SELF-EFFICACY BELIEFS OF PRESERVICE PRIMARY SCHOOL TEACHERS ABOUT ORGANIZATION OF EDUCATIONAL SCHOOL TRIPS[1]

SINIF ÖĞRETMENİ ADAYLARININ OKUL DIŞI ÇEVRELERE EĞİTİM AMAÇLI GEZİ DÜZENLEYEBİLME ÖZ-YETERLİK İNANÇLARI

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ABSTRACT

The aim of this study is to determine self-efficacy beliefs of preservice primary school teachers studying at five universities about organization of educational trips. It has been observed that education programs for many courses (Science and Social Sciences etc.) involve a higher number of educational trips. Therefore, it is important to examine self-efficacy beliefs of preservice teachers about organization of educational trips. There have been several studies directed towards revealing whether preservice primary school teachers consider themselves as competent in organization of trips. This is a descriptive study using the survey method. Data were collected with Self-Efficacy Beliefs Scale for Organization of Educational Trips. It is a five-point Likert scale composed of a single factor and 30 items. Cronbach's alpha was reported to be .93. The reliability analysis in the present study revealed that Cronbach's alpha was .932. Convenience sampling was used and 258 fourth-year students studying primary school education at five universities and accepting to participate in the study were included into the sample. The scale was completed by the students in the last week of the fall term in the 2018-2019 academic year. Data from the scales completed fully were included into the analysis. Obtained data were analyzed with normality test, ANOVA and t test. There was not a significant difference in self-efficacy beliefs of the preservice primary school teachers about organization of educational trips between genders. However, the difference between the universities was significant. As a suggestion, further studies including larger samples could be performed to investigate the self-efficacy beliefs of teachers about organization of educational trips. Due to presence of very few studies about the issue, the results of the present study will provide guidance for studies in the future.

Keywords: Preservice primary school teachers, Self-efficacy beliefs, Educational trips, Informal Learning, Outdoor Education.

ÖZ

Bu çalışmanın amacı, farklı üniversitelerde öğrenim görmekte olan Sınıf öğretmeni adaylarının Okul dışı çevrelere eğitim amaçlı gezi düzenleyebilme öz-yeterlik inançlarını belirlemektir. Son yıllarda birçok dersin eğitim programlarında özellikle okul dışı gezilere daha çok yer verilmesine yönelik önerilerin olduğu görülmektedir (Fen bilimleri, Hayat bilgisi, Sosyal bilgiler vb.). Bu nedenle öğretmen adaylarının gezi düzenlemekle ilgili öz-yeterliklerinin incelenmesinin önemli olacağı düşünülmüştür. Alan yazın incelendiğinde Gezi düzenleme ile ilgili farklı çalışmaların bulunduğu görülmektedir. Bu araştırmadaki amaç ise sınıf öğretmeni adaylarının bu konuda kendilerini yeterli bulup bulmadıklarını ortaya koyabilmektir. Böylece mezun olmadan önce bu alandaki kendilerine yönelik görüşleri değerlendirilebilecektir. Araştırmada tarama modelinden yararlanılmıştır. Betimsel bir yaklaşımın kullanıldığı çalışmada ölçme aracı olarak Bozdoğan (2016) tarafından geliştirilmiş olan 5'li Likert yapısındaki "Okul dışı çevrelere eğitim amaçlı gezi düzenleyebilme öz-yeterlik inancı ölçeği" kullanılmıştır. Ölçek 30 maddeden (17 olumlu ve 13 olumsuz) ve tek faktörden oluşmaktadır. Geliştirme sürecinde ulaşılan Cr-alpha değeri .93'tür. Araştırma sürecinde uygulanan güvenirlik analizi sonuçları da; .932 olarak bulunmuştur. Ulaşılan bu sonuçlar ölçeğin güvenilir olduğunu göstermektedir. Araştırmanın örneklemini; amaçlı ölçüt örnekleme göre belirlenmiş olan farklı üniversitelerin Sınıf öğretmenliği son sınıflarında öğrenim görmekte olan 258 4. sınıf öğrencisi oluşturmuştur. 2018-2019 öğretim yılı Güz döneminin son haftasında gönüllü öğrencilere uygulanan ve geçerli olan ölçekler analiz sürecine dahil edilmiştir. 5 farklı üniversitenin sınıf öğretmeni adaylarından elde edilen verilerin analizinde dağılım ölçümleri, ANOVA ve t-testi teknikleri kullanılmıştır. Önem denetimi için de .05 düzeyi temel alınmıştır. Elde edilen bulgulara göre Sınıf öğretmeni adaylarının cinsiyete göre gezi düzenleyebilme öz-yeterlik inançlarında anlamlı bir farklılık bulunmamıştır.

Ancak Üniversiteler arasındaki farklılığın anlamlı olduğu belirlenmiştir. Bulgulara göre yapılacak yorumlara ve önerilere çalışmada yer verilmesi planlanmaktadır. Alan yazın incelenmesinde bu konuda yapılan çok fazla araştırma sonucuna ulaşılamadığından çalışma sonuçlarının geleceğe ışık tutacağı öngörülmektedir.

Anahtar Kelimeler: Sınıf öğretmeni adayları, Öz-yeterlik inancı, Eğitim amaçlı okul dışı geziler, İnformal öğrenme, Okul dışı öğrenme.

INTRODUCTION

In recent years, teaching approaches have evolved from teacher-centered approaches to student-centered approaches, but teachers ' knowledge levels, education, attitude and self-efficacy can still be effective in the teaching process. Bandura (1986) defined self-efficacy as one's belief to show a certain achievement. Teachers' self-efficacy in any field can have an impact on their teaching activities. Bıkmaz (2004) states that teachers with strong self-efficacy beliefs are more desirous and passionate about teaching. Individuals with a high perception of self- efficacy in general are able to work harder to achieve and be more persistent and patient (Aşkar & Umay, 2001). Studies have shown that teachers 'self-efficay in the related field affects students' academic achievement (Allinder, 1995; Ross, 1994 cited in Bıkmaz, 2004: 302). In the literatue there are studies examining the self-efficacy levels of teachers and their effects on students in different subject areas (Aşkar & Umay, 2001; Bıkmaz, 2006; Ekici, 2009; Hamurcu, 2006; Kutluca & Ekici, 2010; Küçükyılmaz & Duban, 2006). This study was conducted because it was predicted that the examination of the self- efficacy of teacher candidates to organize outside-school educational trips could affect their students ' success and learning processes in this area. Trips constitute one of the students ' out-of-school learning environments. The study therefore focuses primarily on the ability of teacher candidates to organize educational trips to outside-school environments for different courses and their contribution to educational processes.

In Turkey, education programs for the courses such as Life Sciences, Social Sciences and Science, offered during primary education were last revised in 2018. Suggestions for benefiting from learning environments outside school and trips made in the former versions of the programs for the abovementioned courses were still present in the last revised version of the programs. Trips are mentioned both in principles and contents of the Life Sciences course units (Ministry of National Education [MONE]a 2018, p. 9,26). The program for Social Sciences

also involves trips (MONEb 2018, p.10 and 14). Similarly, the program for Science involves directions for taking advantage of learning environments outside school and trips (MONEc 2018, p.11). Ertürk (1972) emphasized that the term program refers to all educational activities prepared to educate students in a given time (p.13).

Education is divided into two categories as mentioned in a study by Türkmen (2010) formal and informal. Informal education means educational opportunities arising without any plans (Güven, 2015). Where and how they will appear is uncertain and what they will teach is unpredictable. This may cause an individual to acquire some desirable or undesirable behavior (Griffin 1994 cited by Çebi 2018, p.2).

Formal education refers to equipping an individual with knowledge and skills in a given time in accordance with predetermined goals. It is conducted and evaluated according to a plan and a program (Laçin Şimşek, 2011). Informal education is a life-long process during which knowledge, skills and behavior are acquired during daily life (Türkmen, 2010). It is unplanned and haphazardly and spontaneously occurs.

Paris, Yambor and Packard (1998) in their study about effects of a number of activities in an informal learning environment on interests and learning outcomes of primary school students found an increase in students' interests in science and problem solving skills. Students feel more relaxed in informal learning environments than in formal learning environments (Ay, Anagün & Demir 2015). As reported by Ertaş Kılıç and Şen (2014), creating a learning environment where students feel relaxed and question things in detail helps achieve learning at a desired level. Students' benefiting from informal learning environments during education and teaching can contribute to achievement of life-long learning (Çebi 2018). In addition, as Atmaca reported (2012), informal learning environments help students understand scientific terms and take responsibility for their further learning. When features of the terms which students have to acquire are taken into consideration, integrating activities outside the class into in-class activities plays an important role in teaching these terms.

Informal learning environments refer to learning environments outside the class (Çavuş, Öztuna Kaplan, Sünbül & Çetin, 2010). According to Eshach (2007), learning outside the class is not only limited to places outside school but also many other places including the virtual environment. Therefore, it should be kept in mind that learning can be achieved in any places one likes. Bakioğlu (2017) has noted that learning environments outside the class are the places where formal education and informal education concur. So that classes at school can be more efficient, it is necessary to integrate informal education into formal education. Education

offered in learning environments outside school is complimentary to and enriches education at school. Such education helps individuals to empathize others and to acquire critical thinking skills and offers opportunities for practice, which satisfy the feeling of curiosity (Seidel &Hudson, 1999). Education offered outside school has been called education outside the class by Berberoğlu and Uygun (2013). They reported this type of education is so important that it cannot be disregarded.

Sontay, Tutar and Karamustafaoğlu (2016) in their study on opinions of students about learning outside school and teaching.Science suggested that appropriate learning environments should be created so that children should not lose their desire for searching, should be curious and should improve their skills for asking questions. However, in a study by Ramey Gassert (1997) about effects of science education outside the class on learning, formal education, offered at school, does not involve real events and life experiences. Integrating various activities into formal education can make learning more concrete. Bozdoğan (2007) reported that trips and observations in informal learning environments including zoos, nature, aquariums, botanic gardens, nature parks, libraries and science, art and archeology museums are examples of these activities. Teachers should be trained concerning their attitudes to students so that concrete learning can be achieved and efficiency of activities can be increased during trips and observations. Bozdoğan (2012) also found that trips organized during elective courses increased preservice teachers' knowledge and confidence about the issue. Similarly, Tatar and Bağrıyanık (2012) reported that preservice teachers should receive different courses concerning arrangement of learning activities outside school.

Bozdoğan and Ustaoğlu (2016) examined opinions of science teachers about a trip to a planetarium by using a semi-structure interview form. They concluded that trips can be effective in concretizing science terms and permanent learning and increase students' motivation. In another study, Bozdoğan (2017) found that taking a special course about learning environments outside school and arranging trips during undergraduate education could contribute to the ability to use learning environments effectively. The researcher recommended that preservice teachers' efficacy in organizing trips should be examined (Bozdoğan 2017). Gürsoy (2018) performed a study with preservice science teachers by using Self-Efficacy Beliefs Scale for Organization of Educational Trips, developed by Bozdoğan (2016), and found that self-efficacy in arranging trips increased after a 14-week intervention including educational trips. Ay, Anagün and Demir (2015) examined opinions of preservice primary education teachers on learning in environments outside school by using open-ended questions. They revealed that the

preservice teachers were aware of advantages and disadvantages of these learning environments. Çiçek and Saraç (2017) obtained similar findings in their study with science teachers by utilizing a semi-structured interview. They reported that the teachers found trips effective and useful, but faced difficulty in establishing discipline and transportation.

Bozdoğan (2018) also makes a research to determine the prospective teachers' past field trip experience and examine their self-efficacy beliefs planning them. Total 336 teacher candidate participate the and the data collected with the same scale that have been used in this research too. The findings of the research were; a significant difference was discovered between the departments where prospective teachers studied, participating in educational field trips in their previous experiences, and receiving training on planning and organizing trips and their self-efficacy beliefs but no differences found depending on gender.

It is evident in the literature that educational trips are mostly organized for the courses such as Science, Life Sciences and Social Sciences. It is striking that these trips are organized for such learning environments as museums, zoos, planetariums and science museums. In several studies, preservice teachers reported that trips to museums in Social Sciences courses would contribute to permanent learning and concretization of terms and increase motivation for learning (Ay & Fidan, 2014; Meydan & Akkuş, 2014). In a study by Aytaç (2014), preservice teachers reported that trips and observations had positive effects on students' understanding subjects. Bozdoğan, Okur and Kasap (2015) performed a study to examine effects of learning environments outside school and trips during Science course in seventh graders. They found that a trip to a factory helped students to recall information in the long-term and increased their interest in and motivation for learning. Likewise, Armağan (2015) found that learning environments outside school during Science course enhanced interest in and motivation for learning and contributed to creativity in primary school students.

In light of the evidence from all the foregoing studies about effects of learning environments outside school and trips in preservice teachers and students, it is clear that education offered to preservice teachers about this issue is important. Therefore, it is necessary to determine self-efficacy beliefs of preservice teachers in organizing trips to learning environments outside school.

The present study was directed towards revealing self-efficacy beliefs of preservice primary school teachers in organization of trips. To this aim, answers to the following research questions were sought.

1. What are the self-efficacy beliefs of preservice primary school teachers in organizing trips?
2. Do self-efficacy beliefs of preservice primary school teachers differ in terms of their gender?

3. Do self-efficacy beliefs of preservice primary school teachers differ in terms of the universities where they study?

Study Population and Sample

The study population comprised of all fourth-year students studying in the departments of Primary Education in education faculties in Ege, Karadeniz, İç Anadolu and Trakya regions in the fall semester of the 2018-2019 academic year. The study sample included 258 fourth-year students from five different education faculties from the study population by using convenience sampling. To avoid ethical concerns and biased comments, the letters A, B, C, D and E were used to refer to the universities in abovementioned regions: A corresponding to the university in Trakya region, B and C the universities in Ege region, D the university in İç Anadolu region and E the university in Karadeniz region.

METHODS

A quantitative research method, the survey model, was used. This model is directed towards describing a concept appearing in the past or still existing at present (Karasar 2006, p.77). In other words, it is based on collecting data to determine certain features of a group (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz & Demirel 2008). It allows accessing a large number of people and presenting data gathered from this group. We attempted to access a large sample by including the fourth-year students from five different universities.

Data Collection Tool

Data were gathered with Self-Efficacy Beliefs Scale for Organization of Educational Trips (SSOET), developed by Bozdoğan (2016). It is a five-point Likert scale with one factor and 30 items (17 positive statements and 13 negative statements). The negative items are reversely scored. Cronbach's alpha for the scale was reported to be .93 by Bozdoğan (2016) and was found to be .932 in the present study. These results showed that the scale is very reliable. In fact, Özdamar (1997) reported that scales with Cronbach's alpha ranging between .60 and .80 can be considered very reliable and scales with Cronbach's alpha ranging between .80 and 1.00 are extremely reliable (p.500). In the present study, the scale was administered at one session. Data obtained were recorded and analyzed with Statistical Package Program for Social Sciences 17. The data shows normal distiribution so parametric tests; ANOVA and t tests were used.. Post-hoc comparisons were made with Scheffe test. $p<.05$ was considered significant.

RESULTS AND INTERPRETATIONS

In this section, results of the study will be presented in accordance with answers to the research questions.

To seek an answer to the first research question "What are the self-efficacy beliefs of preservice primary school teachers in organizing trips?" results of the descriptive statistics are presented in Table 1.

Table 1:
Results of the Descriptive Statistics for Self-Efficacy Beliefs of Preservice Primary School Teachers in Organizing Trips

Scale	*n*	$\overline{x}$	*SD*	*Range*	*Minimum and Maximum Values*
Total Score for SSOET	258	3.98	.073	.981	3.47-4.45

As shown in Table 1, the mean score of the preservice teachers for SSOET was 3.98. Since it is a five-point Likert scale, ranges for scores were determined to interpret the mean scores for the scale. The scores 1.00-1.80 (I completely disagree) are very low, 1.81-2.60 (I do not agree) are low, 2.61-3.40 (I am indecisive) are moderate, 3.41-4.20 (I agree) are high and 4.21-5.00 (I completely agree) are very high. When the mean score in Table 1 ($\overline{x}$ = 3.98) was taken into account, the participants had high scores. This shows that the preservice teachers had high self-efficacy beliefs about organizing trips, which is consistent with the results reported by Gürsoy (2018).

To seek an answer to the second research question "Do self-efficacy beliefs of preservice primary school teachers differ in terms of their gender?" t test was used and obtained results are presented in Table 2.

Table 2:
Results of t Test for the Difference in Mean Scores for SSOET in Terms of Gender

Variable		*N*	$\overline{x}$	*SS*	*SD*	*t test*	*P*
Gender	*Female*	197	120.45	16.75	256	1.719	.087
	Male	61	116.15	18.10			

As shown in Table 2, there was not a significant difference in self-efficacy beliefs of the preservice teachers about organizing trips in terms of gender (p= .087 and p>.05). This results is consistent with the findings of Bozdoğan (2018).

To answer the third research question "Do self-efficacy beliefs of preservice primary school teachers differ in terms of the universities where they study?", ANOVA was utilized. Table 3 shows the distribution of the mean scores for SSOET by universities. Table 4 presents results of ANOVA.

Table 3:
The Distribution of the Mean Scores for SSOET by Universities

Variable		**N**	$\bar{x}$	**SS**
University	*A University*	52	115.96	15.55
	B University C	36	111.11	15.13
	University	91	125.20	14.02
	D University	66	117.76	18.63
	E University	13	124.46	26.16
	Total	258	119.43	17.14

As shown in Table 3, there was a difference in the mean scores for SSOET between the preservice teachers from different universities. The highest and the lowest scores for the scale were 125 and 111 respectively. To determine whether there was a significant difference between the universities, ANOVA was made. Obtained results are outlined in Table 4.

Table 4:
Results of ANOVA for the Difference in the Scores for SBSOET between the Universities

Variable	***Sum of Squares***	***SD***	***Mean Square***	***F***	***p***
Inter group	6657.97	4	1664.49	6.12	.000*
Intragroup	68819.27		272.01		
Total	75477.24				

*p<0.05

Self-efficacy about organizing educational trips significantly differed between the universities (F= 6.12, p= .000 and p<.05). Scheffe test, used to determine which groups differed, showed significant differences only between C University and A University (I-J= 9.24 and p=.037) and

B University (I-J= 14.09 and p=.001). In fact, C University had a higher mean score for self-efficacy in organizing educational trips than other four universities and a significantly higher score than B and A universities. This cannot be attributed to regional differences since B and C universities significantly differed although they are located in the same region. This finding could not be compared with the findings from other studies since SBSOET is a new scale and there have been very few similar studies using this tool. However, differences in educational gains between universities which are located in different regions and where different academicians offer education and the number of students in classes differ should be considered as natural (e.g. 50 students in C University and 32 students in E University). One prior study performed by Pamuk, Hamurcu and Armağan (2014) to determine anxiety levels of preservice teachers also revealed similar result. The difference between the universities detected in the present study can be attributed to education conditions, opportunities for educational trips and the number of students in classes.

CONCLUSION AND RECOMMENDATIONS

In the present study, self-efficacy in organizing educational trips was examined in a sample of preservice teachers from different universities. There have been several studies about organizing educational trips in samples from different scientific fields and with different years of study (Ay, Anagün & Demir,2015; Ay Selanik & Fidan Kurtdede,2014; Aytaç, 2014; Bozdoğan, 2007; Bozdoğan, 2012; Bozdoğan, 2018; Bozdoğan & Ustaoğlu, 2016; Çiçek & Saraç, 2017; Bakioğlu & Karamustafaoğlu, 2014; Gürsoy, 2018; Meydan ve Akkuş, 2014; Sontar,Tutar & Karamustafaoğlu). However, there were only two studies about self-efficacy beliefs in organizing educational trips in Turkey (Bozdoğan, 2018 and Gürsoy, 2018). In Gursoys' research 68 preservice teachers from Life Sciences depertment were included and lasted fourteen weeks and involved an intervention (i.e. educational trips). Both quantitative and qualitative data were collected. Quantitative data were gathered with SSOET, which was administered before and after the intervention. The researcher reported that self-efficacy of preservice teachers regarding organization of educational trips increased after the intervention. In fact, their mean score for SSOET increased from 112.62 to 120.22. These scores are similar to the ones presented in Table 3. In the present study, the preservice primary education teachers got the mean score of 119.43 for their self-efficacy in organization of educational trips. This score is higher than the pretest score reported by Gürsoy and close to posttest score in Gürsoy's study. It seems that the preservice teachers in the current study had very high self-efficacy in arranging educational trips. It shows their high potential for organizing educational trips.

Bozdoğans' research (2018) were smilar with the Gursoys'. Both quantative and qualative data were collected. From different departments total 336 prospective teachers participate the research and the data collected with SSOET. One of the findings of the research was no differences found depending on gender. In the current study, there was not a significant difference in self-efficacy beliefs about organizing educational trips between genders either. Gürsoy (2018) did not compare these beliefs between genders. Other studies about organizing educational trips used qualitative research methods and did not involve a comparison between genders, either (Ay Selanik & Fidan Kurtdede, 2014; Bozdoğan, 2017; Bozdoğan, Okur & Kasap, 2015; Bozdoğan & Ustaoğlu, 2016; Meydan & Akkuş, 2014). In addition, since the present study was directed towards evaluating self-efficacy beliefs in organization of educational trips by using a new scale, the results were only compared with those from similar studies.

Carrier (2009) have done a research about the effects of outdoor science lessons with elementary school students on preservice teachers' self-efficacy. A quantative study with 14 preservice teacher were done and the findings revealed that the participants recognition of the students' enthusiasm and excitement of learning science in the outdoors positively impacted their confidence level as future teachers of science. Moseley, Reinke & Bookout (2002) investigated the effect of teaching outdoor environmental education on preservice teachers' attitudes toward self-efficacy and outcome expectancy. Total 72 preservice elementary teachers were participate the research and the data were gathered by Environmental Education Efficacy Belief Instrument. Study conducted as a pretest-posttest control group model. And the results suggested that the preservice teachers' self-efficacy was high before the program and remained unchanged by their teaching experiences but dropped significantly approximately seven weeks after teaching. The researcers' attributed this results to several factors like; the lack of the ability of preservice teachers' to teach as they have learned, the way the study was structured and also the time effect. As seen from these researchs' there were not too much studies about teachers' self-efficacy beliefs for planning and organizing eductional trips. So our study would be estimated to shed light on future studies.

Another point examined in the present study was differences in self-efficacy beliefs of the preservice teachers about organizing educational trips between the universities. As shown in Table 3, the preservice teachers' mean scores for self-efficacy in organization of trips differed between the universities. C University had the highest mean score. However, this score was only significantly higher than B and A universities. This difference can be ascribed with special features of the universities. No comparisons can be made since there have not been many

relevant studies in the literature. Further studies including larger samples could be performed to investigate reasons for differences in self-efficacy between universities.

Due to presence of very few studies about the issue, the results of the present study will provide guidance for studies in the future.

The preservice teachers in the present study were found to have high self-efficacy in arranging educational trips. Since the study had only a quantitative design and included a limited number of universities, the following recommendations can be made concerning further studies.

1- They should involve a higher number of universities from many different regions.

2- They should compare self-efficacy in arranging educational trips between preservice teachers from different scientific disciplines.

3- They should utilize different research methods and measurement tools (e.g. interviews and observations etc.) to achieve collection of different types of data.

4- In our study we have found that preservice teachers had high self-effcacy in arranging educational trips. But our research was limited with five universities and only consisted from primary education teacher canditades. For this reasons preservice teachers from all the other departments should be offered appropriate courses to enhance their self-efficacy in organization of educational trips and teachers should be given in-service training for it.

5- Since problems arising during organization of educational trips have been frequently mentioned in the literature although not dealt with in the present study, provision of both financial support and motivation by Higher Education Council and the Turkish Ministry of Education will encourage teachers to organize educational trips.

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