

# Examination of self-efficacy beliefs of preservice Turkish language education teachers on educational internet use

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## ABSTRACT

This study was conducted to examine the self-efficacy belief levels of preservice Turkish language education teachers on educational internet use in terms of various variables. The sample of the study was selected based on the non-random purposive sampling method and 197 preservice Turkish language education teachers who agreed to participate in and answer the questions in the scale generated the sample of the study. The study was conducted as a survey research and the data was collected via "Educational Internet Usage Self-Efficacy Beliefs Scale" which was developed by Akgün et al. (2017) and which consists of 26 items in 5-point-likert scale. The findings of the study present that the self-efficacy belief levels of preservice Turkish language education teachers on educational internet usage do not differ significantly according to the gender, class level and age variables. On the other hand, the self-efficacy belief levels of the preservice Turkish language education teachers on educational internet usage differ significantly according to computer using experience, weekly internet using time period, having an education on educational internet use and perceptions on the level of competence in using FATİH Project technologies within the education. It is highly recommended that similar studies with different and wider samples should be conducted in the future.

**Keywords:** Self-efficacy, preservice teacher, preservice Turkish language education teachers, educational internet use.

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## INTRODUCTION

Rapid changes occurred in the 21st century is also affecting the demands and needs in education. In this case, it requires educators to gain some competencies and to renew themselves to face off new situations. In order to acquire these competencies, some psychological variables should be taken into consideration as well as the education given. It has been stated many times in the literature that self-efficacy beliefs are an important variable that determines the frequency and success of individuals using technology (Sure, 2009). Teachers' beliefs and attitudes towards technology have been associated to adoption and integration of these technologies (Donnelly et al., 2011). The basis of these beliefs is self-efficacy beliefs, which are defined as beliefs

about the individual's ability to influence or achieve certain results (Shea and Bidjerano, 2010). This should not be thought as just a physical classroom and school environment. Through high-tech learning environments such as social media, mobile technologies, smart classrooms, flipped learning, and live webcasts, technology-integrated learning and teaching are becoming more common. Especially with the Covid-19 process, these flexible teaching models have an important role in the adoption of technologies belonging to these models.

Considering the above-mentioned facts and developments it can be stated that implementation of technology within the educational activities has gradually

increased over time. Several studies in the literature underline that technology is the primary condition of obtaining effective results from the educational process (Ege and Sezer, 2002; Surry, 2000). Hence, classical teaching tools like books or notebooks are rapidly replaced with new technological devices. Since internet is considered as one of the most preeminent tools due to its advantages both on the speed and variety for presentation of information (Ekiz et al., 2003: 93), it is the leading one in this replacement. All the constituents, particularly the teachers and the students consider technology as a phenomenon which contributes directly to education. Within this framework, language teaching which is the core element in conveying information for all educational and teaching areas is directly affected by the technology-based improvements as well. Accordingly, internet based educational technologies are intensely used throughout all the educational processes especially during in-class activities.

Despite the conflict on the direct effect of technology on education, virtual tools, which are the recent source of knowledge at the beginning of this century, play a significant role for the language teaching area just like the other teaching areas. Similarly, it is observed that language teachers tend to take advantage of technology in their classrooms and thus utilization of technology in the language teaching classrooms gradually increase over time. For instance, a study conducted by Marcinkiewicz with 170 elementary school teachers reported that almost half of the participants did not use computers for teaching (Marcinkiewicz, 1993). According to Marcinkiewicz, self-efficacy beliefs and lack of innovativeness were the main reasons of these findings. However, another study carried out only five years after Marcinkiewicz's research displayed that internet use in the state schools increased almost three times (Becker, 1999: 3). A 2016 study conducted with university students in Turkey revealed that the young people use internet for several purposes and internet use rate is 84.19% (Atav et al., 2006: 38). Yet, data from a 2019 report indicated that nearly 83.3% of Turkey's population use internet (Internet World Stats, 2019). Accordingly, Turkish Statistical Institute's (TSI) 2019 data on the household information technologies use survey reported that the internet using rate for 16 to 74 age range is 75.3% (TSI, 2019).

In their study which aims to reveal the perceptions of preservice teachers (mathematics, science, social sciences, pre-school, elementary school and Turkish) on the skills to use and utilize the internet, computer and educational technology based on different variables. Erdemir et al. (2009) found out that preservice teachers indicated that they did not feel competent in using the internet and the computers for the educational purposes, felt competent in utilizing the search motors, did not have any difficulties in preparing simple educational materials and that did not feel competent in preparing the multi-

purpose teaching tools. These findings demonstrate that internet use rates are considerably high among the university students. Although a distinction among the departments wasn't emphasized, these high rates are significant in presenting the adaptation of the university students for the technology and the internet.

With Movement to Increase Opportunities and Technology or FATİH Project smart boards were installed in the classrooms and tablet computers were given to the teachers and the students in Turkey (FATİH Project, n.d.). Likewise, Education Information Network (EBA) was prepared to support the project by providing interactive educational software and digital contents (Yıldız et al., 2013). Utilization of efficient information technologies, which is considered as one of the essential skills for the 21<sup>st</sup> century individuals (ISTE, 2016), is also regarded as the skills expected from all the teachers, dependent of his/her major. Even efficient utilization of information technologies is listed among the expected qualifications in National Qualifications Framework for Higher Education in Turkey Teacher Training and Educational Sciences Qualifications published by Higher Education Institute in Turkey (NQFHE, n.d.). Therefore, meeting this expectation is a requirement for all the teaching areas as technology is an indispensable aspect of the information age. In short, although efficient utilization of technological tools was considered as a privilege before the information age, nowadays this skill is an obligation for all the teachers. From this point of view, it is obvious that new generations access information via efficient utilization of technology by proper education given by qualified teachers. Therefore, integrating technology into their classroom activities is regarded as one of the responsibilities of the teachers (Gündüz and Odabaşı, 2004). All the teachers including the Turkish language education teachers should work hard to fulfill this responsibility. Therefore, examination and improvement of these skills of Turkish language education teachers and preservice Turkish language education teachers is a significant topic. In the literature the study of Eyüp (2012) on determining the self-confidence of preservice Turkish language education teachers on using teaching technologies presented that self-confidence of preservice Turkish language education teachers on using teaching technologies was sufficient. Likewise, in the study of Şahin and Akçay (2011), which examines the attitudes of preservice Turkish language education teachers on computer assisted education, a positive attitude was found out. Şahin and Akçay (2011) explain that this positive attitude is related to the fact that preservice Turkish language education teachers have to use internet to do their homework and researches (Şahin and Akçay, 2011: 914). Therefore, it can be stated that the internet use is a determining factor both for educational technologies and for utilizing the advantages of information technologies. However, due to rapidly developing technology, technology in education is not

limited to computer or internet usage for the teachers. To train the students on topics such as enhancing the creativity, supporting the ability to work collaboratively and enabling collaboration and communication independent from space and time by utilizing information and communication technologies (ISTE, 2016) and thus self-development of the teachers and is an expected and significant aspect. Therefore, educational internet use is considered as one of the main skills (Topal and Akgün, 2015).

One of the most significant variables affecting the educational internet use skills is self-efficacy beliefs on educational internet use. Self-efficacy beliefs are defined as one's beliefs on the ability to succeed in a specific incident, situation or a task against that very incident, situation or task (Bandura, 1997). As it is valid for many areas, self-efficacy beliefs are among the considerable variables for the teaching and utilizing information technologies area (Akgün, 2008). There are several studies on the self-efficacy beliefs of teachers and preservice teachers on educational internet use. These studies presented significant differences for self-efficacy beliefs of the teachers preservice teachers on educational internet use in terms of variables such as gender (Baş, 2011; Durmuş and Başarmak, 2014; Yenilmez et al., 2012; Kaya et al., 2014; Topal and Akgün, 2015a; Bekmezci et al., 2015; Sırakaya et al., 2015; Akman, 2016), having a computer (Yenilmez et al., 2012; Sarışan-Tungaç and Ergun, 2017), computer and internet experience (Tuncer and Özüt, 2012; Yenilmez et al., 2012; Kahraman et al., 2013; Durmuş and Başarmak, 2014; Sırakaya et al., 2015; Topal and Akgün, 2015a; Akman, 2016; Taşlıçay Arslan, 2018), weekly or daily computer and internet using time periods (Sırakaya et al., 2015; Topal and Akgün, 2015a), success on the computer class(es) (Yenilmez et al., 2012), social media use and using time periods (Topal and Akgün, 2015a), professional seniority (Baş, 2011; Elkatmış, 2014) educational level (Baş, 2011) and class level (Tuncer and Özüt, 2012; Şahin et al., 2016). Besides, although some studies showed that self-efficacy beliefs of preservice Turkish language education teachers on educational internet use are high (Varışoğlu et al., 2012) and that they use the information technologies effectively (Karasakaloğlu et al., 2011), there are some studies indicating that the self-efficacy beliefs of those participants on educational internet use are lower than the other departments of Faculty of Education (Durmuş and Başarmak, 2014; Sırakaya et al., 2015; Teke, 2015; Topal and Akgün, 2015a; Kabaran et al., 2016). Likewise, the studies conducted in Turkey stated that the convenience of the internet is the major factor for the self-efficacy beliefs of preservice Turkish language education teachers (Varışoğlu et al., 2012). Additionally, the international findings support this fact as well. Teo (2009) found out that perceived usefulness is the strongest determinant for the intense use of information

technologies particularly computer use. Therefore, it is presumed that determining the self-efficacy beliefs of preservice Turkish language education teachers on the Internet – especially with the new concepts coming with FATİH Project internet – is a considerable topic.

Within this context the aim of this study is to examine the self-efficacy beliefs of the preservice teachers attending Sakarya University Faculty of Department of Education Turkish Teaching on educational internet use based on gender, class level, age, computer and internet using experience, weekly internet using time periods, receiving sufficient education on internet use at school, perceptions on self-competence in FATİH Project technologies variables.

## MATERIALS AND METHODS

This study is on presenting the characteristics of a mass by gathering data from a specified mass. Therefore, a cross sectional survey model has been used in this study. In cross sectional studies, the variables to be described are measured once (Büyüköztürk et al., 2012).

### Participants

This study which is held via gathering data from a specified group employs a non-random purposive sampling method. Non-random purposive sampling is used to work with a group of people who have or meet specific characteristics (Büyüköztürk et al., 2012). 197 students attending Sakarya University Faculty of Department of Education Turkish Teaching volunteered to fill in the scale for this study and the analyses were carried out based on the data collected from these 197 participants.

### Data collection tools

“Educational Internet Usage Self-Efficacy Beliefs Scale” developed by Akgün et al. (2017) was used for this study. The scale which has one factor consists of 26 items in 5-point-likert scale. The Cronbach alpha reliability coefficient calculated for the reliability of the scale is .970 (Akgün et al., 2017). The Cronbach alpha reliability coefficient calculated for this study is .952.

### Data analysis

First, Kolmogorov-Smirnov coefficients were calculated to examine whether the data have a normal distribution. The value obtained from the total score of the scale is .200. Since this value, which is bigger than  $p < .05$ , the obtained data display a normal distribution (Can, 2014). Thus,

Independent-Samples T Test and One-Way ANOVA were used for the analyses.

## FINDINGS

The average value of data obtained from Educational Internet Usage Self-Efficacy Beliefs Scale was calculated as  $\bar{X} = 101.05$ . Considering that the lowest score that can be obtained from the scale is 5 and the highest score is 130, percentage point of the above-mentioned value is 78.07% which is medium-high level.

### Comparison of self-efficacy belief levels on educational internet use and gender

Independent-Samples T Test was conducted for the comparison of the self-efficacy belief levels on educational internet use and gender variable the findings are shown in Table 1.

Table 1 displays that there is not a significant difference between the self-efficacy belief levels on educational internet use and gender ( $t(193) = 1.33, p < .05$ ). Thus,  $\eta^2$  which is effect size was not calculated.

### Comparison of self-efficacy belief levels on educational internet use and class levels

One-Way ANOVA was conducted for the comparison of self-efficacy belief levels on educational internet use and the class the students are attending. While Table 2 shows the descriptive statistics on the distribution of the self-efficacy belief levels on educational internet use based on class levels. Table 3 gives the findings of the one-way analysis of variance.

The findings presented at Tables 2 and 3 present that the self-efficacy belief levels on educational internet use of the students do not present any significant difference based on their class levels. Therefore,  $\eta^2$  which is effect size wasn't calculated and the results of the post-hoc test were not reported.

### Comparison of self-efficacy belief levels on educational internet use and age

The comparison of the self-efficacy belief levels on educational internet use and age of the participants were conducted using One-Way ANOVA – one-way analysis of variance – for the independent samples. The descriptive statistics on the distribution of the self-efficacy belief levels of the participants on educational internet use based on age variable are listed in Table 4 and the results of the one-way analysis of variance are given in Table 5.

Since the results given at Table 5 indicate that there is

not a significant difference between the self-efficacy belief levels of the students on educational internet use and their age,  $\eta^2$  which is effect size was not calculated and the results of the post-hoc test were not reported.

### Comparison of self-efficacy belief levels on educational internet use and internet using time

One-way analysis of variance (ANOVA) for the independent samples was used for the comparison of the self-efficacy belief levels of the participants on educational internet use and the weekly time periods the participants spend on the Internet. Accordingly, Table 6 presents the descriptive statistics on the distribution of the self-efficacy belief levels on educational internet use based on internet use time periods and Tables 7 and 8 show the results obtained from one-way analysis of variance.

The findings at Table 6, 7 and 8 present a statistically significant difference for the self-efficacy belief levels on educational internet use of the participants based on their weekly internet use time. On looking at the table it can be seen that the participants using the internet for 30 hours and more ( $\bar{X} = 103.36$ ) and between 11 and 29 hours ( $\bar{X} = 103.52$ ) have significantly higher self-efficacy belief levels on educational internet use compared to those using the internet for 10 hours and less ( $\bar{X}=94.60$ ). Hence, the value calculated for  $\eta^2$  is .06 which has a medium effect size as it is between .06 and .14 (Green and Salkind, 2008).

### Comparison of self-efficacy belief levels on educational internet use and computer using experience

One-way analysis of variance (ANOVA) was used for the comparison of self-efficacy belief levels on educational internet use of the students and their experience in computer using. While Table 9 displays the descriptive statistics on the distribution of the self-efficacy belief levels on educational internet use of the participants based on their computer using time periods in terms of years, Tables 10 and 11 gives the results of one-way analysis of variance.

The findings given at Tables 9, 10 and 11 indicate that there is a statistically significant difference for the self-efficacy belief levels on educational internet use of the participants based on their experience of computer using. Correspondingly, the participants who have been using computers for 10 years and more ( $\bar{X} = 104.35$ ) have significantly higher self-efficacy belief levels on educational internet use compared to those who have been using computers for 6 years and less ( $\bar{X} = 93.30$ ). Thus,  $\eta^2$  is found as .041. Since the obtained value is smaller than .06, the effect size is considered as low (Green and Salkind, 2008).

**Table 1.** Findings of independent-samples t test from the comparison of the self-efficacy belief levels on educational internet use and gender variable.

	<b>N</b>	$\bar{X}$	<b>S</b>	<b>sd</b>	<b>T</b>	<b>P</b>	$\eta^2$
Male	70	102.95	14.74	193	1.33	.947	-
Female	125	99.88	15.77				

**Table 2.** Descriptive statistics on the comparison of self-efficacy belief levels on educational internet use and class levels.

<b>Class level</b>	<b>N</b>	$\bar{X}$	<b>S</b>
Freshman	50	96.08	14.78
Sophomore	46	103.56	13.35
Junior	53	103.16	15.99
Senior	47	101.05	14.74

**Table 3.** Findings of one-way analysis of variance for the independent samples on the comparison of self-efficacy belief levels on educational internet use and class levels.

<b>Source of the variance</b>	<b>Total squares</b>	<b>sd</b>	<b>Average squares</b>	<b>F</b>	<b>p</b>	<b>Significant difference</b>	$\eta^2$
Intergroup	1773.28	3	591.09	2.543	.058		
Intragroup	44636.20	192	232.48			-	-
Total	46409.49	195					

**Table 4.** Descriptive statistics on the comparison of self-efficacy belief levels on educational internet use and age.

<b>Age</b>	<b>N</b>	$\bar{X}$	<b>S</b>
18	20	91.00	13.72
19	29	99.06	14.12
20	39	104.71	15.75
21	47	100.74	15.77
22	24	101.41	14.12
23	21	104.57	15.06
24 and above	12	101.66	17.46

**Table 5.** Findings of one-way analysis of variance for the independent samples on the comparison of self-efficacy belief levels on educational internet use and age.

<b>Source of the variance</b>	<b>Total squares</b>	<b>sd</b>	<b>Average squares</b>	<b>F</b>	<b>p</b>	<b>Significant difference</b>	$\eta^2$
Intergroup	2922.97	6	487.16	2.119	.053		
Intragroup	42528.33	185	229.88			-	-
Total	45451.31	191					

**Table 6.** Descriptive statistics on the comparison of the self-efficacy belief levels on educational internet use and internet use time periods.

<b>Internet use time (weekly)</b>	<b>N</b>	$\bar{X}$	<b>S</b>
10 hours and less	53	94.60	15.18
Between 11-29 hours	59	103.52	12.87
30 hours and more	74	103.36	16.60

**Table 7.** Findings of one-way analysis of variance for the independent samples on the comparison of the self-efficacy belief levels on educational internet use and internet use time periods.

Source of the variance	Total squares	sd	Average squares	F	P	Significant difference	$\eta^2$
Intergroup	3020.44	2	1510.22	6.718	.002	30 hours and more, between 11 and 29 hours > 10 hours or less	.061
Intragroup	13389.04	193	224.81				
Total	46409.49	195					

**Table 8.** Scheffe test results for the comparison of the self-efficacy belief levels on educational internet use and internet use time periods.

Internet use time	10 hours or less	between 11 and 29 hours	30 hours and more
10 hours and less	1	-8.91*	-8.76*
Between 11 and 29 hours	-	1	0.15
30 hours and more	-	-	1

\* $p < .05$ .

**Table 9.** Descriptive statistics on the comparison of the self-efficacy belief levels on educational internet use and computer using experience.

Computer using time (yearly)	N	$\bar{X}$	S
6 years and less	55	96.30	14.91
Between 7 and 9 years	62	101.04	13.88
10 years and more	79	104.35	16.23

**Table 10.** Results of one-way analysis of variance for the independent samples on the comparison of the self-efficacy belief levels on educational internet use and computer using experience.

Source of the variance	Total squares	Sd	Average squares	F	p	Significant difference	$\eta^2$
Intergroup	2098.81	2	1049.40	4.571	.011	10 years and more > 6 years and less	.041
Intragroup	44310.67	193	229.58				
Total	46404.49	195					

**Table 11.** Scheffe test results for the comparison of the self-efficacy belief levels on educational internet use and computer using experience.

Computer using experience	6 years and less	between 7 and 9 years	10 years and more
6 years and less	1	-4.73	-8.04*
Between 7 and 9 years	-	1	-3.30
10 years and more	-	-	1

\* $p < .05$ .

**Comparison of self-efficacy belief levels on educational internet use and perceptions of the students on receiving sufficient education on internet use in education**

Independent-Samples T Test was used for the comparison of self-efficacy belief levels on educational internet use of the students and their perceptions on

receiving sufficient education on internet use in education. The findings are presented in Table 12.

As it is seen in Table 12 self-efficacy belief levels of the students on educational internet use and their perceptions on receiving sufficient education on internet in education ( $t(194) = 4.44, p < .05$ ) significantly differ in favor of the students who think they have received sufficient education ( $\bar{X} = 108.94$ ) compared to the ones

**Table 12.** Results of independent-samples t-test on the comparison of self-efficacy belief levels on educational internet use and perceptions of the students on receiving sufficient education on internet use in education.

Receiving sufficient education on Internet use in education	N	$\bar{X}$	S	sd	t	p	$\eta^2$
I received sufficient education	51	108.94	14.21	194	4.44	.00	.092
I didn't receive sufficient education	145	98.27	14.91				

who think they have not received sufficient education ( $\bar{X}$  = 98.27). Thus,  $\eta^2$  is calculated as .092 which implies a medium effect size as it is between .06 and .14 (Green and Salkind, 2008).

### Comparison of self-efficacy belief levels on educational internet use and perceptions of the students on their competence in using FATIH project technologies

One-way analysis of variance for the independent samples was used for the comparison of self-efficacy

belief levels on educational internet use and the perceptions of the students on their competence in using FATIH Project Technologies. The descriptive statistics on the distribution of the self-efficacy belief levels of the students based on the aforementioned perceptions are given in Table 13 and the results of the one-way analysis of variance were demonstrated in Tables 14 and 15.

The findings presented in Tables 13, 14 and 15 point out that there is a statistically significant difference for the self-efficacy belief levels on educational internet use of the participants based on the perceptions of the students on their competence in using FATIH Project Technologies.

**Table 13.** Descriptive statistics on the comparison of the self-efficacy belief levels of the participants on educational internet use and perceptions of the students on their competence in using FATIH Project Technologies.

Perceptions of the students on their competence in using FATIH Project Technologies	N	$\bar{X}$	S
I am completely incompetent	14	92.64	15.40
I am incompetent	41	92.34	16.38
I am not sure	84	100.96	12.31
I am competent	40	106.77	14.27
I am completely competent	10	121.40	9.65

**Table 14.** Results of one-way analysis of variance for the independent samples on the comparison of the self-efficacy belief levels on educational internet use and perceptions of the students on their competence in using FATIH Project Technologies.

Source of the variance	Total squares	Sd	Average squares	F	P	Significant difference	$\eta^2$
Intergroup	9538.83	4	2384.70	12.465	.000	I am completely competent, I am competent, I am not sure > I am completely incompetent, I am incompetent; I am completely competent > I am not sure	.21
Intragroup	35200.70	184	191.30				
Total	44739.53	188					

**Table 15.** Scheffe Test Results of the comparison of the self-efficacy belief levels on educational internet use and perceptions of the students on their competence in using FATIH Project Technologies.

Perceptions of the students on their competence in using FATIH Project Technologies	I am completely incompetent	I am incompetent	I am not sure	I am competent	I am completely competent
I am completely incompetent	1	0.30	-8.32*	-14.13*	-28.75*
I am incompetent	-	1	-8.62*	-14.43*	-29.05*
I am not sure	-	-	1	-5.81	-20.43*
I am competent	-	-	-	1	-14.62
I am completely competent	-	-	-	-	1

\* $p < .05$ .

The self-efficacy belief levels of the students on educational internet use who thinks they are “completely competent” ( $\bar{X} = 121.40$ ), “competent” ( $\bar{X} = 106.77$ ) and who “are not sure” ( $\bar{X} = 100.96$ ) are significantly higher compared to those who thinks they are “incompetent” ( $\bar{X} = 92.34$ ) and “completely incompetent” ( $\bar{X} = 92.64$ ) in using FATİH Project Technologies. Besides, the participants who thinks they are “completely competent” ( $\bar{X} = 121.40$ ) reached a statistically significant and a high average than the ones who “are not sure” ( $\bar{X} = 100.96$ ) for using FATİH Project Technologies. Accordingly,  $\eta^2$  was calculated as .21 the effect size of which is considered as high as the value is bigger than .14 (Green and Salkind, 2008).

## CONCLUSION, DISCUSSION AND SUGGESTIONS

The aim of this study is to examine the self-efficacy beliefs of preservice Turkish language education teachers on educational internet use which is an attractive topic for the educators. Within this scope answers obtained from 197 preservice Turkish language education teachers were evaluated. According to the findings of the analysis the self-efficacy perception level of participant preservice Turkish language education teachers on educational internet use was found as  $\bar{X} = 101.05$ . Considering that the lowest score that can be obtained from the scale is 5 and the highest score is 130, percentage point of the aforementioned value is 78.07% which is medium-high level. In their studies conducted with a scale developed by Şahin (2009) in which the highest score was 140, Varışoğlu et al. (2012) stated that the self-efficacy belief levels of preservice Turkish language education teachers on educational internet use was  $\bar{X} = 101.05$ . In the same study the average of the self-efficacy beliefs of Turkish language education teachers on educational internet use was calculated as 68.05%. Thus, our study revealed a higher average.

The results of the study also pointed out that there isn't a significant difference between the self-efficacy beliefs of female and male Turkish language education teachers on educational internet use. This result bears a resemblance to the study of Varışoğlu et al. (2012). Moreover, the abovementioned finding coincides with the findings of the studies on the self-efficacy beliefs of Turkish language education teachers and preservice teachers on educational internet use conducted by Tuncer and Özüt (2012), Varışoğlu et al. (2012), Kahraman et al. (2013), Elkatmış, 2014, Teke (2015), Kabaran et al. (2016), Şahin et al. (2016), Erdamar et al. (2017), Sarışan-Tungaç and Ergun (2017), Taşlıçay-Arslan (2018) and Karaoğlu Yılmaz and Yılmaz (2019). On the other hand, while some of the studies on the self-efficacy beliefs of Turkish language education teachers and preservice teachers on educational internet use presented that male participants have higher scores than the female

participants (Yenilmez et al., 2012; Kaya et al., 2014; Durmuş and Başpırmak, 2014; Bekmezci et al., 2015; Sırakaya et al., 2015; Topal and Akgün, 2015a; Akman, 2016), others stated that female participants have higher scores compared to the male participants (Baş, 2012). Although some studies indicate that female teachers or preservice teachers have higher scores, it has been observed that the gap between the genders closed in the contemporary studies.

The scores for the self-efficacy beliefs of the preservice Turkish language education teachers on educational internet use did not differ based on the class the participants are attending. Likewise, the results of the analysis depicted that age is not a variable affecting the self-efficacy beliefs of the preservice Turkish language education teachers on educational internet use either. In the literature studies of Yenilmez et al. (2012), Kahraman et al. (2013) and Taşlıçay Arslan (2018) revealed similar results. On the other hand, studies conducted by Tuncer and Özüt (2012) and Şahin et al. (2016) stated that senior students have higher self-efficacy beliefs on educational internet use compared to the teachers who have been teaching for a couple years. This finding can be related to the classroom experience of the novice teachers.

The findings of this study proved that the preservice Turkish language education teachers using the internet for 30 hours and more and between 11 and 29 hours have significantly higher self-efficacy belief levels on educational internet use compared to those using the internet for 10 hours and less. That is, self-efficacy belief levels of the preservice teachers using internet for at least 11 hours are significantly higher than those who use internet less. Furthermore, since the effect size calculated for this significance is considered as medium (Green and Salkind, 2008), it can be recommended that at least 11-hour internet using time period contribute to the self-efficacy beliefs of the preservice Turkish language education teachers on educational internet use. Aforementioned results also coincide with the results of the studies by Yenilmez et al. (2012), Durmuş and Başpırmak (2014) and Topal and Akgün (2015a).

In addition, the findings revealed that self-efficacy beliefs of the preservice Turkish language education teachers on educational internet use who have more than 10 years of computer using experience is significantly higher than those who have been using computer for 6 years or less. Likewise, the studies in the literature also indicate that computer experience has a positive contribution to the self-efficacy beliefs of the preservice Turkish language education teachers on educational internet use (Kahraman et al., 2013; Topal and Akgün, 2015a; Taşlıçay Arslan, 2018). Moreover, having a computer (Yenilmez et al., 2012; Sarışan Tungaç and Ergun, 2017) and attending computer use classes positively affect the self-efficacy beliefs of the participants (Yenilmez et al., 2012).



Self-efficacy beliefs of preservice Turkish language education teachers on educational internet use who think that they have received sufficient education on educational internet use is higher than those who think they did not receive such an education. Likewise, the effect size calculated for this significance is high as well. This finding presents similarity with the finding in the study of Topal and Akgün (2015a). As a matter of fact, self-efficacy beliefs related to information technology skills can improve with experience (Torkzadeh et al., 1999; Salanova et al., 2000; Topal and Akgün, 2015b). Finally, the self-efficacy beliefs of the preservice Turkish language education teachers on educational internet use differs significantly based on their perceptions on being competent enough for using FATİH project technologies. The results indicate that self-efficacy beliefs of the preservice Turkish language education teachers on educational internet who think they are completely competent, competent and who are not sure about their competence are higher than the participants who think they are completely incompetent and incompetent. This finding coincides with the finding in the study of Topal and Akgün (2015b).

It can be recommended that future studies examining the self-efficacy beliefs of Turkish language education teachers on educational internet use can be done with different and wider samples. Besides, the self-efficacy beliefs of Turkish language education teachers on educational internet use can be compared to that of teachers from other majors. In addition, prospective studies can focus on the positive and negative attitudes of preservice Turkish language education teachers on educational internet use and utilization of information and communication technologies in education. Finally, the reasons for higher or lower self-efficacy beliefs and their effects on curriculum or the resources and offerings of the schools or institutions can also be examined in detail.

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