

EXAMINATION OF ATTITUDES TOWARDS E-LEARNING OF TURKISH TEACHER CANDIDATES

Kürşad Çağrı BOZKIRLI^{a*}, Onur ER^b

Abstract

This study was conducted with survey method and aims to determine the attitudes of prospective Turkish language teachers who studied at Kafkas University in the 2019-2020 academic year towards e-learning with respect to the variables of gender, having a personal computer, regarding oneself proficient in computer skills, and having a stable Internet connection. The sample of the study consists of 114 prospective Turkish language teachers and was determined using the simple random sampling method. The "General Attitude Scale Towards E-Learning" developed by Haznedar & Baran (2012) was used as the data collection tool. The Likert-type scale includes 20 items and 2 sub-dimensions [e-learning disposition (items 1 to 10) and avoiding e-learning (items 11 to 20)]. The Cronbach's Alpha reliability coefficient of the scale found by the developers is .93. The reliability coefficient of the scale was found to be .80 in this research, which means the scale is reliable. The SPSS Statistics software package was used for the analysis of the data. As a result of the analysis, it was found that the attitudes of prospective Turkish language teachers towards e-learning did not vary by the variables of having a personal computer and regarding oneself proficient in computer skills. Also, this study showed that female students and students who stated that they do not have a stable Internet connection had a significantly negative attitude in the context of the "avoiding e-learning" sub-dimension.

Keywords: Turkish teacher candidates, e-learning, survey method, Turkish education, Kafkas University.

1. Introduction

Learning is a comprehensive and dynamic process that takes place at all periods of life and makes human life meaningful. Researchers have been conducting many studies on this process. These studies brought about different definitions of learning that differ by theories. As an example, to those theories, "the behavioral approach accepts that learning is developed by creating a connection between the stimulus and the behavior and that behavior change occurs through reinforcement" (Bacanlı, 2012, p. 4). The cognitive approach, on the other hand, "is against the notion that learning is simply recording the surrounding reality in the mind. According to cognitivists, learning includes structuring unique knowledge in the light of experiences. Different people produce different meanings and knowledge to the same stimuli" (Baysen & Silman, 2012, p. 213).

2. Theoretical Framework

2.1. E-Learning

All definitions are based on the idea that learning is an essential need. E-Learning is a concept that has emerged to ensure the continuity of learning under any circumstance (pandemics, natural disasters, wars, etc.) E-Learning can be roughly defined as all kinds of learning activities that take place in electronic environments (the Internet, satellite broadcast, DVD, etc.) (Harman & Koochang, 2005; Abbad, Morris & Nahlik, 2009). Gülbahar (2017), however, defines E-Learning as "Carrying out of teaching activities in electronic environments or transferring knowledge and skills through the use of electronic technologies" (p. 2). Another definition is "E-Learning is learning based on information and communication technologies with pedagogical interaction between students and the content, students and the instructors or among students through the web" (as cited in González-Videgaray, 2007; Sangra, Cabrera & Vlachopoulos, 2012, p. 149) Anohina (2005) stated that E-Learning is linked to "computer-based learning", "distance learning", "Internet-based learning", "online learning", "resource-based learning", "technology-based learning", and "Web-based learning" concepts and that online learning and computer-based learning (non-networked learning) are

^a Dede Korkut Faculty of Education, Kafkas University, Turkey
Corresponding Author, Email: kursadbozkirli@kafkas.edu.tr

^b Faculty of Education, Duzce University, Turkey

subsets of e-learning.

2.2. Distance Learning

Alan, Bicer & Can (2021) defined distance education as a type of educational service where individuals in different places receive education. They also emphasized the importance of interaction between individuals in different places. Another definition describes distance education as one of the active learning types where the teacher and students are in different places and interaction comes to the forefront (Pulasthi Dhananjaya Gunawardhana, 2020). Unless distance education is conducted appropriately, virtual walls are formed between the learner and the teacher. The way to exceed these walls is based on the interaction between the learner and the teacher. Kaysi and Aydemir (2017) stated that interaction is one of the most important components of the distance education process. Establishing interaction will increase the interest of learners in the course during the distance education. Thus, it is important to establish interaction for the process to be conducted successfully.

2.3. Technology Acceptance Model (TAM)

Technology Acceptance Model has been formed to explain users' behaviors about technology (Davis, 1989a) and the main purpose of this model is to evaluate internal belief, attitude, and external variables affecting the intention (Avcı Yücel and Gülbahar, 2013).

According to Yıldırım and Kaplan (2019), the Technology Acceptance Model reveals individuals' attitudes, usages, and behaviors about information systems and to explain the role of information systems on individuals' lives in the future. The Extended Technology Acceptance Model is shown in Figure 1.

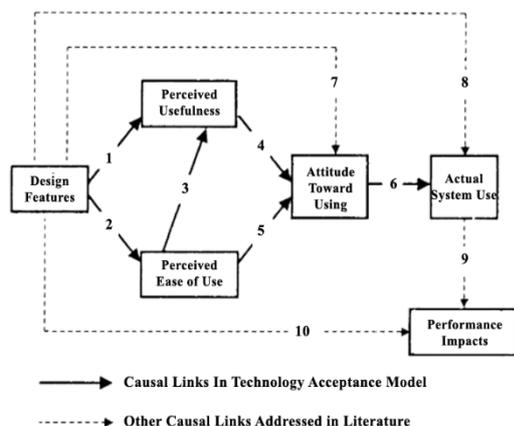


Figure 1. Technology Acceptance Model Extended for Literature Review (Davis, 1989b)

2.4. Covid-19 and E-Learning

Before the global COVID-19 pandemic, lack of confidence of the public in the E-Learning and the non-recognition of diplomas rewarded upon the completion of E-Learning programs (except for institutions with a good reputation) hindered E-Learning to become widespread (Gülbahar, 2017). One of the reasons why E-Learning did not become widespread was the considerable prejudice against the concept. This prejudice stems from the limitations of E-Learning. Some of these limitations have been identified in the literature as below:

- As students are at the center of E-Learning, the responsibility for learning belongs directly to the students. If students have difficulty in fulfilling their learning responsibilities, they may lose motivation, which may negatively affect the educational success of children (Adıyaman, 2020; Cantoni, Cellario ve Porta, 2004).
- Since there is no physical interaction in E-Learning, students may feel isolated from their teachers and classmates (Aslan, 2006; Cantoni, Cellario, & Porta, 2004).
- Students who are unfamiliar with e-learning tools may have difficulty in E-Learning (Aslan, 2006).
- Within the scope of E-Learning, especially Web 2.0. tools may be costly to develop or purchase (Cantoni, Cellario & Porta, 2004).
- E-learning "can be carried out based on various teaching methods and techniques, special teaching designs, and different philosophical and strategic approaches" (Gülbahar, 2017, p. 4). Therefore, in the E-Learning carried out with the participation of a teacher, if the teacher does not have full knowledge of all its aspects, the learning process will fail.

Today, when the impacts of the Covid-19 pandemic are still being intensely felt, E-Learning is being used in the teaching of Turkish both as the mother tongue and a foreign language. Therefore, it is important to determine the attitudes of prospective Turkish language teachers towards E-Learning. Prospective teachers' level of positive attitude towards E-Learning will affect their tendency to use it (Liaw, Huang & Chen, as cited in 2007, Haznedar & Baran, 2012). Although there are studies in the literature on prospective teachers' attitudes towards E-Learning, (Korucu & Ertekin, 2020; Hamutoğlu *et al.*, 2019; Hussain *et al.*, 2018; Khan, 2016; Haznedar, 2012; Çobanoğlu *et al.*, 2009; Dikbaş, 2006), no study related to the attitudes of prospective Turkish language teachers towards e-learning has been found. Based on the requirement for such a study, the aim of this study is to determine the attitudes of prospective Turkish

language teachers who studied at Kafkas University in the 2019-2020 academic year towards E-Learning with respect to the variables of gender, having a personal computer, regarding oneself proficient in computer skills, and having an Internet connection.

Thus, prospective Turkish language teachers' attitudes towards E-Learning were examined and answers were sought for the following questions:

- Do prospective Turkish language teachers' attitudes towards E-Learning differ by their gender?
- Do prospective Turkish language teachers' attitudes towards E-Learning differ by having a personal computer?
- Do prospective Turkish language teachers' attitudes towards E-Learning differ by whether they regard themselves proficient in computer skills?
- Do prospective Turkish language teachers' attitudes towards E-Learning differ by having a stable Internet connection?

3. Method

3.1. Research Model

This quantitative study was conducted using the survey method. "Survey models represent research approaches that aim to describe a past or present situation the way it is perceived. The event, individual, or object to research is attempted to be defined as it is and in line with its own conditions (Karasar, 2010, p. 77).

3.2. Sample

The population of the study consists of 114 prospective Turkish language teachers who studied at Kafkas University Dede Korkut Faculty of Education in the 2019-2020 academic year. The population of the study was selected using the random sampling method. The random sampling method enables every member of the population to have an equal chance of being included in the sample (Mcmillan & Schumacher, 2010).

Table 1. Personal Characteristics of the Participants

Personal Characteristics	f	%	Total	
Gender	Female	84	73.7	114
	Male	30	26.3	
Personal computer	Yes	66	57.9	114
	No	48	42.1	
Proficient in computer skills	Yes	61	53.5	114
	No	53	46.5	
Stable Internet connection	Yes	57	50	114
	No	57	50	

Table 1 shows that 84 (73.7%) of the prospective Turkish language teachers who participated in the study are female and 30 (26.3%) are male. While 66 (57.9%) of the participants have a personal computer, 48 (42.1%) of them do not. Most of the participant prospective Turkish language teachers (f: 61, 53.5%) consider themselves proficient in computer skills. The number of participants who have and do not have a stable Internet connection is equal.

3.3. Data Collection Tool

The "General Attitude Scale Towards E-Learning" developed by Haznedar and Baran (2012) was used as the data collection tool. The Likert-type scale includes 20 items and 2 sub-dimensions [e-learning disposition (items 1 to 10) and avoiding e-learning (items 11 to 20)]. The Cronbach's Alpha reliability coefficient of the scale found by its

developers is .93. The reliability coefficient of the scale was found to be .80 in this research, which means that the scale is reliable.

3.4. Data analysis

SPSS Statistics software package was used in the analysis of the collected data. To determine the homogeneity of the data, the skewness and kurtosis values were examined and the Levene Test was used. At the end of the Levene Test, the p value was found to be greater than .05. Büyüköztürk (2008) suggests that parametric tests should be used in such a case. Therefore, the Independent Samples T-test was used for the analysis of the data.

4. Findings

4.1. Do prospective Turkish language teachers' attitudes towards E-Learning differ by their gender?

Table 2. T-test result showing the participants' attitudes towards e-learning by their gender

Sub-Dimension	Gender	n	\bar{x}	S	sd	t	p
E-Learning predisposition	Female	84	27.19	10.25	112	.057	.95
	Male	30	27.06	9.95			
Avoiding e-learning	Female	84	33.53	11.10	112	2.35	.020
	Male	30	27.86	11.85			

Table 2 shows that as a result of the T-test, which was carried out to determine whether participants' attitudes towards e-learning varied by their gender, it was found that their attitudes towards e-learning did not vary by gender in terms of the "e-learning predisposition" sub-dimension ($t = .057$; $p > .05$) and that female prospective teachers had a significantly more negative attitude

in terms of the "avoiding e-learning" sub-dimension ($t = 2.35$; $p < .05$). Accordingly, it can be stated that sex affected the attitude towards e-learning.

4.2. Do prospective Turkish language teachers' attitudes towards E-Learning differ by having a personal computer?

Table 3. T-test result showing the participants' attitudes towards e-learning by having a personal computer

Sub-Dimension	Personal computer	n	\bar{x}	S	sd	t	p
E-Learning predisposition	Yes	66	28.04	9.71	112	1.09	.27
	No	48	25.93	10.65			
Avoiding e-learning	Yes	66	30.93	10.30	112	1.20	.23
	No	48	33.56	12.98			

Table 3 shows that as a result of the T-test, which was carried out to determine whether participants' attitudes towards e-learning varied by having a personal computer, it was found that their attitudes towards e-learning did not vary by having a personal computer neither in terms of the "e-learning predisposition" sub-dimension ($t = 1.09$; $p > .05$) nor in terms of the "avoiding e-learning"

sub-dimension ($t = 1.20$; $p > .05$). Thus, it can be stated that having a personal computer did not affect the attitude towards e-learning.

4.3. Do prospective Turkish language teachers' attitudes towards E-Learning differ by whether they regard themselves proficient in computer skills?

Table 4. T-test result showing the participants' attitudes towards e-learning by whether they regard themselves as proficient in computer skills

Sub-Dimension	Proficient in computer skills	n	\bar{x}	S	sd	t	p
E-Learning predisposition	Yes	61	28.62	10.57	112	1.66	.09
	No	53	25.47	9.42			
Avoiding e-learning	Yes	61	31.18	12	112	.85	.39
	No	53	33.03	10.97			

Table 4 shows that as a result of the T-test carried out to determine whether participants' attitudes towards e-learning varied by whether they regard themselves as proficient in computer skills, it was found that their attitudes towards e-learning did not vary by whether they regard themselves as proficient in computer skills neither in terms of the "e-learning predisposition" sub-

dimension ($t = 1.66$; $p > .05$) nor in terms of the "avoiding e-learning" sub-dimension ($t = .85$; $p > .05$). Accordingly, it can be stated that competence in using computers did not affect e-learning.

4.4. Do prospective Turkish language teachers' attitudes towards E-Learning differ by having a stable Internet connection?

Table 5. T-test result showing the participants' attitudes towards e-learning according to their stable Internet connection

Sub-Dimension	Stable Internet Connection	n	\bar{x}	S	sd	t	p
E-Learning predisposition	Yes	57	28.19	10.03	112	1.09	.27
	No	57	26.12	10.21			
Avoiding e-learning	Yes	57	29.89	10.32	112	2.01	.04
	No	57	34.19	12.32			

Table 5 shows that as a result of the T-test, which was carried out to determine whether participants' attitudes towards e-learning varied by having a stable Internet connection, it was found that their attitudes towards e-learning did not vary by having a stable Internet connection in terms of the "e-learning predisposition" sub-dimension ($t=1.09$; $p>.05$) and that the prospective teachers who do not have a stable Internet connection had a significantly more negative attitude in terms of the "avoiding e-learning" sub-dimension ($t=2.01$; $p<.05$). Thus, it can be stated that having a steady internet connection affected the attitude towards e-learning.

5. Conclusion and Discussion

The devastating impacts of the Covid-19 pandemic are still visibly seen as of 2021 and this pandemic has made it necessary for humanity to adopt new normals. One of these new normals is the transition to distance learning and E-Learning. Although it seems that the current situation necessitates these practices, considering the pace of development of science and technology, it is safe to say that these practices essentially represent the future of education. In this respect, we can assume that the Covid-19 pandemic accelerated the transition to computer-based learning (distance education and e-learning), although current computer-based learning applications are somewhat incomplete and inadequate. It is great importance for teachers and prospective teachers to be competent in these practices, whose role and importance in education is expected to increase in the coming years. It is more important than ever before for prospective Turkish language teachers, who will perform the important task of teaching a language, to be competent in applications and technologies related to distance education and e-learning, especially in the use of computers, considering the role of language in human life. Accordingly, this study was conducted in the 2019-2020 academic year and aims to examine the attitudes of prospective Turkish language teachers towards E-Learning with respect to the variables of gender, having a personal computer, regarding oneself proficient in computer skills, and having an Internet connection. The most important and urgent findings of the study, which should be taken into consideration before the participants' answers, are that almost half of the participants ($n=114$) do not have a stable Internet connection and a personal computer and consequently, they do not regard themselves as proficient in computer skills. While the Turkish citizens' level of Internet access is

parallel to the world average (We are Social, 2021), finding solutions to their problems regarding Internet access will positively affect firstly the attitudes towards E-Learning and then the level of success in E-Learning.

In this study, it was found that the participants' attitudes towards E-Learning did not vary by gender in terms of the "E-Learning disposition" sub-dimension, which is similar to the findings of previous relevant studies in the literature (Korucu and Ertekin, 2020; Hussain *et al.* 2018, Behera, 2012); however, a significant difference in attitude was detected in terms of the "avoiding E-Learning" sub-dimension. Accordingly, it was found that female prospective Turkish language teachers tend to avoid e-learning. In a study conducted by Alodail (2016) in Saudi Arabia, it was found that female teachers' attitudes towards e-learning were positive. In a study conducted by Şentürk (2016), however, it was determined that female teachers have a more negative attitude towards E-Learning than male teachers in Turkey. Considering the workload of the women in the traditional Turkish family structure because of the household chores, women may not be able to have as much time for E-Learning as men. This may be the reason why such findings were obtained.

Prospective Turkish language teachers' attitudes towards E-Learning do not differ significantly by having a personal computer and whether they consider themselves as proficient in computer skills. Today, it is simple to access computers in many places. Especially universities help their students access computers. Also, many university students have cell phones and they have the potential to use their cell phones as a means of E-Learning. These facts may be the basis of the findings of this study. In a study conducted by Korkmaz *et al.* (2015), it was found that university students have a high level of access to digital technologies and they believe they have the technical skills required for E-Learning.

It was determined that prospective Turkish language teachers' attitudes towards E-Learning do not differ significantly in terms of the sub-dimension of "E-Learning predisposition"; however, in terms of the "avoiding E-Learning" sub-dimension, participants who did not have a stable Internet connection were found to have a significantly negative attitude towards E-Learning. Internet is one of the important elements of e-learning. It is possible for prospective Turkish language teachers who do not have a stable Internet connection to avoid E-Learning, thinking that it will not be effective. In a study conducted by

Dikbaş (2006), it was found that students who did not have a stable Internet connection encountered various problems in the E-Learning process. The below suggestions are made in light of the findings of this research:

- To enable the participation of prospective Turkish language teachers, especially the female ones, in the e-learning process, libraries can stay open 24 hours a day, including weekends, and study rooms for students in public institutions can be provided.
- Providing free Internet packages to prospective Turkish language teachers by universities will enable prospective teachers to participate in the E-Learning activities more easily.
- At least during the Covid-19 pandemic, Internet service providers can offer cheaper Internet service to prospective Turkish language teachers who need it.
- Various events (panels, conferences, etc.) can be organized for prospective Turkish language teachers who have a negative attitude towards E-Learning.

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