positively, in the sense of social satisfaction.

The study *"The Benefits of Social Technology Use Among Older Adults Are Mediated by Reduced Loneliness"* Chopik (2016) investigates the use of technology for social reasons and its association with psychological and physical health. And focuses particularly on older adults as focus group. Chopik (2016) examines also specifically the benefits of technology use in older adults. The use of technology was measured by technology-based behaviors as using a smartphone, SNSs online video/phone calls, using e-mail and chatting/instant messaging. Attitude of the focus group towards the benefits and usability of technology was also measured. According to Chopik (2016), "a growing number of studies have revealed some mental health benefits that come along with using technology and the Internet more often" (p. 551). Also Chopik (2016) argues that researches about technology, conducted previously, are focusing more "digital divide", a term referred to the unevenness in using technology between younger and older generations.

In the case of this particular research, the focus group in general had positive attitudes towards technology. Chopik (2016) notes that, older people think positively about socializing through technology, as it makes it easier for them to reach people, stay in connection with people they like and to meet new people. The increase in the use of

technology for social purposes was linked to better self-rated health, higher subjective well-being, reduced chronic illnesses and reduced depressive symptoms. In addition, the association between the use of technology for social purposes and physical and psychological health provided a decrease in loneliness.

As conclusion about this particular research, the use of technology for social purposes encouraged older people to build close relationships. And close relationships were found to play an important role in physical health and psychological well-being. Chopik (2016) also notes that, reports show that, technology is being used by older people to prevent the feeling of loneliness. Ultimately, technology was found to have the potential of maintaining successful relationships.

In the research *"Will Online Chat Help Alleviate Mood Loneliness?"* Hu (2009) investigates the association between internet use for social purposes and loneliness. According to Hu (2009), there are reports about the influence of internet use and its relation with psychological well-being, which conclude that there is a positive correlation. In other words, "some studies showed that more Internet use led to less social involvement and more depression and loneliness" (Hu, 2009, p.219). But Hu (2009) notes also, that there are studies which concluded the opposite, namely, studies which showed that internet users had wider online communities, therefore wider social networks than internet non-users.

According to Hu (2009), researchers who concluded that internet use leads to more deficits in psychological well-being tie this phenomena to "time displacement effect", a term that refers to inefficient use of time, and a lack of balance between online and offline relationships. Additionally, these researchers acknowledge that "online relationships are weak and therefore easy to break because of the infrequent and irregular contact and narrow focus" (Hu, 2009, p.219). Another group of researchers defend their standpoint by focusing on the advantages of online communication, and say that internet expands one's reachability to the whole world and the physical distance is not a big problem where it can enable to bring like-minded people together.

This particular survey covered a loneliness test and an experiment considering five conditions which might influence the feeling of loneliness of the research participants. These five conditions consist of face-to-face chatting, instant message chatting, watching a video, writing assignments, and "do nothing". As result of this particular research, participants reported an increase in the feeling of loneliness after an online chat. The degree of feeling lonely after an online chat was higher, than a face-to-face conversation.

The research *"News Dissemination Gratifies Needs for Social Media Users"* by Teresa & Chad (2016), examines if individuals interpreting and consuming attitudes about news articles are influenced, when they receive these news articles from their social media friends. In other words, it is being investigated, when a social media user posts a news article with his own interpretation, and if this subjective interpretation receives a positive feedback from his online social circle, in terms of the tendency to agreement on that particular view.

Teresa & Chad (2016) note that, after the emergency of social media platforms, in particular Facebook, the way people use media has changed. Previously, consumers of media used to learn new information through "connecting", but with the change in the media arena, people started to learn new information through "interaction", which occurred with the rise of social media platforms. Teresa & Chad (2016) also note that, this opened the way for people to exchange ideas with their online social circles, which in the end can lead to the fact that people are more into knowing about different ideas, rather than having only fixed opinions about certain topics. This shows that, social media platforms have in some degree a positive effect on critical thinking and preventing cognitive dissonance.

From participants gathered data showed that the most striking motivation of SNSs use was "reading posts", "keeping in touch" and "browsing". In other words, users use the SNSs, gratify their needs mostly with these activities. These top three gratifications, are in relation with the fact that "individuals on social media look for specific posts, photos, videos, etc. to become informed on what's popular with their friends within their social circles" (Teresa & Chad, 2016, p.123). In this context, a user who posts about news articles on social media, will give an interpretive perspective on the news, which in the end will be absorbed by that person's online friends. Results of this particular research showed that, news articles posted by online friends, indeed affects users' knowledge about news events and it also affects how the users consume social media.

In the study *"Social media and political discussion: when online presence silences offline conversation"* Hampton, Shin, & Lu (2017) examined the association between the use of social media, the strength of attitude and perceived opinion in relation with social ties. The study also examines the willingness of discussion about a political issue in online and offline contexts.

Some social media platforms are designed more to provide an anonymous social interaction, whereas other social media platforms from design, allow users to be closely connected to the relationships and activities of everyday life. Because social media becomes increasingly interconnected with offline occurrences, and these occurrences landing in social media wherein it circulates for a sometime, the influence of social media is likely to affect daily conversations about political issues, in terms of online and offline conversations (e.g. home, workplace, social

gatherings with friends, community meetings, and on social network sites). Hampton, Shin, & Lu (2017) note that, there are very few researches, which focus on the effects of social media in daily conversations.

The results of the study show that, the use of social media has less reflection in many offline cases. Because in most cases, users have perceived opinion agreement with their social ties, therefore this reduces the tendency of having a discussion about any political issue in daily conversations. Hampton, Shin, & Lu (2017) also note that, in some cases a spiral of silence can occur, “where willingness to discuss political issues is indirectly hindered as a result of higher levels of perceived disagreement with social ties” (p.1091). So, as a part of spiral silence, even users who use social media platforms actively as a way of sharing their opinions in political issues, tend not to speak about politics in their daily conversations, as they are already aware of their disagreement with their social circles. But as an exception, those with strong position to a political issue are immune to this standpoint.

In the research “*Social Networking Sites, Depression, and Anxiety: A Systematic Review*”, Seabrook, Kern, & Rickard (2016) identify and summarize researches, which are conducted between years 2005 and 2016. This particular study reviews researches, which are in the context of SNSs, and associated with anxiety and depression. The study also reviews the researches, which are analyzing the evaluation of mental illnesses.

This research goes along the idea that, SNSs have become to play an important role in modern culture. So, it aims to identify and summarize other researches, which are examining anxiety and depression in the context of SNSs. According to Seabrook, Kern, & Rickard (2016), there are different views about the association between SNSs and anxiety and depression, where some researchers think that the use of SNS can protect from mental illnesses, as they provide people to build social relations and maintain connections. And on the other hand, some researchers have the opinion that, SNSs can affect mental health negatively, because it can lead people to have miscommunication and mismanaged expectations, also maladaptive dispositions which can lead individuals to feel a greater degree of isolation. Seabrook, Kern, & Rickard (2016) also note that, SNSs can have positive effects on mental health, as well as at the same time can affect people negatively, as it would be the case in the real social environment.

The results of the study show that, social support, social connectedness and positive interactions on the SNSs were commonly in association with lower degrees of anxiety and depression. Overall, the use of SNS was in relation with life satisfaction, increase in self-respect and decrease in loneliness. As conclusion of this particular study, the findings revealed many mixed associations between anxiety, depression and the use of SNS. The use of SNS strongly correlates with mental illness and well-being. Though, the quality of social factors on the SNS environment generally determine the effects on mental health, either negatively or positively. As it would be likely the same case in the physical social environment.

In the research “*Comparing Facebook users and Facebook non-users: Relationship between personality traits and mental health variables - An exploratory study*” Brailovskaia & Margraf (2016) examine the relationship between personality characteristics and mental health variables. And in this context, compare Facebook users with Facebook non-users.

According to Brailovskaia & Margraf (2016), certain personality traits have indeed a strong association with online social behavior, where extraverted individuals spend the most time on SNSs and have considerably long online-friend lists. On the contrary, introverted individuals are spending less time on SNSs and have fewer interactions. Brailovskaia & Margraf (2016) also note that, studies, which examined the relationship between internet use and mental health variables found, that there is a positive correlation between internet use and mental disorders. Brailovskaia & Margraf (2016) acknowledge that, studies, comparing users and non-users of a particular SNS and the effects of these SNS on individual’s personality traits are not common. In this context, this particular research is aimed at to filling this gap in the literature by focusing on the most popular social media platform and compares the personality traits of the platform’s users and non-users. Therefore, Facebook being the most popular social media platform, makes the results of this research valuably considerable.

Results of the study show that, Facebook users had considerably higher scores on narcissism, extraversion and self-regard compared to Facebook non-users. Additionally, Facebook users showed higher results in social support, life satisfaction and subjective-rated happiness in comparison to Facebook non-users. Whereas, Facebook non-users showed significantly higher values of depression symptoms and conscientiousness compared to Facebook users. As conclusion regarding this particular research, the results indicate that, in comparison of the two groups, Facebook users contain personality traits, which can be protective for mental health.

Conclusion

We mentioned various aspects about social media platforms and different views about how social media is effective in different ways, when it comes to influencing social relations and social perceptions in general.

As social networking sites are relatively new in our era, there are many studies conducted in this area. However, there still is a deeper investigation required, for which some time is needed for that to be reached (Pantic, 2014).

According to Pantic (2014), social media indeed has a strong correlation with the mental health of the users. In other words, the use of social media has a correlation with the mental health of the user and also the contrary is the case, where mental health of the user characterizes the way social media is being approached. Which leads to our research question Q1 that is concerned with this case and supports our hypothesis H1, consequently.

The effects of image-based social media sites are considerably different from text-based platforms. Pittman & Reich (2016) found that, the more someone uses image-based social media platforms, the likelihood of subjective feeling in satisfaction with life and happiness increases, whereas loneliness decreases. Pittman & Reich (2016) also note that, text-based social media platforms don't seem to affect loneliness and happiness in a positive manner, and if any, increased use of text-based media may intensify loneliness.

Discussion

Visual images are concrete and are most likely to invoke the emotions in the receiver, that the sender of that particular image has intended. Goh, Ang, Chua, & Lee (2009) acknowledged that, people tend to communicate mostly with photos rather than other media possibilities, i.e. videos or audio, because it requires lesser sending time and provides the intended message accurately. In the sense of social presence, images seem to deliver intimacy and also at the same time, doing this in an immediate manner, which are both important parts of social presence, as explained above.

On the other hand, text messages or posts, seem to deliver only one side of the aspects of social presence, which is only the immediacy side. Therefore, text-based communication may not be as powerful as image-based communication, since it doesn't provide the same degree of intimacy.

In conclusion, image-based communication seems to be more likely to satisfy people's emotions, as this kind of communication provides relatively closer to reality, and interpersonal communication experience. In contrast, text-based communication seems to be less satisfying in comparison to real live social presence phenomena, which means a lack in affecting emotional and consequently mental well-being.

References

- Allen, K. A., Ryan, T., Gray, D. L., McInerney, D. M., & Waters, L. (2014). Social Media Use and Social Connectedness in Adolescents: The Positives and the Potential Pitfalls. *The Australian Educational and Developmental Psychologist*, 31(01), 18–31. <https://doi.org/10.1017/edp.2014.2>
- Altın, M., & Kıvrak, A. O. (2018). The Social Media Addiction Among Turkish University Students. *Journal of Education and Training Studies*, 6(12), 13. <https://doi.org/10.11114/jets.v6i12.3452>
- Brailovskaia, J., & Margraf, J. (2016). Comparing Facebook users and Facebook non-users: Relationship between personality traits and mental health variables - An exploratory study. *PLoS ONE*. <https://doi.org/10.1371/journal.pone.0166999>
- Chen, G. M. (2011). Tweet this: A uses and gratifications perspective on how active Twitter use gratifies a need to connect with others. *Computers in Human Behavior*, 27(2), 755–762. <https://doi.org/https://doi.org/10.1016/j.chb.2010.10.023>
- Chopik, W. J. (2016). The Benefits of Social Technology Use Among Older Adults Are Mediated by Reduced Loneliness. *Cyberpsychology, Behavior, and Social Networking*, 19(9). <https://doi.org/10.1089/cyber.2016.0151>
- Conner, M., & Norman, P. (2017). Health behaviour: Current issues and challenges. *Psychology & Health*, 32(8), 895–906. <https://doi.org/10.1080/08870446.2017.1336240>
- Eisenman, R. (1983). Loneliness. A Sourcebook of Current Theory, Research and Therapy. Letitia A. Peplau & Daniel Perlman (Eds.). Wiley-Interscience, New York, 1982. 430 pp. \$37.95. *Journal of Personality Assessment*, 47(6), 661–662. https://doi.org/10.1207/s15327752jpa4706_16
- Ethridge, D. (2004). *Research Methodology in Applied Economics* (2nd ed.). Wiley-Blackwell.
- Fox, W., & Bayat, M. S. (2008). *A Guide to Managing Research*. Juta Academic. Retrieved from <https://books.google.com.tr/books?id=las-GgOpe-8C>
- Goh, D. H. L., Ang, R. P., Chua, A. Y. K., & Lee, C. S. (2009). Why we share: A study of motivations for mobile media sharing. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 5820 LNCS, 195–206. https://doi.org/10.1007/978-3-642-04875-3_23
- Green, M., & Rossall, P. (2013). *Digital Inclusion Evidence Report*. London, UK. Retrieved from https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/reports-and-briefings/active-communities/rb_sept13_age_uk_digital_inclusion_evidence_review.pdf
- Griffin, J. (2010). *The Lonely Society? London: Mental Health Foundation*. Retrieved from

- https://www.mentalhealth.org.uk/sites/default/files/the_lonely_society_report.pdf
- Gunawardena, C. N. (1995). Social Presence Theory and Implications for Interaction and Collaborative Learning in Computer Conferences. *International Journal of Educational Telecommunications*, 1(2), 147–166. Retrieved from <https://www.learntechlib.org/p/15156>
- Hampton, K. N., Shin, I., & Lu, W. (2017). Social media and political discussion: when online presence silences offline conversation. *Information Communication and Society*. <https://doi.org/10.1080/1369118X.2016.1218526>
- Helbostad, J., Vereijken, B., Becker, C., Todd, C., Taraldsen, K., Pijnappels, M., ... Mellone, S. (2017). Mobile Health Applications to Promote Active and Healthy Ageing. *Sensors*, 17(3), 622. <https://doi.org/10.3390/s17030622>
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review. *Perspectives on Psychological Science*, 10(2), 227–237. <https://doi.org/10.1177/1745691614568352>
- Hu, M. (2009). Will Online Chat Help Alleviate Mood Loneliness? *CyberPsychology & Behavior*. <https://doi.org/10.1089/cpb.2008.0134>
- Hughes, M. E., Waite, L. J., & Cacioppo, J. T. (2004). A Short Scale for Measuring Loneliness in Large Surveys, 26(6), 655–672. <https://doi.org/10.1177/0164027504268574>
- Jin, B., & Park, N. (2013). Mobile voice communication and loneliness: Cell phone use and the social skills deficit hypothesis. *New Media and Society*. <https://doi.org/10.1177/1461444812466715>
- Kagan, J., Bornstein, M. H., & Lerner, R. M. (2017). Human behaviour. Retrieved November 14, 2018, from <https://www.britannica.com/topic/human-behavior>
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and Gratifications Research. *The Public Opinion Quarterly* VO 37, (4), 509. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.2747854&lang=tr&site=eds-live&scope=site&authtype=ip,uid>
- Malik, A., Dhir, A., & Nieminen, M. (2016). Uses and Gratifications of digital photo sharing on Facebook. *Telematics and Informatics*, 33(1), 129–138. <https://doi.org/10.1016/j.tele.2015.06.009>
- McDaniel, B. T., & Coyne, S. M. (2016). “Technoference”: The interference of technology in couple relationships and implications for women’s personal and relational well-being. *Psychology of Popular Media Culture*, 5(1), 85–98. <https://doi.org/10.1037/ppm0000065>
- Monica, A., & Jingjing, J. (2018). Teens, Social Media & Technology 2018. *Pew Research Center*, (May).
- Nadkarni, A., & Hofmann, S. G. (2012). Why do people use Facebook? *Personality and Individual Differences*, 52(3), 243–249. <https://doi.org/10.1016/j.paid.2011.11.007>
- Nasaescu, E., Marín-López, I., Llorent, V. J., Ortega-Ruiz, R., & Zych, I. (2018). Abuse of technology in adolescence and its relation to social and emotional competencies, emotions in online communication, and bullying. *Computers in Human Behavior*, 88(June), 114–120. <https://doi.org/10.1016/j.chb.2018.06.036>
- Nicolaisen, M., & Thorsen, K. (2014). Who are Lonely? Loneliness in Different Age Groups (18–81 Years Old), Using Two Measures of Loneliness. *The International Journal of Aging and Human Development*, 78(3), 229–257. <https://doi.org/10.2190/AG.78.3.b>
- Number of smartphone users worldwide from 2014 to 2020 (in billions). (2018). Retrieved November 14, 2018, from <https://www.statista.com/statistics/330695/number-of-smartphone-users-worldwide/>
- Olds, J., & Schwartz, R. (2011). The Lonely American : Drifting Apart in the Twenty-first Century. In *The Lonely American : Drifting Apart in the Twenty-first Century* (Vol. 98, pp. 51–57). <https://doi.org/10.1177/0027432111415538>
- Pantic, I. (2014). Online Social Networking and Mental Health. *Cyberpsychology, Behavior, and Social Networking*, 17(10), 652–657. <https://doi.org/10.1089/cyber.2014.0070>
- Perlman, D., & Peplau, L. A. (1981). Toward a Social Psychology of Loneliness. In *Personal Relationships in Disorder* (pp. 31–56).
- Pittman, M., & Reich, B. (2016). Social media and loneliness: Why an Instagram picture may be worth more than a thousand Twitter words. *Computers in Human Behavior*, 62, 155–167. <https://doi.org/10.1016/j.chb.2016.03.084>
- Quan-Haase, A., & Young, A. L. (2010). Uses and Gratifications of Social Media: A Comparison of Facebook and Instant Messaging. *Bulletin of Science, Technology & Society*, 30(5), 350–361. <https://doi.org/10.1177/0270467610380009>
- Rico-Uribe, L. A., Caballero, F. F., Olaya, B., Tobiasz-Adamczyk, B., Koskinen, S., Leonardi, M., ... Miret, M. (2016). Loneliness, social networks, and health: A cross-sectional study in three countries. *PLoS ONE*, 11(1).

The Effects Of Using Smartphones On The Feeling Of Loneliness: Literature Review

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Abstract

There is a rapid increase in informatics and communication technologies whole the world. Parallel to this growth, diversification and innovation of smart phones are quite active. Particularly teenagers are very active in social media through these smart phones. Then it is surprising that, in spite of this enhanced interconnectivity, young adults may be lonelier than other age groups, and that the current generation may be the loneliest ever. The usage of smart phones among adolescents might be considered by some people as an increase communication network while others might think that they reduce communication and make them more isolated. The study was carried out to perceive the effects of using smart phones on the feeling of loneliness based on the literature review. The reason why this study was conducted especially with freshman students is that it's the important age range that plays a major role in the formation of the characters of the youth, which is the transition period from childhood to adulthood.

Keywords: sense of loneliness, smart phone addiction, teenage, social media effects, freshman

1. Introduction

The concept of communication technologies is often used as a concept that covers all technologies in the field of communication. New communication technologies, also known as information technologies, are the result of developments in three key areas such as computers, telecommunications and microelectronics (Tekin, 2012, p. 4).

In fact, the first users were so impressed by the easy access to the information that they visited the Internet for 4-5 hours and began to enjoy the information needed or not. Davis, Smith, Rodrigue and Pulvers (1999) called as a *"masturbation with the information"* (as cited in Doğan, Işıklar, & Eroğlu, 2010, p. 107).

Along with the rapidly developing technology, important design changes have been made in the dimensions of the products, especially when we consider the change of devices such as the first computer or the first telephone, we understand the importance of the studies in this field. In recent years, with the rapid developments in technology, the demand for smart phones and tablets, which can fit even in our pockets, is growing rather than huge computers. As a result, we can say that the interest in desktops and laptops in the world is now decreasing and mobile technologies, especially smart phone ownership, are increasing (Güler, Şahinkayasi, & Şahinkayasi, 2017, p.188 - 189).

Worldwide and in Turkey, mobile phone number of the show much greater increases than estimated users, and indispensable to become a part of daily life, this technology also requires closely monitored and questioned the changes in cultural life. This situation may cause individuals to feel they cannot be mobile phones (Tekin, 2012, p.2). This dependence is considered to be more especially among young generation (Öztunç, 2013).

There are philosophers who claim that technology has both good outcomes and bad outcomes. Surely, the importance of technology cannot be underestimated and its effects on human life cannot be ignored. Today's people are fully involved in the process of technological change and development. Smart phones offer a whole world that can fit into our pockets. Internet has brought innovations which able to fit all segments of society.

Global System for Mobile Communications (GSM) sector is developing very fast in the Turkey as in all over the world. In addition to verbal communication, telephones are now used for many different purposes, such as through chat rooms, message boards, multiuser domains (MUDs). People may meet with someone else who has similar interests and these online relationships may develop into real-world relationships surfing the internet, exchanging e-mails (Tekin, 2012, p. 1; Shaw & Gant, 2002, p. 158).

The hardware and software of smart phones are dramatically improving and various applications are being developed and these available to suit our lifestyle. It is natural for smart phones to become increasingly popular due to new features added to smart phones and easy portability. With smart phones, besides the features of normal phones; there are also many applications such as image and sound recording, transmission of data, internet access, e-mail, transmission of instant messages, display of digital content, mobile applications, social media tools, games

- <https://doi.org/10.1371/journal.pone.0145264>
- Rubin, A. M., & Haridakis, P. M. (2001). Mass Communication Research at the Dawn of the 21st Century. *Annals of the International Communication Association*, 24(1), 73. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=edo&AN=ejs44212002&lang=tr&site=eds-live&scope=site&authtype=ip,uid>
- Ruggiero, T. E. (2000). Uses and Gratifications Theory in the 21st Century. *Mass Communication and Society*, 3(1), 3–37. https://doi.org/10.1207/S15327825MCS0301_02
- Seabrook, E. M., Kern, M. L., & Rickard, N. S. (2016). Social Networking Sites, Depression, and Anxiety: A Systematic Review. *JMIR Mental Health*. <https://doi.org/10.2196/mental.5842>
- Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. London; New York: Wiley.
- Siciliano, V., Bastiani, L., Mezzasalma, L., Thanki, D., Curzio, O., & Molinaro, S. (2015). Validation of a new Short Problematic Internet Use Test in a nationally representative sample of adolescents. *Computers in Human Behavior*, 45, 177–184. <https://doi.org/10.1016/j.chb.2014.11.097>
- Skues, J. L., Williams, B., & Wise, L. (2012). The effects of personality traits, self-esteem, loneliness, and narcissism on Facebook use among university students. *Computers in Human Behavior*, 28(6), 2414–2419. <https://doi.org/https://doi.org/10.1016/j.chb.2012.07.012>
- Smith, A. (2014). *Older Adults and Technology Use*. Pew Research Center. Washington, DC, USA. Retrieved from <http://www.pewinternet.org/2014/04/03/older-adults-and-technology-use/>
- Smith, A., & Anderson, M. (2018). Social Media Use in 2018. *Pew Research Center*, (March). Retrieved from www.pewresearch.org
- Sundar, S. S., & Limperos, A. M. (2013). Uses and Grats 2.0: New Gratifications for New Media. *Journal of Broadcasting and Electronic Media*, 57(4), 504–525. <https://doi.org/10.1080/08838151.2013.845827>
- Sutcliffe, A. G., Binder, J. F., & Dunbar, R. I. M. (2018). Activity in social media and intimacy in social relationships. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2018.03.050>
- Teresa, V., & Chad, M. (2016). News Dissemination Gratifies Needs for Social Media Users. *Online Journal of Communication and Media Technologies*.
- Thayer, S. E., & Ray, S. (2006). Online Communication Preferences across Age, Gender, and Duration of Internet Use. *CyberPsychology & Behavior*, 9(4), 432–440. <https://doi.org/10.1089/cpb.2006.9.432>
- Yang, C. (2016). Instagram Use, Loneliness, and Social Comparison Orientation: Interact and Browse on Social Media, But Don't Compare. *Cyberpsychology, Behavior, and Social Networking*. <https://doi.org/10.1089/cyber.2016.0201>

etc. As a result, many people in this modern society are extremely willing to acquire a smart phone (Çakır&Oğuz, 2017; Kwon et al., 2013, p. 1 - 2)). Due to very rich programs they contain, are thought to isolate people since they personalize them, and worst of all, render them addicted. New Generation mobile phones open the windows of a new dimension to users(Tekin, 2012, p. 6).

According to the We Are Social report (2016), individuals with smartphones make up 56% of Turkey's population, and the number of active mobile social network users has reached 36 million people, in other words, 45% of the population, in Turkey. Furthermore, the number of people using social media activity on their mobile devices has increased by 13% percent over the last one year in Turkey. Therefore, it might seem fair to say that people are now migrating to mobile devices for socialization, entertainment, and other needs (Gezgin, Hamutoglu, Sezen-Gultekin, & Ayas, 2018, p. 359).

Devices, smart phones and the internet, in particular, are being extensively used all over the world. These tools of communication take all the people, whether young or old, under their control and are also being used to satisfy a number of needs in addition to communication. These tools offering many activities such as watching television, playing games, instant messaging etc., render them addicted. (Öztunç, 2013, p. 456-457).

The combination of faster mobile connections and improved access to smartphones has delivered another of the key findings of 2017's report. More than half of all web pages are now served to mobile phones (We Are Social, 2017).

The use of mobile phones is becoming increasingly common among adolescents. This increased use of mobile phones affects the social communication of young people, and these devices are not only for communication but also as a status symbol and identity element (Tekin, 2012). Shaw and Grant research (2002) shows that there is no certain internet user. Although internet use is linked generally with younger generations, a 1998 study found that only 6% of users were under 21, while in 2000, 4 million senior citizens were reportedly online.

Especially in school-age adolescents, excessive use of internet and computer has a negative effect on both academic and personal development of adolescents. Problematic internet use can make the person addictive. Research on adolescents has shown that problematic internet use affects adolescents intensively (Doğan et al., 2010, p. 108).

On the other hand, some of the disadvantages of overuse cell phone usage include hindering classroom performance, distraction and an annoyance to fellow classmates and instructors, because of the lack of attention, increasing dropout rates, and fewer graduates for students, the anxiety students experience because of their constant need to have their phone on them at all times. Therefore, it can be claimed that multiple psychological effects emerge from smart phone ownership and usage. For instance, Bian and Leung (2014) observed that the higher one scores in loneliness, the higher the possibility one would be addicted to smart phones (as cited in Gezgin et al., 2018, p. 359). While the concept of Internet addiction was at the forefront, the concept of smart phone addiction has now been replaced by this concept(Kwon et al., 2013).

Technology adoption has been the subject of various theories(Gezgin et al., 2018; Güler et al., 2017; Kwon et al., 2013; Liu, Desai, Krishnan-Sarin, Cavallo, & Potenza, 2011; Lopez-Fernandez, Honrubia-Serrano, Freixa-Blanxart, & Gibson, 2014; Mert & Özdemir, 2018; Moody, 2001; Öztunç, 2013; Siomos, Dafouli, Braimiotis, Mouzas, & Angelopoulos, 2008).

According to Shaw and Gant research (2002), loneliness, depression, and daily stress were positively linked to greater Internet usage when researchers controlled for possible mediating variables. The researchers used path analyses to analyze each of these findings and determined that the Internet caused the observed effects (p. 158)

Today, the phenomenon of socialization has gone beyond the definition of the individual with the physical conditions, the people and places around it. With the development of technology, this concept has found itself in different fields. The use of social media has become known as a new form of socialization when it becomes an object in the construction of social reality (Yüzüncüyıl, Buluş, & İşman, 2016, p. 611-612).

Considering the increasing role of smartphone use play in everyday life and the potential dangers of loneliness, the aim of the present research is to determine the relationship between use smartphones and feeling lonely. Unfortunately, in the world, while carried out research on the internet and the use of negative effects, studies conducted in Turkey are quite limited. Therefore, the purpose of this study is to reveal the problematic internet usage levels of adolescents and smart phone addiction.

2. Communication Technologies and Social Change

Worldwide and in Turkey, the number of mobile phone users showing much greater increases than estimated and become an indispensable part of daily life. This technology requires the questioning of changes in cultural life (Tekin, 2012).

More than half the world now uses a smart phone, almost two-thirds of the world's population now has a mobile phone and more than half of the world's web traffic now comes from mobile phones (We Are Social, 2017). With the rapidly developing innovations in the field of technology and especially after the 21st century, we

feel strongly the effect of the internet everywhere in our lives. As well as all over the world, we see the effects of the wide internet in terms of Turkey besides. According to TUIK (Turkish Statistical Institute [TUIK], 2018); Internet usage of individuals was 72.9% in 2018. In April 2018, 82.5% of households had a broadband Internet connection. In terms of broadband connection types, while 44.5% of households used a fixed broadband connection (ADSL, cable, optic fibre, etc.), 79.4% of households used the mobile broadband connection to access the Internet. 78.3% of households had a broadband Internet connection in the previous year in Turkey.

New communication tools attract people, from any age and statute and one of them is smart phones (Doğan et al., 2010). Mobile phone usage is becoming more and more common in adolescents (Tekin, 2012). As the access to these technologies increases, times spent and interaction with these technologies will increase even at very young ages (Güler et al., 2017). Upon review of the above information, problematic mobile phone usage may adversely effects adolescents whom may easily be influenced by the characteristics of the period they are in and constitute an important risk group (Çakır & Oğuz, 2017; Öztunç, 2013).

As Moody said; "The internet is so new that little is known about those who use it a great deal, or whether it can effect behaviour or reflect personality traits" (2001, p. 393). However, our knowledge is limited if the innovations impress masses or impulse them.

However, the direction of this relationship is uncertain. Two contrast theses have been submitted to describe the association between loneliness and Internet use: extreme Internet use causes loneliness vs. lonely individuals are more likely to use the Internet extremely (Mert & Özdemir, 2018; Moody, 2001). As in every addiction, smart phone addiction is common also in individuals alone. To prevent this, individuals should first be made aware of the ways of coping with the feeling of loneliness (Mert & Özdemir, 2018).

The subject of loneliness which is at the forefront of these effects forms the foundation of this research. In fact, although the means of communication emerged to increase communication among people, in this study, it was pointed out that the sense of loneliness created by smart phones which is one of these communication tools. One of the issues identified as a major problem is the spread of the view that children and young people move away from society and become lonely due to such environments.

3. Problematic Smart Phone Usage and Social Changes on Adolescents'

As digital technologies continue to make communication channels and platforms more accessible and effortless, human beings are more related to each other than ever before (Pittman & Reich, 2016, p. 155). The standout finding of the 2017 year report is that more than half of the world's population now uses the internet. It's not only the internet that's growing rapidly but also more than half the world now uses a smart phone. In addition 2017 statistics, almost two-thirds of the world's population has a mobile phone and more than half of all mobile connections around the world are broadband (We Are Social, 2017).

New communication tools attract people, from any age, statute and one of them is smart phones. Now people have begun to spend most of their time with new communication technologies in order to obtain information or to spend their leisure time. Our daily habits at home, work or our relationships with the environment are determined according to the time that we spare for these technologies in our daily lives (Tekin, 2012, p. 4).

The development of technology has established significant distinguish in people lives, particularly over the past few years. It has not only changed the daily routine but has also changed the cultures of societies. (Morahan-Martin & Schumacher, 2003). More specifically, in tandem with an expansion in the prevalence of mobile phone use, certain side effects related to extend usage of mobile phones have come into the picture (Gezgin, Hamutoglu, Sezen-Gultekin, & Ayas, 2018, p. 358). According to TUIK; computer and Internet usage of individuals aged 16-74 were 59.6% and 72.9% respectively in 2018. These proportions were 56.6% and 66.8% respectively in 2017. Almost three-quarters of the world's population use a mobile phone and the overall trend is clear: mobile phones are now an indispensable part of everyday life for most people around the globe (We Are Social, 2017).

Although smart mobile phones are widely used in daily life and work well, they bring with them a number of problems. Particularly young people are becoming addicted to the smart phones. They have a huge impact on the birth of technology-filled world.

Especially teenagers, who use their phone for social networking sites and messaging, want to keep their phones hands on or beside them even when they are not using them. Unfortunately most young people cannot limit and control the use of phones. When they are in the cinema, with their family or friends, they even use the phone in the toilet or in the bathroom and when they don't use it, they feel uncomfortable, missing, and uneasy (Doğan et al., 2010; Kwon et al., 2013).

The consequences of smart phone addiction may be as bad as the consequences of substance abuse. Because first, you will get away from your family, friends, social and cultural activities, and then you will experience behaviours such as depression, loneliness, hypersensitivity, low self-esteem, guilt and despair due to the failure of your interpersonal or self-relationship with yourself. Mert and Özdemir (2018) emphasized, there are numerous studies confirming that loneliness is more intense at young ages. It was proved in the results of research that adolescence is the period when loneliness was more intense than other age groups (p. 103). Also Erikson said

that it is the period of psychosocial development in which adolescents form identity and are the most vulnerable to environmental impacts while they form this identity (as cited in Doğan et al., 2010).

We can say that the young people who use excessive mobile phones are risky for addiction. Loss of control over the use of technology and unpredictable use of technology can lead to serious physical and psychological damage. In general, excessive and unconscious consumption causes a negative change in our country as in the whole world (Tekin, 2012).

Day by day, new technologies are developed and made available to the public to address the needs of society and people. Technological improvements will continue to progress at any moment. With the new technological developments they have developed, companies are approaching their customers more closely. They understand the demands of customers in changing conditions more clearly and adapt to developments in this framework.

Each firm has different technological products to test for future generations, and this cycle is rapidly continuing dramatically. Innovation is a process that begins with encountering new ideas and technologies both individually and in social terms and results in adopting or rejecting these ideas and technologies. The concept of innovation spread aims to model the spread of new ideas and technologies within a culture (Chang, 2010).

The first studies on this subject have started in the field of communication with the thesis that a social system is spread over certain channels among its members and then different disciplines have been involved with the interest in economics and management. The first model of the diffusion of innovations is developed by Rogers. He defined the model as “the process by which an innovation is communicated through certain channels over time among the members of a social system” (Rogers, 2010).

An innovation must be self-sustained on a large scale. There is a critical point for the size of the mass reached and it can be said that after reaching this point, the innovation has reached a sustainable level.

In recent years, where research on the internet and social media addiction has increased, human beings have been confronted with serious problems (Chang, 2010). This dependency ratio has increased rapidly, especially by providing internet access easily via mobile phones. From a psychological point of view, this addiction can cause many problems, ranging from behavioural disorder to loss of relationships. Again, Internet addiction causes people to be isolated from society, weaknesses of relationships, decrease in trust and asocialism (Öztunç, 2013; Tekin, 2012). As a result of the fact that the existing relations start to gain a virtual dimension, the existing relations are being e-social and they are dragged into a process of communication that is not natural. In addition, the most serious side effects of Internet addiction that cause behavioural disorder include anxiety, anxiety, depression and stress (Shaw & Gant, 2002). People who isolate themselves in the mobile world are trying to design their behaviour and lives according to social networks. After a while, people living in the real world with the difficulty of separating the real world, if not treated can lead to severe psychological trauma may result.

4. Does Smart Phone Really Felt Lonelier?

With the rapidly developing technology, the purpose of using modern technology and its tools are changing. On the one hand, the use of this changing technology meets our needs, on the other hand, bring up some problems.

In Öztunç (2013) research aimed to determine the feelings of the loneliness of adolescents. In Öztunç study, a notable distinction was observed among the feeling of shyness and internet use (2013). It has seen that pupils, who do not use the internet very often in their regular lives, feel much shyer than students who use it. It can be translated that using the internet decreases the feeling of shyness. There were not found significant differences between the feeling of loneliness and internet use variable. In addition, there were not found meaningful discrepancies between the place of residence, students' grade level and problematic mobile phone use and internet use variables.

Morgan and Cotten's research was an internet survey of college beginners at Mid-Atlantic Mid-Sized University was conducted during the spring of 2002 (2003). They were tried to determine the effect of Internet activities on social aspects and well-being. Unfortunately, a few studies consider that these internet activities may be related to depression. Conclusions show that increased e-mail and instant messaging hours are linked to reduced depressive symptoms. On the contrary an increased internet hour is associated with increased depressive signs. Morgan and Cotten hypothesized that higher levels of internet usage should be associated with lower levels of depressive symptoms, while higher levels of non-communication Internet usage should be associated with increased depressive symptoms (2003). Also, these findings recommend those male students communications, even if by e-mail, is important for reducing depression levels. These conclusions recommend that using the Internet for communication purposes has useful consequences on well-being among college beginners, while non-communication internet usage may be connected with adverse effects on well-being.

Since more people are connected to the internet, researchers have increased the work on the effects of the internet. One of these researches, Morgan and Cotten's study is an important study in terms of comparing the results of this research and considering each aspect with the result that smart mobile phone use increases both social interaction and decreases the sense of loneliness, decreases social insolvency and increases loneliness (2003).

In Doğan, Işıklar, & Eroğlu research, (2010) conducted to observe adolescents' problematic internet usage according to variables, such as gender, internet access situations, interests, their comments about going to an

internet café. According to the results of Doğan and his friends study, it has been revealed that boys and girls use the internet for different reasons(2010). While the girls mostly connected to the internet with the aim of creating e-mail and social relations; men use the internet for playing games, virtual sex, reading news, chatting, meeting new people, accessing illegal materials, music and downloading programs. Girls are supported by the results that are more effected by the negative results of the internet than men. Also, considering the culture of the location, it can be thought that girls see the internet as the only environment in which they will feel free and easily communicate with people and express themselves. Based on these results, it can be said that girls are more risky in terms of problematic internet usage behaviour than males.

Ownership of Japanese mobile phones called *Keitai* has increased quickly day by day among young people. Kamibeppu and Sugiura's research determined *Keitai* usage of younger high school students and consider the effect of using it on their psychology, particularly on their social interaction as friendship (2005). Findings from research conducted that students used *Keitai* much more often for e-mail than as a telephone. Most of them transferred e-mails between classmates. Students ascertained that their own *Keitai* was useful for their friendship and well-being. Students considered that they could not live without their own *Keitai*. The surveyed students positively estimated the effects of using *Keitai* on relations with friends. The students who have a large number of friends are used e-mail more often than those who did not. As a result, usage of *Keitai* mail effectively broadens their inter-personal relations.

Kamibeppu and Sugiura's research will be an important source of literature for this research in addressing both the advantages and disadvantages of using the mobile phone psychologically. This will help to draw the borders more clearly.

In Siomos, Dafouli, Braimiotis, Mouzas and Angelopoulos research(2008), proposed to detect the diffusiveness of Internet addiction among Greek adolescent students, between 12 to 18 ages. Considering the evaluation of the contemporary condition, Siomos and friends detected at-risk Internet use, establishing it as the fulfilment of three to four of eight criteria. These results concern when considering the rapid growth of the Internet in Greece (2008).

While many researchers focus on the harmless and negative effects of the Internet, Shaw and Gant aim to reveal the useful and positive effects of internet use (2002). Shaw and Gant's research confirms that the negative effects of the Internet have been exaggerated. According to their findings, sense of depression among the participants could have decreased for reasons independent to the research(2002). As hypothesized, the data point out that chatting on the Internet had useful effects on students. It seems unlikely that college students' depression would reduce as they became more confused in the semester. As a result, internet use was found to reduce loneliness and depression significantly. Somewhat, it is more credible that the reduction in depression was linked to the study.

In Moody's research (2001), the association between Robert Weiss's bimodal theory of loneliness and Internet use was examined. Low levels of social and emotional loneliness were both associated with high degrees of face-to-face networks of friends and high levels of Internet use were associated with low levels of social loneliness and high levels of emotional loneliness. This might include keeping in contact with distant relatives and friends, although this connection, high Internet usage also links with high emotional loneliness. As hypothesized in related research, individuals who consume more time online are more likely to have higher degrees sense of loneliness (Moody, 2001). This proposes that the influence of the Internet on emotional wellbeing might be more complicated. As a conclusion, the Internet can reduce social well-being, even though it is frequently used as a communication tool. Therefore it is inevitable that the research of Moody was in the literature of this research (2001).

The usage of the smart phone can be described as an internet addiction. Accordingly, in Çakır and Oğuz's study (2017) it was proposed to show the relationship between high school students' loneliness levels and their smart phone addiction. According to the results of the research, high school students use the smart phone intensively (Çakır & Oğuz, 2017). More than half of the students were male. Nonetheless, female students participating in the research were more likely to have a smart phone dependency than male students. It can be said that female students use the smart phone more, provide more socialization in this way, so they experience more physical symptoms. It can be said that 15 years old students who were in transition to adolescence lived the most. There is a positive and significant relationship between students' smart phone addiction and loneliness levels.

In Gezgin, Hamutoglu, Sezen-Gultekin and Ayas research(2018) aims to examine the association between nomophobia and loneliness. Besides them, analyse the impacts of smart phone and mobile internet usage among adolescents. As a result of research, there is as a notable positive relationship between nomophobia and loneliness in adolescents (Gezgin et al., 2018). Adolescents' nomophobic behaviours levels were at a medium level. The findings show that; when participants lose access to their smart phones, have a sense of loneliness. They could feel anxiety because of failure to interact with others. Base on the results of research, it is reasonable to say that adolescents who suffer from loneliness might have difficulties when they are isolated from their smart phones.

The mobile phone, which is one of the communication tools, has experienced an increase in usage rate every year since it entered our lives. The reason for this increase is the renewal of the usage characteristics of

mobile phones with the development of technology and the addition of different functions. The main feature of communication, rather than the purpose of high-level access and information processing has had the opportunity. While the studies focused on creating the feeling of loneliness by the use of intensive mobile phones, Mert and Özdemir pointed out a completely different question in their study (2018). This time, the effect of research loneliness on the use of mobile phones has been discussed. The findings support the effects of loneliness on smart phone addiction (Mert & Özdemir, 2018). It has been found that smart phone addiction has no relation with age, learning and teaching status. The state of loneliness is not proportional to the ages, meaning that people experience less loneliness when they get older.

With the rapidly developing technology, the innovations in the communication tools and the attractive functions they offer us increase the usage time of people. This leads to addiction on devices. As with any addiction, smart phone addiction is common in individuals who are alone. As a way to cope with the sense of loneliness to prevent this, individuals tend to use intensive mobile phones. In the study of Mert and Özdemir, the connection of mobile phone and loneliness with a completely different perception would be a very important literature in terms of the research (2018).

5. References

- Çakır, Ö., & Oğuz, E. (2017). Lise öğrencilerinin yalnızlık düzeyleri ile akıllı telefon bağımlılığı arasındaki ilişki. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 418–418. <https://doi.org/10.17860/mersinefd.290711>
- Chang, H.-C. (2010). A new perspective on Twitter hashtag use: Diffusion of innovation theory. *Proceedings of the American Society for Information Science and Technology*, 47(1), 1–4. <https://doi.org/10.1002/meet.14504701295>
- Doğan, H., Işıklar, A., & Eroğlu, S. E. (2010). Ergenlerin problemli internet kullanımının bazı değişkenler açısından incelenmesi. *Atatürk Üniversitesi Kazım Karabekir Eğitim Fakültesi Dergisi*, (18), 106–124.
- Gezgin, D. M., Hamutoglu, N. B., Sezen-Gultekin, G., & Ayas, T. (2018). The relationship between nomophobia and loneliness among Turkish adolescents. *International Journal of Research in Education and Science*, 4(2), 358–374. <https://doi.org/10.21890/ijres.409265>
- Güler, H., Şahinkayasi, Y., & Şahinkayasi, H. (2017). İnternet ve mobil teknolojilerin yaygınlaşması: Fırsatlar ve sınırlılıklar. *Sosyal Bilimler Dergisi*, 7(14), 186–207.
- Kamibepu, K., & Sugiura, H. (2005). Impact of the mobile phone on junior high-school students' friendships in the Tokyo metropolitan area. *CyberPsychology & Behavior*, 8(2), 121–130. <https://doi.org/10.1089/cpb.2005.8.121>
- Kwon, M., Kim, D.-J., Cho, H., & Yang, S. (2013). The smartphone addiction scale: Development and validation of a short version for adolescents. *Plos One*, 8(12), e83558. <https://doi.org/10.1371/journal.pone.0083558>
- Liu, T. C., Desai, R. A., Krishnan-Sarin, S., Cavallo, D. A., & Potenza, M. N. (2011). Problematic internet use and health in adolescents: Data from a high school survey in Connecticut. *The Journal of Clinical Psychiatry*, 72(6), 836–845. <https://doi.org/10.4088/JCP.10m06057>
- Lopez-Fernandez, O., Honrubia-Serrano, L., Freixa-Blanxart, M., & Gibson, W. (2014). Prevalence of problematic mobile phone use in British adolescents. *Cyberpsychology, Behavior and Social Networking*, 17(2), 91–98. <https://doi.org/10.1089/cyber.2012.0260>
- Mert, A., & Özdemir, G. (2018). Yalnızlık duygusunun akıllı telefon bağımlılığına etkisi. *OPUS Uluslararası Toplum Araştırmaları Dergisi*. <https://doi.org/10.26466/opus.382285>
- Moody, E. J. (2001). Internet use and its relationship to loneliness. *CyberPsychology & Behavior*, 4(3), 393–401. <https://doi.org/10.1089/109493101300210303>
- Morahan-Martin, J., & Schumacher, P. (2003). Loneliness and social uses of the internet. *Computers in Human Behavior*, 19(6), 659–671. [https://doi.org/10.1016/S0747-5632\(03\)00040-2](https://doi.org/10.1016/S0747-5632(03)00040-2)
- Morgan, C., & Cotten, S. R. (2003). The Relationship between internet activities and depressive symptoms in a sample of college freshmen. *CyberPsychology & Behavior*, 6(2), 133–142. <https://doi.org/10.1089/109493103321640329>
- Öztunç, M. (2013). Analysis of problematic mobile phone use, feelings of shyness and loneliness in accordance with several variables. *Procedia - Social and Behavioral Sciences*, 106, 456–466. <https://doi.org/10.1016/j.sbspro.2013.12.051>
- Pittman, M., & Reich, B. (2016). Social media and loneliness: Why an Instagram picture may be worth more than a thousand Twitter words. *Computers in Human Behavior*, 62, 155–167. <https://doi.org/10.1016/j.chb.2016.03.084>
- Rogers, E. M. (2010). *Diffusion of Innovations*, 4th Edition. Simon and Schuster.
- Shaw, L. H., & Gant, L. M. (2002). In defense of the internet: The relationship between internet communication and depression, loneliness, self-esteem, and perceived social support. *CyberPsychology & Behavior*, 5(2), 157–171. <https://doi.org/10.1089/109493102753770552>

- Siomos, K. E., Dafouli, E. D., Braimiotis, D. A., Mouzas, O. D., & Angelopoulos, N. V. (2008). Internet addiction among Greek adolescent students. *CyberPsychology & Behavior*, 11(6), 653–657. <https://doi.org/10.1089/cpb.2008.0088>
- Tekin, Ç. (2012). Cep telefonu problemleri kullanımı (PU) ölçeğinin Türkçe'ye uyarlanması: Geçerlik ve güvenirlik çalışması. Retrieved from <http://openaccess.inonu.edu.tr:8080/xmlui/handle/11616/1073>
- Yüzüncüoğlu, K. S., Buluş, B., & İşman, A. (2016). Sosyalleşmenin dijital dönüşümü ve dijital benliğin sunumu. *TRT Akademi*, 1(2), 608–619.

Tüketim Toplumu ve Tüketim Toplumunun Toplumsal Değişim Paradigmalarına Yansımaları

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ÖZET

Tüketim toplumu kavramı günümüz insanının içinde bulunduğu toplumsal yapıyı tanımlamak için kullanılan en genel kavramlar arasındadır. Tüketim toplumunda üretimin devam etmesi tüketimin artışıyla ilişkilidir. Nesne tüketimleriyle bireylerin toplum içindeki statüleri belirlenmektedir. Bireylerin imajları da tükettikleri nesnelerle belirlenmektedir. Teknoloji sürekli değişmekte ve her şey tüketilmektedir. Teknolojik gelişmelerin sonucu olarak kredi kartları, online alışveriş siteleri, cep telefonları ve bloglar tüketimi hem kolaylaştırmakta ve hem de toplumsal paradigmalardaki değişimler olarak karşımıza çıkmaktadır. Bu çalışmada, tüketimin ve tüketimde kullanılan araçların geçmişten bugüne değişen anlamı ve bu değişimi körükleyen iletişim paradigmaları tartışılmaktadır.

Anahtar Kelimeler: Tüketim kültürü, kitle kültürü, toplumsal değişim

Giriş

Kişisel hedeflerimizin birçoğuna ulaşmak için birbirimize bağımlı olduğumuz bir toplum içerisinde yaşıyoruz. Bunlar toplumdaki yerimizle doğrudan ilgili olan tüm hedefleri içerir ve sadece sosyal bir bağlamda anlamlıdır. 20. Yüzyılın sonlarına doğru kapitalizmin etkisiyle toplumsal yapıları anlamlandırma konusunda tüketim konusunu ele alan kavram ve yaklaşımlar öne çıkmıştır. Bu durum farklı alanlarda çalışma yapan araştırmacıların ilgisini tüketim kültürüne çekmiştir.

Avrupa’da teknolojik anlamda yaşanan ilerlemeler ve bunun bir sonucu olarak görülen ekonomik büyüme, toplumları, adına modernleşme denilen kurumsal ve kültürel bir değişim sürecine zorlamıştır. Bu gelişmeler dünyada hissedilen yeni bir yaşam tarzı ve sosyal örgütlenme biçimini ortaya çıkarmıştır. “Modern” olmak kavramı, eskisi olmayan ve yeni yöntemlerle değerlendirilen bir toplumda yaşamayı ifade etmektedir. Toplumun yapısını ve gelişim sürecini daha iyi anlayabilmek için kimileri endüstrileşme, rasyonelleşme ve kentleşme sürecini incelemiştir. Tüketim toplumunda ise teknolojinin değişmesiyle birlikte tüketimi kolaylaştıran araçlar olarak karşımıza kredi kartları, online alışveriş siteleri ve bloglar çıkmaktadır.

Kitle iletişim araçları ve reklamlar tüketicilerin daha da fazla tüketmelerine ortam hazırlamıştır. Tüketiciler daha da çok tüketsinler diye işletmelerin uyguladıkları pazarlama stratejileri onları etkilemiş ve tüketim bir yaşam biçimi haline gelmiştir. Yeni medyanın ortaya çıkmasıyla pazarlama iletişimi alanındaki değişiklikler, daha verimli ve uygun maliyetli iletişim ihtiyacını artırır hale gelmiştir.

Tüketiciler bir ürünün değişik işlev ve özelliklerine sahip ürünlerle karşılaşmaktadırlar. Tüketiciler gereksinimlerini karşılamak üzere kendilerine en fazla yararı sunan markayı tercih etmektedirler. Bu durumda firmalar markalarını sürekli takip eden bir tüketici kitlesi yaratabilmek için, tüketicilerin beklentilerini en iyi şekilde karşılayabilmeleri beklenir. Şirketler hizmetlerini verimli bir şekilde sürdürmek ve küresel rekabet piyasasında ayakta kalabilmek için bütünlük pazarlama iletişimini kullanırlar.

1. Tüketim Kavramı

Baudrillard’ın tüketim toplumu çalışmasında da ele aldığı üzere üretimde yaşanan bollukla birlikte tüketimde artış görülmüş ve çevremizdeki ürünlerin, nesnelerin ve hizmetlerin artış göstermesiyle bireylerin yaşam tarzlarında değişiklikler olmuş ve üretim ve paralelinde tüketimde bolluk yaşanmıştır. Alışverişler de ihtiyacın ötesine geçerek gündelik motivasyon unsuru olarak haline gelmiştir (Baudrillard, 2010, s. 17).

Türk dil kurumu tanımına göre “bir şeyleri kullanıp bitirmek ve yok etmek” anlamına gelen tüketim sadece nesnelerin değil aynı zamanda kimliğin ve iletişim de bir sürecidir. Tüketim, ihtiyaçlarımızı karşılamak için satın aldığımız ve kullandığımız bir ürünü kullanma süreci olarak ifade edilmektedir (Odabaşı, 2006, s. 16).

Sadece üretim şekli değil bununla birlikte kültürel bir yaşama biçimi olan kapitalist ekonomi tüketimi bir yaşam biçimi haline dönüştürmüştür.

Önemli bir farklılaşma gösteren tüketim kavramı 18. Yüzyılın son çeyreğinden beri modern toplumların ilgisini çekmiştir (Bocock, 1997, s. 13). Bu farklılaşmanın en önemli etkenlerinden biri üretimin makineleşmeye dönüşmesi ve çoğalmasdır. Farklılaşma gösteren tüketim kavramı modern toplumların kendilerini ifade etmeleri için kullanılan önemli kavramlardan biri olmuştur. On sekizinci yüzyılın son çeyreğinde makineleşme ile hissedilen sanayideki ilerlemeler yirminci yüzyılın ikinci yarısına geldiğinde ise farklılaşma çok daha farklı bir anlam taşıyor hale gelmiştir (Orçan, 2008).

Hayatımızın her alanına giren tüketim kavramı temelde insanların karar verme süreçlerinin bir sonucudur. Sadece ürünleri tüketmek olmayan tüketim kavramı aynı zamanda toplumsal alanı da etkilemektedir. İnsanlığın var olduğu zamandan beri tüketim kavramı farklı bilim dallarının dikkatini çekmiştir. Üretimin daha önceki yapısından dolayı tüketicinin önüne geçerken günümüzde üretim ve tüketim ilişkisi çok iç içe geçmiş durumdadır (Featherstone, 2013).

Tüketim *“insan ihtiyaçlarının ötesinde kolektif yaşamı, sermaye hareketlerini ve imajlar dizgesini dönüştürmek, tarihin belli bir kesitinde dünya genelinde değerler atfedebilmek ve bilişsel anlamlar kazanmak için kullanılan bilinç yönetimi biçimi”* olarak eleştirel ekonomi politik yaklaşımlar tarafından anlamlandırılmaktadır (Tellan, 2009, s. 86).

Temel ihtiyaçlardan farklı olarak bireyin kontrolü dışında gerçekleşen gerçek olmayan ihtiyaçlar oluşturulmaktadır. Bize reklamlar aracılığıyla dayatılan tüketim algısı serbest zamanlarımızı geçirdiğimiz vakitlerde toplumdan etkilenerek zorla veya farkında olmadan yaptığımız şeyler gerçek olmayan ihtiyaçlar tanımı olarak ifade edilebilir. Neyin gerçek neyin gerçek olmayan ihtiyaçlar olduğuna insanların karar verebileceklerinin fakat bunun tüketim ve ideolojik zorlamalardan dolayı neredeyse imkânsız hale geldiğini ortaya koymaktadır (Tankut Tuğcu, 2003). Tüketim kavramı günümüzde tüketilenin sadece ürünler ve hizmetler olmadığı aynı zamanda bireylerin düşünceler aracılığıyla kendi kimliklerini simgesel olarak oluşturmalarında bir süreç olarak görülmektedir.

Baudrillard tüketimi temel ürünlerin ve hizmetlerin tüketilmesi olarak değil aynı zamanda gösterge ve sembollerin tüketilmesi olarak ifade eder. Tüketim günümüzde sadece temel gereksinimlerin giderilmesi değil aynı zamanda kültür alanından kaynaklanan kurallar ve istemsiz zorlamaların bir sonucu olarak ortaya çıkan davranışlardır. Tüketim insanların kendilerini diğer insanlardan farklı göstermek adına yani yer almak istedikleri sosyal sınıflarda kendilerini kanıtlamak üzere de ortaya çıkmaktadır. Böylelikle, ekonomik ve bunun yanı sıra kültürel ve sosyal bir kavram olarak beliren tüketim farklı disiplinler tarafından da çalışılmaktadır (Orçan, 2008, s. 22).

Tüketicinin yalnızca ekonomi alanından değil aynı zamanda kültür alanından da olduğu ifade edilmesine rağmen kültür alanındaki çalışmalara on dokuzuncu yüzyıl öncesinde çok rastlanmamaktadır. Bunun sebebini de on yedinci yüzyılın sonunda öne çıkan üretim ve tüketim ilişkisi olarak ifade etmek mümkündür. Sanayileşme, farklılaşan yeni üretim kolları ve farklılaşan endüstri devrimi de bunun sebepleri arasındadır (Kıray, 2005, s. 14). Modern tüketim kavramının gelişmesini tetikleyen birçok neden bulunmaktadır. Tüketim kavramını incelerken, başta ekonomik olmak üzere sosyal ve kültürel gelişmeleri değerlendirmek gerekir. Üretim ve tüketim ilişkisi tüketime yeni anlamlar kazandırmıştır. Seri üretime geçilmesi tüketicinin gelişmesini sağlayan en temel faktörlerden biridir. Kitle iletişim araçlarının yaygınlaşması ile (gazete ve reklam) modern reklamcılık hayat bulmuş ve modern tüketim on dokuzuncu yüzyılın dünyasında kendine yeni bir anlam daha yüklemiştir. Kitle iletişim araçları modern tüketim için bir araç haline gelmiştir. (Orçan, 2008, s. 20).

1.1. Tüketim Toplumu

Tüketim konusunda araştırma yapanlar tüketim toplumunun ortaya çıkışı ile farklı düşüncelere sahipler. Çalışmalar temelde kitle iletişim araçlarının ortaya çıkmasıyla ürün imajlarının kültürel değişime uğradığını ortaya koymaktadırlar. On dokuzuncu yüzyıla gelindiğinde ise tüketicinin üretim – tüketim ilişkisinin yanı sıra üretim – tüketim – ticari ilişki olarak ifade edilmektedir. Endüstri devrimi, insanların tüketim tercihlerini belirgin şekilde farklılaştırırken, varlıklı insanların (burjuvazi) kullandıkları veya tercih ettikleri ürünler işçilerin kullandıkları ürün ve hizmetlerden farklılaşmış ve her iki kesim arasında da önemli bir fark olduğunu ortaya çıkarmaktadır (Tellan, 2009, s. 90).

Tüketim toplumunun gelişme sürecine bakıldığında üretimin bireylerin üretiminden seri üretim haline dönüşmesiyle önemli bir ivme kazanır. Seri üretimde tüketim olursa üretim hayat bulabilecektir. On sekizinci yüzyılın sonunda işçiler ürettikleri ürünleri tüketmiyorlar sadece kazandıklarının çoğunu temel ihtiyaçlarını karşılamak üzere kullanıyorlardı (Karl, 2000, s. 125). Kapitalizm’deki gelişmeler yirminci yüzyılın başında ve sonunda tüketime farklı şekilde yansımıştır. Bunun sebebi de ücret artışlarının tüketime yansmasıdır (Wagner, 1996, s. 30).

On sekizinci yüzyılda kendini hissettiren ekonomik refah modern tüketicinin ve böylelikle tüketim toplumunun temelidir. Tüketim – üretim kavramları birbirleriyle anlam kazanmış ve paralel gelişme göstermişlerdir. Endüstrinin gelişmesiyle birlikte evde üretilen ürünler ev dışından alınmaya başlanmıştır. Böylelikle insanlar ihtiyaçlarını karşılamak için satın alma yani tüketme yoluna gitmişlerdir. Yalnızca temel ihtiyaçlar değil bunun yanı sıra gerekli olmayan lüks tüketim devreye girmiştir. Gösteriş tüketicimini ifade eden ürünleri olarak farklılaşmak istemişlerdir (Zorlu, 2006, s. 78).

Bauman'ın (1997, s. 215) ifade ettiği gibi üretim, bireyleri tüketim toplumuna dönüşmeleri için özendirir veya bireyleri farkına varmadan ikna eder. Bu sebepten ötürü herkes bu düzenin içinde kendine yer bulabilir ve kendilerine yer bulmaları için mümkün hale getirilirler.

Bauman (1997) tüketim toplumunu bireylerin toplumda yer edinmek için kimlik ve simgelerle kendilerini ifade ettikleri kültürel bir sistem olarak ele alır. Bu sistemde devamlılığı sağlayan araçları reklam ve kitle iletişim araçları olarak ifade eder.

Tüketim toplumu kavramı ile vurgulanmak istenen nokta tüketim toplumunun tüm bireylerinin tüketime odaklanmış olmaları ve temel ya da lüks olmak üzere insanların tüketime karşı istekli olmalarıdır (Tomlinson, 1999, s. 183).

Bireylerin tüketim davranışları üretim potansiyellerinden daha çok öne çıkmaktadır. Bu durumda bireyleri tüketmeye yönlendiren araçların başında halkla ilişkiler ve reklamlar gelmektedir (Bauman, 1997, s. 214).

1.2. Tüketim Kültürü

Kültür, belli bir grubun bireyleri tarafından paylaşılan davranış sonuçları ile öğrenilen davranışların tamamıdır. Kültürü aynı zamanda inanç sistemi, yasalar, ahlaki kural ve sanata dair varlıklar olarak da ifade etmek mümkündür (Yanıklar, 2006, s. 13).

İnsanoğlu kültürü doğuştan kazanmaz fakat doğduktan sonra önce ailesi sonra çevresinden kültürü öğrenir. Kültür unsurları tarihsel gelişme sürecinde yaratılan her türlü değerlerle inanç sistemi, ahlaki kurallar ve sanatsal faaliyetleri kullanma ve bir sonraki kuşaklara iletme yoluyla aktarılmaktadır. İnsanlar tarafından oluşturulan kültür zaman içinde değişime uğrar (Odabaşı, 2006).

Tüketim kültürünün hem Batılı toplumlarda hem de tüketimin tam anlamıyla gelişmediği toplumlarda kendini hissettirdiği görülür (Yanıklar, 2006). Tüketim kültürü kapitalist düzene uyum sağlar ve her türlü toplumda bireylerin tüketme isteği içinde olmasını sağlar. Bu tüketme isteği, gerekli olan ihtiyaçların temin edilmesinden sonra, satın alma işlemi kendisini sürekli olarak gösterir.

Amerika Birleşik Devletleri'nin yeni beğenilerin ve eğilimlerin kitle iletişim araçları reklam, sinema, moda, yüksek tirajı olan basımla birlikte tüketim kültürünün ilk gerçek gelişimi meydana gelmiştir. Bireyleri ürünlerin temel ihtiyaçlarını karşılamak üzere değil de faydacı olmayan bir tutumla sergilemeye ve özellikle sadece kişiye özgü olma çabası içinde ürünleri özenli bir şekilde seçmeye ve özellikle göstermeye teşvik eder (Featherstone, 2013, s. 201).

Bireyin sahip olduğu kültürü, tüketici davranışlarında da kendini hissettirmektedir. Çevresinden öğrendiği ve edindiği davranışlar bireyin günlük yaşamını etkiler. Günlük yaşamında satın alma davranışları da tüketim davranışını belirler. Çevresindekilerin kabul ettikleri değerleri, tüketim motivasyonları bazı unsurları ve ürünleri değerli yaparken, bazılarını değersiz kılar (Çelik, 2009, s. 77-78).

Tüketim toplumlarında üretim ve tüketim ilişkisi dengeli gitmektedir. Ekonominin şekillenme biçimi de toplumların ihtiyaçlarına göre olmaktadır. Toplumların ihtiyaçlarını göz önüne alarak ihtiyaçları karşılayacak mal ve hizmetler üretilmektedir. Birey satın aldığı ürünle bir kimlik kazanmaya, birey olduğunu tüketimle hissedebileceğini düşündürten kavram tüketim kültürüdür. Tüketim toplumunun temelinde mutlu olmak ifadesi tüketiciye tüketirsen mutlu olursun sloganı ile gönderilmektedir (Dağtaş & Dağtaş, 2009, s. 80).

Tüketimin hızının takip edilemediği küreselleşen dünyada iletişim mecralarında da değişimler yaşanmış ve tüketicilerin yeni medya ortamlarında ne kadar zaman geçirdikleri önemli duruma gelmiştir.

Postmodernizmi tüketim kültürünün büyümesi ve malların üretilmesi ve dağıtılması ile paralel bir gelişme olarak görmek mümkündür. Tüketim kültüründe bulunan hayatın estetikleşmesi olarak ifade edilen postmodernizm estetik hayatın iyi hayat olduğunu belirtir. Postmodernizm gerçek benlik diye bir şeyin olmadığını ve hayatın yeni tecrübeler ve değerler arayışında olduğunu savunur (Featherstone, 2013, s. 218). Tüketim kültürünün kapitalizm kültürü olduğu yönündeki görüşler birçok çalışmada ön kabul olarak yerini almaktadır (Dağtaş & Dağtaş, 2009, s. 68). Baudrillard'a (2010) göre tüketim semboller ve göstergeler tüketimine dönüşmüştür. Bunun sebebi de modern toplumun tüketimci bir kültürle beslenmesidir.

1.3. Tüketim Kültürünün Toplumsal Değişim Paradigmaları

İnsanları temel ihtiyaçlarını sağlarken, bulundukları çevreden, ekonomik unsurlar ile bireyin bulunduğu çevresindeki adetlerinden, aile büyüklerinden ve değerlerinden etkilenmektedir (Kıray, 2005, s. 13). Tüketim kültüründe hizmet ve ürünler bir ihtiyacı gidermenin yanı sıra bireyin bulunduğu toplumda kendisini ifade ettiği sosyal bir içerik olarak ortaya çıkmaktadır (Gültekin, 2007, s. 91). Tüketim sosyal açıdan ele alındığında bireyler arası ilişkileri düzenleyen, özellikle statü ve itibar göstergesi olarak değerlendirilmektedir (Kıray B. M., 1999, s. 77).

Tüketim insanlığın ilk zamanlarından bu yana var olmuş ve değişimlerle yeni bir boyut kazanmıştır. Önceki dönemdeki insanların ihtiyaçları ölçüsünde gerçekleştirdikleri tüketim günümüzde ise daha çok satın almak ve bunun neticesinde toplumda yer edinebilme olarak karşımıza çıkmaktadır. Tüketim kavramının kapsamının değişikliğe uğramasıyla birlikte tüketimde kullanılan araçlar da değişikliğe uğramıştır. Yüz yüze yapılan

alışverişler yerini internet üzerinden- bloglardan bilgiler alarak, kredi kartlarını ve sosyal medya araçlarını da etkin bir şekilde kullanarak- alışverişler yapılmaktadır.

Tüketimle toplumsal değişimi özetleyen görüşe göre (Eğilmez, 2005) insanın yalnızca tüketici olduğu ve de tüketici ve üretici olduğu dönem olmak üzere iki dönem bulunmaktadır. Üretici ve tüketici olduğu dönemi de kendi içinde üçe ayırabilmek mümkündür: Tüketiciliğin ağır bastığı tarımsal devrim sonrası, üreticiliğin baskın olduğu sanayi devrimi sonrası, tüketiciliğin baskın olduğu bilgi teknolojisi dönemidir.

Baudrillard'a göre (Baudrillard, 2010, s. 70) avcı toplumların amacı eşyalara sahip olmak değildi. Üretmeye yönelik olarak araç ya da çalışma disiplini bulunmamaktaydı. Avcılıktan elde edilen her şey diğer bireylerle paylaşılmaktaydı. Bireyler gelecek kaygısı olmadan büyük bir savurganlıkla tüketmekteydiler (Baudrillard, 2010, s. 71).

Dünyada pek çok ülkede tarıma dayalı olan ekonomi 19. Yüzyılın ikinci yarısına kadar devam etmiştir. Halkın büyük bir bölümü kırsal bölgelerde hayatını devam ettirirken, tarımın hâkim olduğu ekonomilerde evin yakınlarında üretilen ürünler tüketilmekteydi. Ürünler değiş tokuş şeklindedir ve pazarda satışı genellikle kısıtlıdır (Yavuz, 2013, s. 220). Tarım toplumundan sanayi üretimine geçiş dünyadaki önemli gelişme ve değişimlerden biridir (Giddens, 1998, s. 36).

Aydınlanma döneminde global ilişkiler ve akıl ve mantık ilkelerine uygun olarak tutarlı düşünme sistemi yayılırken, bireyler akıl ve mantık çerçevesinde bir tutarlılık ve süreklilik ortaya çıkararak değişiklikler oluşturmuşlardır. Kavramlar geçmiş ve gelecek arasında bir köprü oluşturmak gayretiyle yeniden tanımlanmaya başlamıştır. Bilimsel bilginin endüstride hayat bulmasıyla birlikte sanayileşme süreci önce ekonomisi gelişmiş toplumlara sonra da tüm dünya devletlerine etki etmiştir (Sağlam, 2016, s. 189). Tarımdan sanayiye geçiş süresinde sanayinin üretimi gerçekleştirmek için kurduğu fabrikalarının niceliklerinin artmasıyla üretimin gelişmesine katkı sağlanmıştır. Endüstri alanındaki gelişmeler ekonomik unsurlar başta olmak üzere sosyal ve kültürel yapıyı değişikliğe uğratmıştır (Yavuz, 2013, s. 220).

Endüstri devrimiyle birlikte bireyler para kazanmaya başlamışlardır. Sanayi kuruluşlarında ücret kazanan bireylerin sayısında artış olmuştur. Geliştirilen sosyal politikaların gelişmesiyle beraber çalışma ve ücret düzenlemeleri gerçekleştirilmiştir. Tüketim konusunda ise tarım toplumundan farklılaşmalar meydana gelmeye başlamış ve insanlar kendileri üretmek yerine sanayileşmenin etkisiyle satın almaya yönelmişlerdir (Yavuz, 2013, s. 221).

Savaş sonrası dönem bebek patlaması kuşağı olarak adlandırılmakta, bu dönemde doğum oranları artmış ve ciddi teknolojik ve ekonomik gelişmeler hayat bulmuştur. Savaşın zorlu etkisinden çıkmak isteyen insanlar ise mutlu olmak için tüketmeye hazır dırlar (Fromm, 1985, s. 454). Geleneksel medya araçlarının gelişme gösterdiği dönemde televizyon'un etkisinde kalan ilk kuşaktır (Benlisoy, 2008, s. 31).

İletişim teknolojileri alanındaki gelişmeler büyük bir hızla yaşanmakta ayrıca bu gelişmeler yerel ve küresel olmak üzere bireylerin düzenini etkileyebilmektedir. Bu gelişmenin nedeni internet teknolojileri olarak gösterilebilir. Yeni medya alanındaki en önemli gelişmeler internet ile hayat bulmuştur. Günümüzde internet sadece yeni medyayı değil aynı zamanda geleneksel medyayı da etkilemektedir (Kırık, 2017).

İnterneti kullanan kuşaklar internetin sunduğu sanal dünyanın sembolleri üzerinden ilişkilerini oluşturmaktadırlar. Üretime dayalı dünya algısının kırılması hususunu gün yüzüne getiren internet dünyası y kuşağı tüketim dünyası ile tanışan ilk kuşak olmuştur.

2000 sonrasında henüz çocukluklarını yaşayanlar ise, ekonomik, sosyal, kültürel ve teknolojik alanda yaşanan değişimler sonucunda, tüketim kararlarında çok farklı davranışlarda bulunmaktadır. Diğer tüm kuşakların tecrübe ettikleri pazarlama ve tüketim alışkanlıklarında büyük ölçüde farklılık gösterecekleri ve gelecek kuşakların alışkanlıklarını da etkileyecekleri tahmin edilmektedir. 2000 sonrası doğanlar iletişim teknolojileri sayesinde teknolojiye bağımlı, aceleci, internet kullanma konusuna oldukça iyi, önceki nesillere göre daha yaratıcı, değişime çok hızlı ayak uydurabilen, her şeyi en hızlı şekilde olsun isteyen ve bu çizgi doğrultusunda da anlık tüketim davranışında bulunmaktadır.

Bireyler tüketim davranışında bulunurlarken istedikleri kaynaktan istedikleri kadar tüketerek yaşam ve hayat durumlarını ortaya koyarlar. Yeni ürünlerin tasarlanması ve yeni endüstri alanlarının oluşması toplumun satın alabilme gücüyle de orantılıdır. Özellikle 1990'larda tüketimin küreselleşmesiyle tüketim yeni bir boyut daha kazanmıştır.

Neo-liberal uygulamalar, devamlı olarak tüketim konusu üzerine çalışmalar yapmaktadır.

Yenilikçi tüketim uygulamalarının esnekliği durumu, zaman mekân ilişkilerinin dönüşümüne yönelik görüşleri temellendirmiştir.

Üretim bandının uygulamaya konduğu Fordizm ve post-Fordizm uygulamaları tüketim kültürünü etkilemiştir. Ürün çeşitliliğinin artmasıyla tüketicinin tercih edeceği ürün ve marka da çeşitlilik yaşamıştır. Post-modern dönemde ürünün tüketiciye sağlayacağı temel özelliklerin yanı sıra tüketiciye sağlayacağı imaj ve statü önemlidir. Tüketim ürünlerindeki bolluğun ilk olarak giyim eşyalarında, paketli ürünlerde ve hazır giyim eşyalarında görülmüştür. Bireyleri tüketmeye zorlayan nedenlerin arasında güzel şekilde paketlenen ürünler, renkli kıyafetler ve ürünlerin ışıltılı yerlerde sunulması sıralanabilir (Baudrillard, 2010, s. 12).

Son zamanlarda tüketim sürekli bir yenilik halinde kendini yenileyerek yeni şekliyle tüketicilerle buluşmaktadır. Tüketici sürekli yenilenen bu sistemin içerisinde geleneksel ve yeni medya araçları (reklam, sosyal medya gibi) tarafından tüketmeye özendirilmektedir.

Burke'e (2008:37) göre bir kuşaktan diğer bir kuşağa aktarılan şeyler aktarım sırasında değişikliğe uğramaktadır. Her bireyin dünyada iz bırakma iddiasıyla eylemde bulunması değişimi hızlandırmaktadır. Belge'ye (2012) göre değişim elimizde olmadan olmakla birlikte geçmiş ve geleceği birbirine bağlayan bir takım değerlere dayanmaktadır.

1946 – 1964 Bebek patlaması dönemi ve 1965 - 1980 arası X kuşağının tüketim alışkanlıklarında tek yönlü pazarlama ilişkisi ortaya çıkmaktadır. X kuşağı tüketicileri pazarlamaya yeni bir boyut kazandırmışlardır fakat piyasanın hâkimi pazarlamacılar olmuştur. 1985 – 1995 arası Y kuşağının tüketime dâhil olmasıyla X kuşağından farklı olarak piyasanın hâkimiyeti tüketicilere geçmiştir. Y kuşağı bireyleri post modernist uygulamaların düşünme ve yegâne doğrunun hakimiyetine karşı çıkmasına bağlı olarak, benzeşmeyen yönlerin ifade edilmesinden ve bununla ilişkili sonu olmayan tüketim zihniyetinin globalleşmesinden yararlanarak; benzersiz, kişisel ve kendine has tüketimi benimsemişlerdir.

Y kuşağının internet teknolojilerini çok iyi kullanması sebebiyle her türlü bilgiyi ve mobil uygulamaları takip etmeleri işletme sahiplerinin de dikkatini çekmektedir. Tüketicilerin mobil iletişim araçlarındaki uygulamalarından gelişmeleri takip etmeleri bilinçli tüketici kitlesinin olduğunu göstermektedir. Şeffaf olmayan işletme yapıları sosyal medya ortamlarında hızlı bir şekilde yayınlanmaktadır (Yüzbaşıoğlu, 2012). Bu sebepten işletmeler özellikle sosyal medya ortamlarından tüketiciyle iletişime geçerken dikkatli olmalıdırlar.

İnternet aracılığıyla ortaya çıkan yeni mecralar tüketici davranışlarını takip etme anlamında pazarlamacılar için önemli bir duruma gelmiştir. Geleneksel medya ortamları henüz etkisini kaybetmemiş olsa da yeni medya ortamları tüketim davranışlarında önem arz etmektedir. Tüketicilerin yenilikleri takip etme isteği hususundaki tüketim çabası dikkatlerden kaçmamaktadır.

Sonuç ve Öneriler

Kapitalizm ve tüketim döngüsünü ele aldığımızda hiç şüphesiz medyanın kapitalizm ve tüketim kültürü üzerindeki yansımaları görmezden gelinemez. Topluma ayak uydurma ve modern olma isteğinin sonucu olarak bireyler kapitalist ve post-modern dünyada tüketmektedirler. Bireyler tüketmeyi kanıksamış durumda ve bireyleri tüketmeye yönelten sistem etraflarını sarmış haldedir. Aşırı tüketmek üzere bireyler sanki görevlendirilmiş gibi çalışmaktadırlar. Fiske'nin popüler haz kavramına dikkat çektiği gibi, bireyler medya tarafından popüler olarak gösterilene uyum sağlayarak kendilerini mutlu hissetmekte ve tüketimi haz aldıkları bir araç olarak görmektedirler. Tüketim sadece üst sınıfın bir pratiği olarak değil orta ve alt sınıfın da kendi imkânları ölçüsünde pratiği olmaktadır. Tüketim kültürünün ortaya çıkışının sırasıyla en önemli nedeni sanayileşme, modernleşme ve sosyal ilişkiler boyutu olarak ifade edilebilir. Sanayileşme döneminde bireyin emeği konusunda etkili olan sistem tüketim çağında bireyin tüm tüketim alanını kapsamaktadır. Artan medya araçları ve reklamlar aracılığı ile gelişmiş ülke olmanın yegâne koşulunun tüketmek olduğu fikri geniş ölçüde kabul edilen bir kanı haline getirilmiştir.

Z kuşağı ile diğer kuşaklar arasındaki tüketim alışkanlıklarındaki farklılığın en önemli sebebi de internet teknolojisinin getirdiği yenilikler olarak karşımıza çıkmaktadır. Sosyal uygulamalar, kültürel değerler ve kredi kartları modern olmanın pratikleri olarak görülmektedir. Kuşaklar arasındaki farklılıklardan dolayı geleneksel medya araçlarından yeni medya teknolojilerine geçiş hem tüketiciler hem işletmeler tarafından bir zorunluluk olarak hissedilmektedir. Bireyler dâhil oldukları kuşağın niteliklerine uygun tüketim davranışı göstermektedirler. İşletmeler ise yeni medya teknolojilerinin sunduğu imkânlardan faydalanarak bireylerin yaşam standartlarına uygun tüketim hizmeti sunmaktadırlar. Online iletişim ortamları bireylere tüketimi kolaylaştıran yeni bir güç olarak hizmet vermektedir.

Kaynakça

- Baudrillard, J. (2010). *Tüketim Toplumu*, (H. D. Keskin, Çev.) İstanbul: Ayrıntı Yayınları.
- Bauman, Z. (1997). *Özgürlük*, (V. Erenus, Çev.) İstanbul: Sarmal Yayınları.
- Belge, M. (2012, Şubat 02). Değişim ve Süreklilik. *Taraf*.
- Benlisoy, S. (2008). Mit ile Gerçeklik Arasında 68'i Hatırlamak. *Mesele Kitap*, 30-33.
- Bocock, R. (1997). *Tüketim*, (Çev : İrem Kutluk) . Ankara: Dost Kitabevi.
- Çelik, S. (2009). *Hazsal ve Faydacı Tüketim*. İstanbul : Derin Yayınları.
- Dağtaş, B., & Dağtaş, E. (2009). *Medya, Tüketim Kültürü ve Yaşam Tarzları*. Ankara: Ütopya.
- Eğilmez, M. (2005, 10 09). *Küreselleşen Tüketim*. 02.01.2019 tarihinde Radikal: <http://www.radikal.com.tr/yazarlar/mahfi-egilmez/kuresellesen-tuketim-759597/> adresinden alındı
- Featherstone, M. (2013). *Postmodernizm ve Tüketim Kültürü*. (M. Küçük, Çev.) İstanbul: Ayrıntı Yayınevi.
- Fromm, E. (1985). *Sevme Sanatı*. İstanbul: Say Yayınları.
- Giddens, A. (1998). *Sosyoloji Eleştirel Bir Bakış*. (R. Esengül, & İ. Öğretir, Çev.) İstanbul: Birey Yayıncılık.
- Gültekin, M. (2007). Tarihsel Bağlamda Tüketim Kültürü. *Sosyal Bilimler Araştırma Dergisi*(9), 81-96.
- Karl, M. (2000). *1844 El Yazmaları (M. Belge, Çev.)* . İstanbul : Birikim Yayınları .

- Kıray, B. M. (1999). *Toplumsal Yapı Toplumsal Değişme*. İstanbul: Bağlam Yayınevi.
- Kıray, M. (2005). *Tüketim Normları Üzerine Karşılaştırmalı Bir Araştırma*. İstanbul: Bağlam Yayıncılık.
- Kırık, A. M. (2017). Yeni Medya Aracılığıyla Değişen İletişim Süreci: Sosyal Paylaşım Ağlarında Gençlerin Konumu. *Gümüşhane Üniversitesi İletişim Fakültesi Elektronik Dergisi*, 5(1), 230-261.
- Odabaşı, Y. (2006). *Tüketim Kültürü Yetinen Toplumdan Tüketen Topluma*. İstanbul: Sistem Yayıncılık.
- Orçan, M. (2008). *Osmanlı'dan Günümüze Modern Türk Tüketim Kültürü*. Ankara: Harf Eğitim Yayıncılık.
- Sağlam, Ö. (2016). Küreselleşen Dünyada Tüketimin Anlamsal Çözülüşü. *21. Yüzyılda Eğitim ve Toplum Eğitim Bilimleri Ve Sosyal Araştırmalar Dergisi*, 5(13), 187-221.
- Tankut Tuğcu, Ş. (2003). Tüketim Kültüründe Satın Alma Davranışının Oluşması. *Selçuk İletişim*, 3(1), 143-149.
- Tellan, D. (2009). *Medya, Tüketim Kültürü ve Yaşam Tarzları*. Ankara: Ütopya Yayınevi.
- Tomlinson, J. (1999). *Kültürel Emperyalizm*. (E. Zeybekoğlu, Çev.) İstanbul: Ayrıntı Yayınları.
- Varnalı, K. (2013). *Digital Kabilelerin İzinde*. İstanbul: Mediacat Yayıncılık.
- Wagner, P. (1996). *Modernliğin Sosyolojisi (Ç. M. Küçük)*. İstanbul : Sarmal yayınları.
- Yanıklar, C. (2006). *Tüketimin Sosyolojisi* (1. Basım b.). İstanbul: Birey Yayıncılık.
- Yavuz, Ş. (2013). Türk Toplumunun Tüketim Toplumu Dönüşümünde Reklamcılığın Rolü. *İletişim Kuram ve Araştırma Dergisi*(36), 219-240.
- Yüzbaşıoğlu, S. (2012, 04 03). *Kuşaklar X, Y, Z Diye Ayırıştı Pazarlamacıların Kafası Karıştı*. <http://www.dunya.com/print.php?type=1&id=151507>,: <https://www.dunya.com/ozel-dosya/isim-iletisim/kusaklar-x-y-z-diye-ayristi-pazarlamacilarin-kafasi-karisti-haberi-171279> adresinden alınmıştır
- Zorlu, A. (2006). *Tüketim Sosyolojisi*. Ankara.