### Teachers’ Self-Efficacy Beliefs regarding Out-of-School Learning Activities

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- Teacher Training
- Out-of-School Learning
- Self-Efficacy
- Non-Formal Learning

**Abstract**
Learning activities employed in out-of-school learning activities (OOSLA) provide students with a different learning experience while enabling teachers to discover, implement, and evaluate different teaching approaches. This study intends to investigate the self-efficacy beliefs levels of teachers as regards OOSLA and whether these self-efficacy levels differ significantly depending on their gender, graduated faculty, educational status, seniority, and department graduated from. It adopts the descriptive survey design. The sample is composed of 308 teachers. The data were collected utilizing the "Teachers' Self-Efficacy Beliefs Toward Out-of-School Learning Activities Scale". Parametric test statistics were used in data analysis. The results revealed that teachers had a high level of self-efficacy beliefs regarding OOSLA and that gender was not a determinant of teachers' self-efficacy beliefs. It was also found that the participants who completed graduate studies had firmer self-efficacy beliefs than those who did not. The teachers with 21 years and above of teaching experience had higher self-efficacy levels than those with 6-10 and 11-15 years of teaching experience. On the other hand, graduates of mathematics and science education departments had lower self-efficacy levels than primary education, Turkish education, and social science education departments. Finally, researchers recommend encouraging pursuing graduate studies, collaborating with experienced teachers, eliminating institutional obstacles to out-of-school activities, and supporting teachers in increasing their self-efficacy regarding out-of-school learning activities.

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Introduction

Multifaceted development of teachers has become increasingly essential and highlights the importance of teaching methods to fulfill this necessity. The recent developments in teaching and learning have demonstrated that learning experiences are not limited to the classroom or school environment, generating the idea that any environment conducive to learning can be utilized. Similarly, learners are not restricted to the learning experiences provided at schools in the classroom environment but can experience learning outside of the classroom environment (Şen, Ertaş-Kiliç, Oktay, Ekinci & Kadirhan, 2021). Şimşek and Kaymakçı (2015) defined out-of-school learning as all planned and programmed learning experiences that include people, areas, institutions, and resources outside the school building, as well as all curricula. Out-of-school learning is a multidimensional process involving employing structured learning activities outside the classroom in various settings such as society and nature (Bunting, 2006). The out-of-school learning concept encompasses a variety of environments, from different life spaces outside the school boundaries to virtual learning platforms (Şen, 2019). Şimşek (2011) defines out-of-school learning environments as where learning-teaching is carried out outside the school. Any environment conducive to learning, such as museums and archeological sites, national parks, zoos, art ateliers, exhibitions, industrial plants, and schoolyards, is typical of out-of-school learning environments. OOSLA is the whole of activities outside of school, including educational aims and acquisitions (Karademir, 2013). All activities that involve excursions, observations, or experiments in these environments are called OOSLA. Learning activities in these out-of-school learning environments provide the students with a unique learning experience while enabling the teachers to discover, implement, and evaluate different teaching approaches.

Children's experiences in and outside the school profoundly impact their academic performance and social functions (Resnick, 1987). OOSLA offers different learning opportunities that are not present in the traditional learning environments (Ertaş-Kiliç & Şen, 2014), including informal and non-formal learning platforms. Eshach (2007) defines non-formal learning environments as learning environments that support structured and pre-planned learning, under the leadership of teachers, where learning is not generally evaluated, allowing for the construction and development of knowledge. He defines informal learning as not purposeful and planned environments, where learning is not evaluated, and learning takes place under the learner’s leadership. In the learning process, informal environments can be used following the curriculum (Türkmen, 2019). OOSLA, which promotes learning by doing and experiencing, and developing a critical approach (Ay, Anagün, & Demir, 2015), lead to permanent learning and greater interest in learning experiences (Bozdoğan & Ustaoğlu, 2016; Sontay, Tutar & Karamustafaoğlu, 2016; Tortop & Özek, 2013).

In recent years, many studies have been conducted in various fields on the effect of OOSLA on education and training. These studies have generally focused on student attitudes about learning, academic achievement, motivation, and effects on other skills. According to the results obtained from the research, the following results were obtained, respectively:

The teacher plans OOSLA well. They are a source of motivation for students. They are fun and entertaining environments to make trips and observations (Arabacı & Akgül, 2020). Teaching biology out of school has a positive cognitive and influential effect on 13-15-year-old Swedish high school students (Fägerstam & Blom, 2013). Students exhibited positive
attitudes regarding out-of-school excursions (Nadelson & Jordan, 2012), and middle school students in the museum group learned more than in the classroom group (Sturm & Bogner, 2010).

Moreover, they make the abstract learning outcomes concrete and observable (Laçin Şimşek, 2011). OOSLA, which has been shown to have positive effects on learners, serves the curriculum’s purposes to a great extent when carefully designed and implemented (Andrew, Maggie & Sarah, 2010; Nelson, 2012). Students’ learning experiences based on cause-effect relationships outside of school and curriculum-based learning through mutual interaction support their holistic development. Out-of-school learning environments in Turkey were introduced with the guidebooks for out-of-school learning environments prepared by some provincial directorates of National Education. The learning outcomes and venues were associated according to the grade level.

Regardless of how perfect the curriculum looks on paper, it still depends on the teachers since they are implementing them. At this point, teachers’ self-efficacy beliefs, attitudes, and behaviors are critical to the success of a curriculum. Teachers need to have high levels of self-efficacy beliefs regarding OOSLA. Because teacher’s perception of self-efficacy affects the quality of teaching, the methods and techniques used, the inclusion of students in learning, and student’s understanding of the subjects taught (Aydın, Haşıoğlu & Kunduracı, 2016). On the other hand, teachers need to have firm self-efficacy beliefs regarding OOSLA because only such teachers can encourage other teachers, parents, and students to get involved in OOSLA. Nevertheless, teachers are reluctant to use and have concerns about OOSLA for such reasons as complex control of the process, time problems, supervision-security concerns (Yaşar Çetin, 2021), economic obstacles, and reluctance to take on responsibility (Ince & Akcanca, 2021), and lack of motivation (Ay, Anagün & Demir, 2015; Çiçek & Saraç, 2017). In addition, they conceive that OOSLA is not adequately supported in Turkey (Büyükkaynak, Ok & Aslan, 2016). The problems teachers encounter influence their self-efficacy beliefs regarding OOSLA.

Teachers’ self-efficacy is an essential predictor of teachers’ behaviors in the future. Bandura first defined the concept of self-efficacy belief in 1977. He asserts that self-efficacy beliefs have a significant effect on human behaviors and defines the term as “one’s self-judgment about his or her capacity of organizing and applying activities to accomplish a task” and “an individual’s belief in his or her capacity of performing a task” (1977, 1994, & 1997). Bandura (1994) attributed individuals’ self-efficacy beliefs to four primary sources. The first and the most effective one is personal experiences. The second is others’ experiences. The third source is the assurance from others, and the final one is self-judgment about the person’s skills. Regardless of failures or resistance to hardships, perseverance also indicates self-efficacy. Individuals with low self-efficacy tend to overestimate the difficulty of tasks and have difficulty overcoming problems because they might have a narrow perspective (Kaptan & Korkmaz, 2002). Therefore, self-efficacy is vital in teachers’ "planning," "implementation, and assessment" of OOSLA. They require painstaking preparation and planning. It is essential to have high levels of self-efficacy in going beyond the traditional classroom environment, as legal procedures might be demanding. Thus, it is vital to determine teachers’ self-efficacy levels regarding OOSLA. When the studies in the introduction are examined, studies on OOSLA can be classified into two parts. The first is research on the effects of OOSLA on students, and the second is teachers' views on OOSLA. The focus of this study is teachers' self-efficacy perceptions for OOSLA. It is known that OOSLA serves the purposes of the curriculum (Andrew, Maggie & Sarah, 2010; Nelson, 2012)
and that the teachers’ self-efficacy perception affects the quality of teaching and the methods and techniques used (Aydin, Haşıoğlu & Kunduracı, 2016). In this context, researching teacher self-efficacy, which is also valid for OOSLA, will contribute to the literature. The present study intends to determine the self-efficacy beliefs levels of teachers as regards OOSLA and whether these self-efficacy levels differ significantly depending on their gender, graduated faculty, educational status, seniority, and department graduated from. The variables used in this study were determined by examining the variables in similar studies (Azar, 2010; Ekici, 2008; Saracaloğlu, Yenice & Özden, 2013; Üstün et al., 2009) on teacher and self-efficacy. To this end, it seeks answers to the following research questions:

1. What is the level of teachers’ self-efficacy beliefs regarding OOSLA?
2. Do the level of teachers’ self-efficacy beliefs regarding OOSLA differ by gender?
3. Do the level of teachers’ self-efficacy beliefs regarding OOSLA differ by graduated faculty?
4. Do the level of teachers’ self-efficacy beliefs regarding OOSLA differ by educational status?
5. Do the level of teachers’ self-efficacy beliefs regarding OOSLA differ by seniority?
6. Do the level of teachers’ self-efficacy beliefs regarding OOSLA differ by department graduated from?

**Method**

**Research Design**

The study is based on the descriptive survey design since teachers’ self-efficacy beliefs regarding OOSLA are revealed in this study. Descriptive survey design involves reaching a large sample group by mail, phone, or in-person to ask the same set of questions, and descriptive survey design describes the event or situation that is the subject of the study as it exists (Fraenkel, Wallen & Hyu, 2012, Karasar 2014).

**Study Group**

The non-probability sampling method, convenience sampling, was used in the data collection process. In inconvenience sampling, researchers form their sample starting from the easiest respondents to reach (Cohen, Manion & Morrison, 2018). The data was collected online from the teachers who were active in the teacher groups on social media platforms during the COVID-19 pandemic when schools were closed. A total of 396 teachers were involved in the study. Because of outliers and data loss, 88 were excluded from data analysis. Ultimately, 308 teachers comprised the study group. Table 1 presents the demographic information about the participants.

**Table 1. Demographic Characteristics of Participants**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Groups</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>186</td>
<td>60.4</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>122</td>
<td>39.6</td>
</tr>
<tr>
<td>Graduated faculty</td>
<td>Faculty of Education</td>
<td>234</td>
<td>76.0</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>74</td>
<td>24.0</td>
</tr>
<tr>
<td>Educational status</td>
<td>Undergraduate</td>
<td>222</td>
<td>72.1</td>
</tr>
</tbody>
</table>
As can be observed in Table 1, female teachers and teachers who graduated from the departments of education faculty were more than half of the study group. Teachers who have a graduate degree (master’s or Ph.D. degree) form part 28% of the study group. The shares of senior participants are close to each other. Teachers have graduated from 29% dept. Of primary education, 21% mathematics and science education, 23% dept. Of Turkish and social sciences, and 26% of other departments of education faculty (foreign languages education, dept. of computer and instructional technologies education, dept. of fine arts education.)

**Table 1. (Cont.)**

<table>
<thead>
<tr>
<th>Seniority</th>
<th>Graduate</th>
<th>1-5 years</th>
<th>6-10 years</th>
<th>11-15 years</th>
<th>16-20 years</th>
<th>21 years and above</th>
<th>Department of Primary education</th>
<th>Mathematics and Science Education</th>
<th>Department of Turkish and Social Sciences</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>86</td>
<td>40</td>
<td>52</td>
<td>73</td>
<td>67</td>
<td>90</td>
<td>66</td>
<td>71</td>
<td>81</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Department graduated from</td>
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</tr>
</tbody>
</table>

Data Collection Tool

The present study's data were collected employing the "‘Teachers’ Self-Efficacy Beliefs toward OOSLA" scale developed by Göloğlu Demir and Çetin (2021). It is a 5-point Likert scale consisting of four factors with 29 items. The four factors are entitled as follows: "Planning Self-Efficacy," "Implementation and Assessment Self-Efficacy," "Self-Efficacy to Support Learning," and "Knowledge and Experience Self-Efficacy." The exploratory factor analysis of the scale was found to account for 61.01% of the total variance. The confirmatory factor analysis results revealed that the scale had a good model fit ($\chi^2$/df=0.27, RMSEA=.072, SRMR=.06, PNFI=.87, and PGFI=.7) and perfect model indices (CFI=.97, NFI=.90, NNFI=.95, IFI=.97, RFI=.94). The Cronbach Alpha and combined reliability coefficients were calculated to determine reliability.

It was revealed that the Cronbach's Alpha (\(\alpha\)) reliability coefficients of the measures for the four factors and the overall scale were respectively: .95, .90, .86, .78, and .94. The Cronbach's Alpha (\(\alpha\)) reliability values were calculated for the sub-factors and the overall scale in the present study. The Cronbach's Alpha (\(\alpha\)) coefficient for the overall scale was found to be .94, while the Cronbach's Alpha (\(\alpha\)) coefficients for the sub-factors were as follows: planning self-efficacy=.92, implementation and assessment self-efficacy=.87, self-efficacy to support learning and knowledge=.81 and experience self-efficacy=.76. These indices reveal that the Cronbach Alpha internal consistency values for the "Teachers’ Self-Efficacy Beliefs Toward OOSLA" scale and each of its sub-dimension were .70 and above, indicating that the scale's internal consistency was at an acceptable level (Pallant, 2017).

Data Collection Process

In this research, the data were collected by online survey method in 2021. The reason for selecting this method is that schools were closed because of the COVID-19 pandemic. An
online survey was designed using Google Forms and shared with participants. Information was given about the research in the online form, and voluntary consent (informed consent form) was requested at first. The data was collected online from the active teachers in the teacher groups on social media platforms. The research was conducted upon the approval of Bandırma Onyedi Eylül University’s Social and Human Sciences Ethics Committee (date 18.06.2020, issue number 20 20-3).

Data Analysis

The normality test was run to identify whether the variables displayed a normal distribution before the data obtained from the “teachers’ self-efficacy beliefs regarding OOSLA” were analyzed within the scope of the study. Table 2 presents the Kolmogorov-Smirnov test results.

Table 2: Kolmogorov-Smirnov Test Results

<table>
<thead>
<tr>
<th>Scale Components</th>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>.080</td>
<td>308</td>
<td>.000</td>
</tr>
<tr>
<td>Implementation and Assessment</td>
<td>.085</td>
<td>308</td>
<td>.000</td>
</tr>
<tr>
<td>Supporting Learning</td>
<td>.117</td>
<td>308</td>
<td>.000</td>
</tr>
<tr>
<td>Knowledge and Experience</td>
<td>.085</td>
<td>308</td>
<td>.000</td>
</tr>
<tr>
<td>OOSLA (Overall Scale)</td>
<td>.040</td>
<td>308</td>
<td>.200</td>
</tr>
</tbody>
</table>

As can be observed in Table 3, the Kolmogorov-Smirnov test results indicated that the data in the overall “teachers’ self-efficacy beliefs regarding OOSLA” scale show a normal distribution (p>0.05). Thus, the standard distribution curve’s histogram Skewness and Kurtosis coefficients were examined. The Skewness and Kurtosis coefficients these calculations yielded are presented in Table 3.

Table 3: Values for the Self-Efficacy Beliefs regarding OOSLA and the Sub-Dimensions

<table>
<thead>
<tr>
<th>Scale Components</th>
<th>Skewness</th>
<th>Skewness Standard Error</th>
<th>Kurtosis</th>
<th>Kurtosis Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>-.111</td>
<td>.139</td>
<td>-.296</td>
<td>.277</td>
</tr>
<tr>
<td>Implementation and Assessment</td>
<td>-.115</td>
<td>.139</td>
<td>.064</td>
<td>.277</td>
</tr>
<tr>
<td>Supporting Learning</td>
<td>-.244</td>
<td>.139</td>
<td>-.474</td>
<td>.277</td>
</tr>
<tr>
<td>Knowledge and Experience</td>
<td>-.002</td>
<td>.139</td>
<td>-.474</td>
<td>.277</td>
</tr>
<tr>
<td>OOSLA (Overall Scale)</td>
<td>.057</td>
<td>.139</td>
<td>-.519</td>
<td>.277</td>
</tr>
</tbody>
</table>

As measures of the normality assumption, the Skewness and Kurtosis coefficients are expected to be between -1 and +1 (Morgan, Leech, Gloeckner & Barrett, 2004). Thus, the values in the present can be claimed to display a normal distribution. Moreover, z-score values obtained by dividing the Skewness and Kurtosis coefficients by the standard error and fall between -1.96 and +1.96 are regarded as sufficient for the normality assumption of the distribution (Field, 2009). Hence, the results obtained indicate that the sub-dimensions of the scale also display normal distribution.

In data analysis, the t-test was employed for the independent samples to identify whether or not the average scores from the overall “teachers’ self-efficacy beliefs regarding OOSLA”
scale and the sub-dimensions of the scale varied by gender, type of faculty graduated from, and educational status. On the other hand, Analysis of Variance (ANOVA) was used to identify whether the mean scores varied by years of seniority and department. After ANOVA, the Levene test was used to find that the variances of the distributions were homogeneous. Since variances are homogenous, and the sample size is close equity in each group (Kayri, 2009), Tukey’s multiple comparison techniques were utilized. The results of the analyses were interpreted based on the .05 significance level by reporting the percentage, frequency, mean, and standard deviation values of the variables. The eta chi-square statistic was calculated to identify whether the significant variation was affected by the difference between the mean scores. The values obtained via eta square were interpreted as follows: .01= small effect, .06= moderate effect, .14=large effect (Cohen, 1988). In addition to this, 1.00-1.79=Strongly Disagree, 1.80-2.59= Disagree, 2.60-3.39= Moderately Agree, 3.40-4.19=Strongly Agree, 4.20-5.00=Completely Agree intervals were used (Karagöz, 2019; Pimentel, 2010) in order that descriptive interpretation of the teachers’ mean scores of their self-efficacy beliefs regarding OOSLA.

Results

The first research question was, "What is the level of teachers' self-efficacy regarding OOSLA?" Descriptive statistical techniques (min, max, $\bar{x}$, s) were employed to respond to this question, and the results obtained are presented in Table 4.

Table 4. The Distribution of Teachers’ Self-Efficacy Belief Scores

<table>
<thead>
<tr>
<th>Scale Components</th>
<th>n</th>
<th>Min</th>
<th>Max</th>
<th>$\bar{x}$</th>
<th>s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>308</td>
<td>1.91</td>
<td>5.00</td>
<td>3.84</td>
<td>.61</td>
</tr>
<tr>
<td>Implementation and Assessment</td>
<td>308</td>
<td>2.00</td>
<td>5.00</td>
<td>3.77</td>
<td>.63</td>
</tr>
<tr>
<td>Supporting Learning</td>
<td>308</td>
<td>2.40</td>
<td>5.00</td>
<td>3.97</td>
<td>.61</td>
</tr>
<tr>
<td>Knowledge and Experience</td>
<td>308</td>
<td>1.50</td>
<td>5.00</td>
<td>3.65</td>
<td>.73</td>
</tr>
<tr>
<td>OOSLA (Overall Scale)</td>
<td>308</td>
<td>2.55</td>
<td>5.00</td>
<td>3.82</td>
<td>.53</td>
</tr>
</tbody>
</table>

It can be observed in Table 4 that the teachers’ mean scores of their self-efficacy beliefs regarding OOSLA ranged between 3.65-3.97. Hence, their self-efficacy beliefs can be regarded to be at a high level.

An independent sample t-test was conducted to respond to the second sub-question of research: "Do the level of teachers' self-efficacy beliefs regarding OOSLA differs by gender?" The findings showed that teachers’ self-efficacy beliefs regarding the OOSLA did not differ a significant variation by gender. The analysis results are presented in Table 5.

Table 5. T-Test Analysis Results by Gender

<table>
<thead>
<tr>
<th>Scale Components</th>
<th>Gender</th>
<th>n</th>
<th>$\bar{x}$</th>
<th>S</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Female</td>
<td>186</td>
<td>3.85</td>
<td>.60</td>
<td>306</td>
<td>.281</td>
<td>.78</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>122</td>
<td>3.83</td>
<td>.64</td>
<td>306</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation and Assessment</td>
<td>Female</td>
<td>186</td>
<td>3.74</td>
<td>.59</td>
<td>306</td>
<td>-1.240</td>
<td>.22</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>122</td>
<td>3.83</td>
<td>.68</td>
<td>306</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supporting Learning</td>
<td>Female</td>
<td>186</td>
<td>4.00</td>
<td>.60</td>
<td>306</td>
<td>.910</td>
<td>.36</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>122</td>
<td>3.93</td>
<td>.63</td>
<td>306</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As can be observed in Table 5, the scores obtained from the sub-dimensions and the overall scale of the “teachers’ self-efficacy beliefs regarding OOSLA” did not show a significant variation by gender (p>0.05).

The third sub-questions of the research were “Do the level of teachers’ self-efficacy beliefs regarding OOSLA differs by graduated faculty?” According to the independent sample t-test, teachers’ self-efficacy beliefs regarding the OOSLA did not show a significant variation among graduated faculty. The analysis results are given in Table 6.

As can be observed in Table 6, the scores obtained from the sub-dimensions and the overall scale of the “teachers’ self-efficacy beliefs regarding OOSLA” did not show a significant variation by type of faculty graduated from (p>0.05).

An independent sample t-test was conducted to respond to the fourth sub-questions research question: “Do teachers’ self-efficacy beliefs regarding OOSLA differ by educational status?” The self-efficacy beliefs of teachers regarding the OOSLA differed. A significant variation in educational status was found. The analysis results are presented in Table 7.
As can be observed in Table 7, the scores obtained from the sub-dimensions and the overall scale of the “teachers’ self-efficacy beliefs regarding OOSLA” showed a significant variation in whether or not a graduate degree was pursued (p>0.05). The teachers with a graduate degree had firmer self-efficacy beliefs than those who did not. The effect size of the significance of the sub-dimensions and the overall scale can be small as the eta square values ranged between .01 and .06.

The ANOVA test was run to respond to the fifth research sub-question how do teachers’ self-efficacy levels regarding OOSLA differ by seniority? Findings obtained from the teachers’ self-efficacy beliefs scale regarding OOSLA showed a significant difference in seniority. The analysis results are presented in Table 8.

As can be observed in Table 8, the scores obtained from the sub-dimensions and the overall scale of the “teachers’ self-efficacy beliefs regarding OOSLA” showed a significant variation by seniority (p>0.05). The Levene test run following ANOVA revealed that the variation in the group distribution was homogeneous, and the Tukey multiple comparative techniques were utilized. The results obtained showed that teachers with 21 or more years of seniority had
higher levels of self-efficacy than those with 6-10 years of experience in the “planning self-efficacy,” “implementation and assessment self-efficacy,” “supporting learning self-efficacy,” and “knowledge and experience self-efficacy” beliefs regarding OOSLA. Moreover, teachers with 21 or more years of seniority had significantly higher self-efficacy scores in the supporting learning sub-dimension and the overall scale compared to those with 11-15 years of seniority. Similarly, teachers with 11-15 years of seniority had lower self-efficacy in the knowledge and experience sub-dimension. It was revealed that the effect size of the overall scale and the sub-dimensions was small.

The sixth sub-questions of the research was “Do teachers’ self-efficacy levels regarding OOSLA differ by department graduated from?” According to the results of the ANOVA, teachers’ self-efficacy beliefs regarding OOSLA show a significant variation by department graduated from. The analysis results are given in Table 9.

Table 9. ANOVA Results regarding Department Graduated from

<table>
<thead>
<tr>
<th>Scale Components</th>
<th>Department</th>
<th>n</th>
<th>±</th>
<th>sd</th>
<th>F</th>
<th>p</th>
<th>Significant Variance</th>
<th>Eta Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Primary Edu.</td>
<td>90</td>
<td>4.00</td>
<td>.59</td>
<td>7.132</td>
<td>.000</td>
<td>2-1</td>
<td>.065</td>
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As can be observed in Table 9, the scores obtained from the sub-dimensions and the overall scale of the “teachers’ self-efficacy beliefs regarding OOSLA” showed a significant variation by
department graduated from ($p > 0.05$). The Levene test run following ANOVA revealed that the variation in the group distribution was homogeneous, and the Tukey multiple comparative techniques were utilized. The results obtained showed that teachers who were graduates of primary education had higher levels of self-efficacy than those who had graduated from a mathematics and science education department in the "planning self-efficacy," "implementation and assessment self-efficacy," "supporting learning self-efficacy," and "knowledge and experience self-efficacy" beliefs regarding OOSLA. The Turkish and social sciences department graduates were found to have significantly firmer self-efficacy beliefs regarding OOSLA than mathematics and science education department graduates. When the effect sizes were examined, it was observed that it was at a moderate level in "planning," "knowledge and experience," and the "overall scale," while it was small in the other subdimensions.

**Discussion, Conclusion, and Implications**

The present study aimed to investigate the self-efficacy beliefs levels of teachers as regards OOSLA. In addition, the study examined whether teachers' self-efficacy beliefs in OOSLA varied by their gender, the type of faculty they graduated from, the department they graduated from, their educational status, and their seniority. According to the present study results, the teachers participating in the study were revealed to have a high level of self-efficacy beliefs in OOSLA. This finding is consistent with the finding reported by Tural and Kala (2018). They studied teacher candidates’ self-efficacy beliefs in museum education and found that teacher candidates had a high level of self-efficacy beliefs. Mosoley, Reinke, and Bookout (2003) revealed that the self-efficacy of outdoor environmental education is high in the study of preservice teachers. In another study conducted by Gürsoy (2018), the teachers' pre-and post-test self-efficacy belief scores who performed OOSLA varied significantly in favor of the post-test.

The teachers' self-efficacy beliefs regarding OOSLA did not vary significantly by gender and type of faculty graduated from in the sub-dimensions and the overall scale. This is consistent with other findings reported in studies by Pekin and Bozdoğan (2021) and by Sontay and Karamustafaoğlu (2017), where there was no significant variation between teachers' levels of self-efficacy in their ability to organize out-of-school excursions by gender. Similar findings are also observed in studies conducted with teachers and teacher candidates in the related literature (Hamurcu & et al., 2019; Kunduracı, 2015; Sanşan Tunguç, 2015; Uysal & Kösemen, 2013; Yeşilbursa & Uslu, 2014). This indicates that females and males have similar self-efficacy beliefs and that their beliefs in completing a duty or task did not vary by gender. Britner and Pajares (2006) concluded that gender makes a significant difference in self-efficacy. In addition to this, Pekin and Bozdoğan (2021) reported no significant difference between teachers' levels of self-efficacy beliefs regarding the type of faculty graduated also. Considering that teachers are trained from different sources such as education faculties and science and literature faculties in our country, it is thought-provoking that teachers' self-efficacy beliefs regarding OOSLA do not show a significant difference in favor of education faculties. However, faculties of education are institutions where teacher candidates receive pedagogy training and practice for a more extended time.

The self-efficacy beliefs of teachers with a graduate degree (master's or Ph.D. degree) were revealed to be higher than those who did not hold a graduate degree. In other words, teachers
with a graduate degree had higher levels of "planning self-efficacy," "implementation and assessment self-efficacy," "self-efficacy to support learning," and "knowledge and experience self-efficacy," as well as an "overall self-efficacy" in OOSLA. This finding shows similarity with the findings reported in a study conducted by Pekin and Bozdoğan (2021) with middle school teachers. In another conducted by Sontay and Karamustafaoğlu (2017), it was revealed that teachers' self-efficacy levels in their ability to organize excursions were significantly higher for those who held a graduate degree compared to those who did not. In many developed countries, including England, Canada, Australia, Singapore, Finland, and Germany teaching profession is required a graduate degree (Şişman, 2009). The results of the study examined the impact of postgraduate studies on teachers' practice and showed that research conducted in universities by teachers had improved their teaching (Ion & Iucu, 2016). From this point of view, it can be said that the positive reflections of postgraduate education on the teaching process of teachers are also practical on OOSLA.

Teachers with more than 21 years of professional experience had firmer self-efficacy beliefs in OOSLA than those with 6-10 years of experience. Experienced teachers had higher levels of "planning self-efficacy," "implementation and assessment self-efficacy," "self-efficacy to support learning," and "knowledge and experience self-efficacy" in OOSLA. This finding is not consistent with the findings reported by Pekin and Bozdoğan (2021); Pas, Bradshaw, and Hershfeldt (2012), and Yılmaz and Çokluk-Bökeoğlu (2008). However, it shows similarities with the findings of the studies conducted by Sontay and Karamustafaoğlu (2017), and Aydın, Haşıoğlu, and Kunduracı (2016). Despite these studies in the related literature, more studies need to be conducted to reveal the relationship between teachers' self-efficacy beliefs in terms of professional experience. In organizing OOSLA, realizing the necessary official procedures, the provision of student safety, and the more significant experience of teachers in classroom management may have positively affected their self-efficacy belief in OOSLA.

The present study results revealed that the levels of self-efficacy beliefs of teachers who were mathematics and science education graduates were higher than those of teachers who were graduates of primary education, Turkish education, and social sciences education. It can be attributed to the fact that out-of-school learning environments (museum-archeological sites, schoolyards, etc.) are easier to benefit from in the disciplines of social sciences. Studies conducted in Turkey on out-of-school learning environments between 2007 and 2016 were examined. It was determined that most of the studies on out-of-school learning environments were in science and social Sciences (Saraç, 2017).

Based on the findings revealed in the present study, the following recommendations can be made: (i) experienced and less experienced teachers are recommended to work collaboratively in conducting OOSLA; (ii) school principals are recommended to develop interventions that support and facilitate OOSLA; (iii) the mathematics and science education departments in education faculties are recommended to give more place to the topic of OOSLA in their curriculum; (iv) teachers can be encouraged to pursue a postgraduate degree, and (v) teachers with a postgraduate degree are recommended to work collaboratively with their colleagues in the area of OOSLA. The collection of data during the pandemic period is a limitation of this research. It is recommended to repeat similar studies in the period when teachers provide face-to-face education.
References


TÜRKÇE GENİŞ ÖZET

Öğretmenlerin Okul Dışı Öğrenme Faaliyetlerine Yönelik Öz-Yeterlik İnançları

Giriş


1. Öğretmenlerin ODÖF’e yönelik öz-yeterlik inançları ne düzeydedir?
2. Öğretmenlerin ODÖF’e yönelik öz-yeterlik inançları cinsiyete göre anlamlı farklılıklar göstermektedir mi?
3. Öğretmenlerin ODÖF’e yönelik öz-yeterlik inanç düzeyleri mezun olunan fakültelere göre anlamlı farklılık göstermektedir?
4. Öğretmenlerin ODÖF’e yönelik öz-yeterlik inançları eğitim durumuna göre anlamlı farklılık göstermektedir?
5. Öğretmenlerin ODÖF’e yönelik öz-yeterlik inançları kideye göre anlamlı farklılık göstermektedir?
6. Öğretmenlerin ODÖF’e ilişkin öz-yeterlik inanç düzeyleri mezun olunan bölüme göre anlamlı farklılık göstermektedir?

Yöntem


Bulgular

Tartışma, Sonuç ve Öneriler


Bu araştırmının sonuçlarına göre matematik ve fen bilimleri eğitim bölümü mezunlarının, temel eğitim ve Türkçe ve sosyal bilimler eğitim bölümü mezunlarının ise genel olarak daha düşük inanç değerlerine sahiptir. Bu durum okul dışı-ögrenme ortamlarının (müze, ören yerleri, okul bahçesi vb.) sosyal bilimler disiplinlerinde kullanımının daha kolay olması ile açıklanabilir. Araştırmada elde edilen sonuçlara bağlı olarak kılavuzluğa sunulan, ODÖF’ü gerçekleştirememesi hususunda deneyimli öğretmenler ile diğer öğretmenlerin iş birliği içerisinde çalışması sağlanabilir. Okul yöneticilerinin ODÖF’ü dekleleyici ve kolaylaştırıcı uygulamalar geliştirmesi sağlanabilir. Öğretmenler lisansüstü eğitim almaya teşvik edilebilir ve lisansüstü eğitim alan öğretmenlerin ODÖF konusunda diğer meslektaşları ile iş birliği yapması sağlanabilir.