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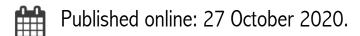
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TEACHER EDUCATION AND DEVELOPMENT ▎RESEARCH ARTICLE
Investigating Pre-service EFL teachers' Perceptions of Online Education

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Abstract: This study sets out to investigate the pre-service EFL teachers' opinions on online education. The participants were 3rd and 4th grade students studying in ELT departments in three different state universities. Quantitative research design was adopted for the current study. Data was gathered through a questionnaire. Having collected data, descriptive statistics, t-test and ANOVA were conducted to analyze data. The results indicated that gender and grade level had an impact on participants' attitudes. However, no significant difference was detected between participants' opinions and their GPA.

Keywords: Online education, pre-service teachers, ELT.

Developments in the world of technology offer alternatives in various fields including education. Recent trends in educational technology have led to a proliferation of studies that investigate computer-based instruction (Özer, 2018; Young, 2003). Besides continuing the traditional face-to-face education, institutions start offering online education for some courses. Online education, as suggested by Ascough (2002), provides a different learning experience via computer or through World Wide Web (WWW) than the traditional classroom since the learners are different, and the social dynamics of learning environment are changed. It is distinctive for providing access to the resources anytime and anywhere (Holmes & Gardner, 2006). When compared to traditional face-to-face education, teacher and students are separated in online education (Paulsen, 2002). However, with the help of two-way communication, presenting a multisensory experience, students can interact both with their teachers and other students, which makes online education collaborative (Kearsly, 2000).

Online education has received considerable critical attention in recent years (Bakar, 2009; Mohammadi, Ghorbani, & Hamidi, 2011; Ong & Lai, 2006). Swan's review of the studies on the effectiveness of online education and its differences from traditional education revealed that online learning environments produce generally equivalent learning outcomes as face-to-face instructions (Swan, 2003). Moreover, she found out that individualized instructions and immediate feedback could promote learning when the appropriate tools were used (Swan, 2003). However, Yacob, Kadir, Zainudin, & Zurairah (2012) asserted that students' individual differences such as age, gender and grade might influence the effectiveness of online education. They hypothesized that young male students would be more successful in adapting online education than young female students; however, they could not find any significant relationship between gender and the use of technology in learning process (Yacob et al., 2012). In their study with 590 university students, Peytcheva-Forsyth, Yovkova & Aleksieva (2018) reached the conclusion that younger students were more willing to participate in online learning environments, and the females preferred being supported during online education. Similarly, the study conducted by Özdamlı, Hürsen and Özçınar (2009) with teacher candidates showed that male students were more positive towards using online instructional tools than female students. In addition, Mumford and Dikilitaş (2020) noted that although students have positive attitudes towards technology in their personal lives, they may be reluctant to integrate technology into their classes because of their previous experiences.

Shin and Son (2007) investigated the factors affecting teachers' use of Internet in their classes. They put forward that "teachers' personal interest in Internet use"; "teachers' abilities to integrate Internet resources into classroom activities"; and "computer facilities and technical support in schools" were determinants of internet use by Korean EFL teachers. In the same vein, Badia, Garcia, and Meneses (2017) pointed out that teacher roles are the most important underlying factor of adaption of online education. The factors including age, academic background, online teaching dedication also impact teachers' use of online teaching.

Because of COVID-19 pandemic in the world, authorities have enforcedly changed the formal education system to control the disease and adapt online education in most of the countries (Bao,2000; Basilaia & Kvavadze, 2020; Demuyakor,2020; Sun, Tang, & Zuo, 2020). Therefore, online education has gained importance. Basilaia and Kvavadze (2020) conducted a study on transition traditional education to online education in Georgia. They found that transition process was successfully accomplished. They concluded that online education experiences can be used after the pandemic is over. Demuyakor (2020) scrutinized perceptions of students on online education. Their participants were Ghanaian international students. Their findings indicated that learners satisfied with online education. However, they also revealed learners faced with problems including cost and speed of internet connection during the online education.

This current study aims to investigate the opinions of teacher candidates in English Language Teaching Departments in three different state universities on online education. Adopting a quantitative data collection tool, overall attitudes of participants towards online education and the possible differences between their attitudes in terms of gender, grade level and GPA were investigated.

1. Research questions
- What are the participants' general attitudes towards online education?
- Is there a significant difference between participants' attitudes towards online education and their gender, grades, GPA?

2. Methodology
2.1. Setting and Participants
Data for this study were collected in the 2016-2017 academic year. The participants were 150 pre-service teachers studying at three different state universities in Turkey. 3rd and 4th grade students participated in the current study. Pre-service teachers were selected as participants because they will teach Gen-Z in the future who are born into a world of technology. Table 1 illustrates detailed information about participants. The majority of participants (N=107) were female and the rest of them (N=43) were male. A minority of participants were (N=39) were third graders, while the majority of them (N=111) were fourth graders. K-mean cluster analysis was conducted to categorize the participants according to their achievement levels. The ones having 3.50 and over GPA were accepted as high achievers; the ones having 3.00 and 3.49 GPA were accepted as moderate achievers; and the ones having 2.99 and less GPA were accepted as low achievers. As it is presented table below, over half of participants (N=84) were moderate achievers, 48 of them had low achievers, and 18 of them were high achievers.

Table 1. Demographic information of the participants

		Frequency (f)
Gender	Male	43
	Female	107
Grade level	3rd grade	39
	4th grade	111
GPA	Low	48
	Moderate	84
	High	18

2.2. Instruments
Data were collected using a demographic information form and Online Language Teaching Scale. Participants were asked to indicate their gender, grade levels, and their GPA on the demographic information form.

Online Language Teaching Scale was developed by Karakaya (2010) in order to identify participants' attitudes towards online language education. The scale consisted of 26 items in a 5-point Likert-type scale from "strongly agree" to "strongly disagree". The original scale was developed for in-service English teachers. Cronbach's Alpha coefficient was reported as .87 in the original study and it was calculated as .91 in the present study. The scale was prepared in English originally; therefore, original scale was used in the current study.

2.3. Data Collection and Analysis

In this study, data was gathered by using an aforementioned scale. Before conducting the study, informed consent was obtained from all participants through a voluntary consent form. The instructors of participants were informed before the study and their permission was obtained to collect data in their classes. Having received necessary permission, the researchers distributed the questionnaires by visiting the participants in their classes. Data analysis was performed using SPSS 21 software. Prior to analyzing the collected data, the assumption of normality was checked. Kolmogorov-Smirnov test results indicated that data was normally distributed. After that, descriptive statistics, independent sample t-test, and one-way ANOVA was employed to analyze data.

3. Results

R.Q.1. What are the participants' overall attitudes towards online education?

On the question of the participants' overall attitudes towards online education, descriptive statistics were utilized. Higher mean value, which means above 3.50, indicates positive attitudes towards online teaching. The results indicated that participants had neutral opinions towards the online education (M=3.35).

Table 2. Overall attitudes towards online education scale

	N	Mean	SD
Attitudes towards online education	150	3.35	.53510

Further analysis of mean scores of each item in online education scale revealed that participants supported online language education on the grounds of effectiveness of online education environments. As shown in Table 3, majority of respondents (M=4.18) stated that integration of both online and face-to-face instruction increase the effectiveness of the course. The participants also agreed that online education can provide interaction just like face-to-face education. Furthermore, most of them (M = 4.02) stated that numerous materials can be found via internet. For a small number of participants (M = 2.56), online education did not provide interaction as much as traditional education. In addition, they access to internet create problems for online education (M = 2.56).

Table 3. Descriptive statistics for online education scale

	Mean	SD
Online education does not offer the sense of face to face interaction.	2.5467	.96646
There is less interaction between teacher and students in online education.	2.5600	1.10812
Online courses create problems in terms of access to the Internet.	2.5667	.98592
Students can easily access to a wide range of materials on the web.	4.0200	.70919
It would be better if the course has both online and face to face component.	4.1800	.83602

R.Q.2. Is there a significant difference between participants' attitudes towards online education and their gender, grade levels, GPA?

The second research question was whether a significant difference exist between participants' attitudes towards online education and their gender, grade levels, GPA? An independent sample t-test was used to analyze the difference between the attitudes of male and female participants. The result showed that a significant difference was detected between males (M=3.54, SD=.553) and females (M=3.27, SD=.510; t(148)=-2.83,p<.05, two-tailed), with a small effect size (Cohen's d=.4, Cohen, 1988).

Table 4. T-test results for gender differences

Gender	N	Mean	SD	df	t	p
Male	43	3.54	.553	148	-2.837	.005

Female	107	3.27	.510

To analyze the relationship between participants' attitudes and grade levels independent sample t-test was utilized. According to t-test results, the difference between the third (M=3.09, SD=.563) and fourth graders (M=3.43, SD=.498; t(148)=-3.53,p<.05, two-tailed) was significant. Cohen's d indicated a moderate effect size (Cohen's d=.6).

Table 5. T-test results for grade-level differences

Grade	N	Mean	SD	df	t	p
3rd grade	39	3.09	.563	148	-3.53	.001
4th grade	111	3.43	.498			

A one-way ANOVA was performed to identify the effect of participants' GPA on their attitudes. The analysis results revealed that no statistically significant differences were found between participants' opinions and their GPA F (2-147) =1.096, p>.05.

Table 6. ANOVA results

	Sum of squares	df	Mean square	F	Sig.
Between Groups	.627	2	.313	1.096	.33
Within Groups	42.037	147	.286		
Total	808.02				

4. Discussion and Conclusion

This paper attempts to show the viewpoints of pre-service ELT teachers on online education. The first question in this study is related to their overall attitudes towards online education. The results reveal that pre-service language teachers have positive attitudes towards online education. Further analysis of mean scores indicates that most of the participants (M=3.97) agree that "online education saves time and effort in teaching" (item 1). This finding does not support the previous research conducted by Karakaya (2010) who noted that in-service ELT teachers have a neutral stance on using online teaching environments because they feel incompetent to implement online learning environments into their courses. This discrepancy could be attributed to the age difference of participants of the two studies and the recent developments in instructional technologies learning.

The second question seeks to determine effects of gender, grade, and GPA on participants' attitudes towards online education. With respect to gender effect, it is found that gender differences exist among pre-service teachers. In accordance with the present results, previous studies have demonstrated that males have more positive attitudes than females (e.g Özdamlı et al., 2009). These results are likely to be related to males are more interested in computer technologies (Karakaya, 2010). Therefore, they might be more confident about integrating online education applications into their classes. Moreover, males may give more importance on online teaching. That is why, they are more motivated towards online learning. The results, however, do not support the findings of Yacob et al. (2012), which show no significant difference between male and female participants' opinions about online education.

On the question of the impact of grade levels on participants' attitudes, this study reveals that fourth graders have more positive attitudes towards online education when compared to third graders. This finding was also reported by Peytcheva-Forsyth and colleagues (2018). Since fourth graders attend practice teaching course, they apply online learning tools in their lesson. The more experience with those tools makes students more confident and make them willing to integrate those tools into teaching process. As stated by Mumford and Dikilitaş (2020), past experiences of participants determine their attitudes towards technology integration. If they have negative experiences with technology or if they are not involved in online education platforms previously, they may have negative perceptions on online language instruction. A note of caution is due here since the number of participants is not equally distributed. In addition, since their previous experiences with both online education and instructional technologies are unknown, a further study with more focus on grade level differences is suggested.

The results of this study indicate that participants' GPA is not a determinant of their attitudes towards online education. A possible explanation for this might be that both high and low achievers support the integration of online teaching tools.

In addition, all of the participants feel confident in implementing online education because most of the participants (M=3.16) state that "I am competent enough to offer an online course". More than half of the participants (M=3.63) also stated that they can utilize "many more materials in online teaching". Regardless of their achievement, pre-service teachers agreed that online language education as beneficial as face to face education. They believed that online education tools should be integrated into traditional language classes because it provides lots of resources to practice English. There are similarities between the attitudes expressed in this study and those described by Özer (2018) who stated that participants' attitudes towards computer-assisted language learning were unaffected by their achievements. It might be related to pre-service teachers do not have difficulty in using computers and because of this, they can manage the computer-based activities.

Overall, this study has identified that pre-service ELT teachers have positive attitudes towards online education. The findings strengthen the idea that prospective language teachers are aware of the usefulness of instructional technologies. The current data highlight the importance of offering courses related to educational technology in teacher training programs because pre-service teachers need to learn how to integrate online language teaching applications into their classes. Investigating the viewpoints of pre-service teachers will shed lights on their competencies in using online teaching tools. Moreover, during the practicum studies, pre-service teachers need to be encouraged to use online learning tools to improve their technology-related skills. The generalizability of these results is subject to certain limitations. For instance, the small sample size and adopting only quantitative research design make these findings less generalizable to a larger population. Therefore, further research in this field is strongly recommended.

Disclosure of Conflict
The authors declare that they have no conflicts of interest.

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