

ORIGINAL ARTICLE

A Study on The Satisfaction Levels of Pre-Service Teachers for Distance Education

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Ethical Statement

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Conflict of Interest

No conflict of interest is present in the conduction or the reporting of this study.

ABSTRACT

This research aims to determine the satisfaction levels of teacher candidates for distance (online) education practices and to evaluate them according to certain variables. Therefore, a survey from quantitative models was used to reveal an existing situation. The research sample was determined among the candidates studying at the Faculty of Education at Bayburt University. Depending on the purpose of the research, the Satisfaction Scale for University Students' Distance Education Applications was used to collect the data. The data obtained in the research were analyzed using the SPSS 16.0 program in line with the research purpose and sub-problems, and the findings were presented and interpreted in tables. Quantitative statistics were used to analyse the data on the satisfaction levels of teacher candidates for distance (online) education applications. As a result of the research, it was determined that the teacher candidates who received pre-service training had a positive level of satisfaction with distance (online) learning practices in the Agree range. It was seen that the grade in which the candidates studied did not significantly affect satisfaction with distance education, but 4th-grade students had higher satisfaction.

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INTRODUCTION

One of the innovations brought by technological developments to educational environments is distance and online learning opportunities. Different requirements such as physical facilities, time or epidemic make distance or online learning environments increasingly common. Distance education is a planned learning activity that takes place in a different place than face-to-face education, and it requires communication in a technological environment and includes private institutional systems (Moore & Kearsley, 2012, p.2). On the other hand, Finch and Jacobs (2012, p.546) define distance education as "any kind of teaching and learning that the student and the instructor can be located in different places spatially and temporally". The current Covid-19 outbreak has also highlighted distance education activities. In this period, we witnessed that education and training activities are carried out from time to time in our country and the world.

With the widespread use of distance education, online learning environments have also been enriched in terms of content and users. Factors that affect students' learning from primary education to university and the teaching activities of instructors have emerged. Thus, attitudes towards online education environments and user satisfaction have attracted more attention (Allen & Seaman, 2017; Ateş & Altun, 2008; Bulun et al., 2004; Chang, Chen & Hsu, 2011; Ghaderizefreh & Hoover, 2018; Maden, 2019). Because one of the most important factors showing the success and preferability of the system for online learning is the level of satisfaction with the system (Baltacı et al., 2021; Parahoo et al., 2016). Online training systems have features that will increase the satisfaction level of users. Online education systems have features that will increase the satisfaction level of users. As a result, online learning opportunities will positively affect students' interest in the lessons and their learning levels.

Distance and online learning applications are used at all levels of education. Online learning environments are used in non-formal education activities from primary school to university. Distance education has become a compulsory and inevitable form of education with the Covid-19 epidemic, which the world has struggled with for about two years. Thus, teachers must have sufficient knowledge and skills about this environment and practices. Therefore, determining satisfaction with distance or online education activities will determine the quality of this form of education, which is gaining more and more value, and the improvement steps to be taken.

Students' satisfaction with distance education activities depends on online interaction, opportunities suitable for learner characteristics, content planning, educational tasks, user competence, and learning perception (Fidan, 2016; Gökçe, 2008; Uusiautti et al., 2018; Young and Norgard, 2006). Research shows that structuring teaching environments according to student interests and needs will increase satisfaction (Ralston-Berg et al., 2015; Sahin & Shelly, 2008). According to Bollinger (2004), the technical and digital infrastructure of the distance education system and other visual and design features can also affect the students' satisfaction with the system. In the related literature, there are studies showing that students' online interaction with their teachers and peers positively affects their satisfaction levels (Eom & Ashill, 2016; Fedynich et al., 2015; Jaggars & Xu, 2016). In addition, it is seen that various studies have been carried out to determine the satisfaction of teachers and students with distance education applications. Regarding the subject, the studies of Özdirek and Cicerali (2021) to determine university students' attitudes toward distance education, Gökbulut's (2021) studies to determine their perception and readiness for distance and mobile learning, Elçiçek and Karal's (2019) teacher candidates' readiness for mobile learning, Paydar and Doğan's (2019) teacher candidates' views on open and distance learning, and Yahşi and Kırkıç's (2020) teachers' attitudes towards distance education can be given as

examples. Studies on teachers by Horzum, Albayrak and Ayvaz (2012), Maden and Önal (2022), Önal, Küçükhayrat and Doganay (2022), Karakuş and Erşen (2021), Ustabulut (2021) and Uyar (2020) can be found in the literature. On the other hand, it is seen that the studies on the satisfaction levels of teacher candidates for online learning applications are limited. Based on the reasons above, it can be said that revealing the satisfaction levels of teacher candidates towards online education practices will lead to relevant research and regulations.

Purpose of The Research

For the reasons above, the research aimed to determine the satisfaction levels of teacher candidates regarding distance (online) education practices and to reveal the effect of various variables on the satisfaction level. The research also aimed to determine how the satisfaction levels towards distance education changed as the class, undergraduate program, duration of internet presence, and preferences of using digital media and applications changed. In line with the purpose of the research, answers to the following sub-problems were sought:

What is the satisfaction level of teacher candidates towards distance (online) education?

Do teacher candidates' satisfaction with distance (online) education differ significantly according to grade level?

Does the satisfaction of teacher candidates for distance (online) education differ significantly according to the time they are on the Internet?

Does the satisfaction of teacher candidates' towards distance (online) education differ significantly according to their preference for using digital media and applications?

METHOD

Research Model

This research aims to determine the satisfaction levels of teacher candidates for distance (online) education practices and to evaluate them according to certain variables. Therefore, a survey from quantitative models was used to reveal an existing situation. This model aims to describe a past or present situation realistically and holistically (Karasar, 2010). Depending on the purpose of the study, it was designed according to the "relational survey" model. The correlational survey model has a feature that aims to determine the existence and degree of change between two or more variables (Karasar, 2010; Yıldırım & Şimşek, 2008).

Research Sample

The research sample was formed based on being accessible, economical and applicable. In this direction, the sample was determined among the candidates studying at the Faculty of Education at Bayburt University. The sample was selected by the convenience sampling method among the candidates studying at the relevant faculty. Sample selection based on convenience and the appropriate situation is frequently preferred in research because it provides convenience, speed and economy (Kinnear and Taylor, 1996; Kurtuluş et al., 2012; Malhotra, 2004). While determining the sample, attention was paid to a close number of candidates who were active in the faculty that formed the sample from the Classroom, Preschool, Turkish, Social Studies, Mathematics (Elementary), Guidance and Psychological Counselor, and the English Language Teaching undergraduate programs. The sample consisted of 437 teacher candidates.

The information about the students in the study sample is shown in Tables 1 and 2 below.

Table 1. Grade levels

	Frequency (f)	Percent (%)
1st Grade	141	32,3
2nd Grade	110	25,2
3rd Grade	103	23,6
4th Grade	83	19,0

In the sample, 141 candidates are in the first grade, 110 are in the second grade, 103 are in the third grade, and 83 are in the fourth grade.

Table 2. Undergraduate programs

	Frequency (f)	Percent (%)
Turkish Teacher	61	14,0
Psychological Counselor	60	13,7
Mathematics(Elementary) Teacher	56	12,8
English Teacher	67	15,3
Classroom Teacher	68	15,6
Preschool Teacher	59	13,5
Social Studies Teacher	66	15,1

Of the candidates in the sample, 61 are studying Turkish, 60 are Guidance and Psychological Counselor, 56 are Mathematics(Elementary), 67 are English, 68 are Classroom, 59 are Preschool, and 66 are Social Studies Education.

Data Collection and Analysis

Depending on the purpose of the research, the *Satisfaction Scale for University Students' Distance Education Applications* was used to collect the data. The scale was developed by Baltacı et al. (2021). There are 28 Likert-type items on the scale. Candidates stated their level of agreement with the items on the scale based on the interval values of *Strongly Disagree (1), Disagree (2), Undecided (3), Agree (4) and Strongly Agree (5)*.

In the study of Baltacı et al. (2021), item-test correlations of the scale were calculated, and values between 0.307 and 0.881 were found. As a result of the internal consistency reliability test, the Cronbach Alpha value was 0.980 for the entire 28-item scale; regarding the confirmatory factor analysis, the CFI value of the scale was 0.935, the GFI value was 0.833, and the RMSEA value was 0.076. As a result of factor analysis, it was determined that the scale had a satisfactory level of construct validity and a 2-dimensional structure. As a result of the validity and reliability analyzes, it was seen that the scale was suitable for determining the satisfaction levels of university students towards distance learning. Permission was obtained for the scale and used as a research data collection tool.

During the data collection process, it was planned to deliver the measurement tool to the teacher candidates by hand, but due to the need for time and data analysis during the application process, it was transmitted electronically via Google Forms.

Data Analysis

The data obtained in the research were analyzed using the SPSS 16.0 program in line with the research purpose and sub-problems, and the findings were presented and interpreted in tables. In order to rate the interval values of the

scale, the interval calculation method was used. In this direction, the $n-1/n$ gap width formula was applied to the gap values in the scale. There are five intervals in the scale "Strongly Agree", "Agree", "Undecided", "Disagree", and "Strongly Disagree". These options have values between 1 and 5. The level of participation of the candidates in the sample for each item in the scale was determined by the formula $(SKPA = (5-1=4), (4/5=0.80))$ coded according to the options. According to this, it was accepted that "Strongly Agree" 4.21-5.00, "Agree" 3.41-4.20, "Undecided" 2.61-3.40, "Disagree" 1.81-2.60, "Strongly Disagree" was between 1.00-1.80.

Quantitative statistics were used to analyse the data on the satisfaction levels of teacher candidates for distance (online) education applications. Among the quantitative statistical techniques, techniques such as arithmetic mean, t-test, and ANOVA were used. The arithmetic mean was used to analyse the averages of the candidates' satisfaction levels, and a one-way analysis of variance (ANOVA) was used to test the variables of class, program, internet use and digital media preference. In the data analysis, the significance level was accepted as 0.05 ($p < 0.05$).

FINDINGS

The findings of the research, which aims to determine the satisfaction levels of teacher candidates' regarding distance (online) education practices and to evaluate them in terms of various variables, are shown in the tables below according to the sub-problems:

Findings About the Satisfaction Levels of Teacher Candidates Toward Distance Learning

The findings regarding the satisfaction levels of teacher candidates toward distance education are shown in Table 3:

Table 3. Satisfaction level for distance learning

	Average	Standard deviation	Value
Distance (Online) Education Satisfaction Level	3,6445	0,97515	Agree

As seen in Table 3, the average satisfaction of teacher candidates towards distance education is 3.64. This average corresponds to the *Agree* range. It shows that the candidates have a positive satisfaction with distance learning. Based on the findings, it can be said that teacher candidates have a satisfaction level above the average for distance (online) education applications and have a positive effect on the follow-up of learning activities.

Findings on the Grade Level Variable

The findings regarding the relationship between teacher candidates' satisfaction with distance education and the class variable are shown in Table 4:

Table 4. Findings regarding the class variable

	Grade	N	Average	Standard Deviation	$F_{(3,433)}$	p
Distance (Online) Education Satisfaction Level	1	141	3,6413	1,02932	1,265	,286
	2	110	3,5539	,92637		
	3	103	3,6047	,97352		
	4	83	3,8193	,94002		

As seen in Table 4, the satisfaction levels of teacher candidates towards distance education do not change according to the grade level. According to the findings, the candidates with the highest level of satisfaction are the 4th-grade

students ($\bar{x}=3.82$). It is followed by 1st-grade ($\bar{x}=3.64$) and 3rd-grade ($\bar{x}=3.60$) students. It is seen that the 2nd-grade students ($\bar{x}=3.55$) have the lowest satisfaction with distance learning. When the satisfaction levels of the candidates for distance learning were evaluated according to the class variable, it was determined that there was no significant difference between their averages in terms of grade level ($F_{(4,433)}=1,265$, $p>0,05$). This finding shows that the satisfaction levels of teacher candidates towards distance learning do not show a regular increase or decrease depending on the grade they are studying. However, it is significant that 4th-grade students have the highest level of satisfaction. It can be explained by the fact that senior students can easily follow distance (online) courses with the knowledge and awareness gained in previous classes, and they are more experienced in online learning than in lower classes. In addition, they can consider distance education practices superior as it facilitates the KPSS preparation process that students continue with their undergraduate education in the last year. On the other hand, the fact that the candidates show a certain level of satisfaction with distance (online) education starting from the first grade may be related to the tendency toward the internet, computer and digital.

Findings on the Department/Undergraduate Program Variable

The findings regarding the relationship between the satisfaction levels of teacher candidates toward distance education and the undergraduate program variable are shown in Table 5:

Table 5. Findings regarding the undergraduate program variable

	Department/Program	N	Average	Standard deviation	$F_{(3,433)}$	p
Distance (Online) Education Satisfaction Level	Turkish	61	3,7149	,96059	1,414	,207
	Psychological Counselor	60	3,6988	,96931		
	Mathematics (Elementary)	56	3,3399	,93383		
	English	67	3,8246	,86934		
	Classroom	68	3,6035	,96979		
	Preschool	59	3,6229	,99465		
	Social Studies	66	3,6672	,99854		

As seen in Table 5, the satisfaction levels of teacher candidates towards distance education do not change according to the undergraduate program. According to the findings, the candidates with the highest level of satisfaction are English language teaching students ($\bar{x}=3.82$). It is followed by Turkish ($\bar{x}=3.71$), Psychological Counselor ($\bar{x}=3.70$) and Social Studies ($\bar{x}=3.67$) students. It is seen that mathematics (elementary) teaching students ($\bar{x}=3.34$) have the lowest satisfaction with distance education, and classroom ($\bar{x}=3.60$) and preschool ($\bar{x}=3.62$) students have low satisfaction. When the satisfaction levels of the candidates towards distance learning were evaluated according to the undergraduate program variable, it was determined that there was no significant difference between their averages in terms of their programs ($F_{(3,433)}=1,414$, $p>0,05$). This finding can be explained as the satisfaction levels of teacher candidates towards distance education do not differ according to the teaching program they are studying.

Findings on the Time Spent on the Internet Variable

The findings regarding the relationship between teacher candidates' satisfaction with distance education and the variable of time spent on the internet daily are shown in Table 6:

Table 6. Findings on the time spent on the internet variable

Using Internet	N	Average	Standard Deviation	$F_{(3,433)}$	p
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Distance (Online) Education Satisfaction Level	1 hour	20	3,1750	,73026	10,328	,000
	2-5 hours	193	3,6873	,92114		
	More than 5 hours	157	3,8585	,97169		
	When necessary	67	3,1599	1,00438		

As seen in Table 6, the satisfaction levels of teacher candidates regarding distance education vary according to the time they spend on the Internet. According to the findings, the candidates with the highest level of satisfaction are the students who use the Internet more than 5 hours a day ($\bar{x}=3.86$). It is followed by those who use the Internet for 2 – 5 hours ($\bar{x}=3.69$) and 1 hour ($\bar{x}=3.18$). It is seen that students ($\bar{x}=3.16$) who use the Internet when necessary have the lowest satisfaction with distance learning. When the satisfaction levels of the candidates for distance education were evaluated according to the frequency of daily internet use, it was determined that there was a significant difference between their averages in terms of internet use ($F(3,433)=10.328, p<0.05$). This finding proves that there is a relationship between graduation level and daily internet usage time. Post-Hoc LSD analysis was performed to see how much the variable of time spent on the Internet had an effect on the level of satisfaction with distance education, and the results are presented in Table 7:

Table 7. Post-hoc LSD analysis

Using Internet (I)	Using Internet (J)	Average Difference (I-J)	p
1 Hour	2-5 hours	-,51227 [*]	,022
	More than 5 hours	-,68351 [*]	,002
	When necessary	,01509	,950
2-5 Hours	1 hour	,51227 [*]	,022
	More than 5 hours	-,17124	,093
	When necessary	,52735 [*]	,000
More than 5 Hours	1 hour	,68351 [*]	,002
	2-5 hours	,17124	,093
	When necessary	,69859 [*]	,000
When necessary	1 hour	-,01509	,950
	2-5 hours	-,52735 [*]	,000
	More than 5 hours	-,69859 [*]	,000

According to Table 7, there is a significant difference between the satisfaction levels of the candidates who use the internet for 1 hour daily and use the internet when needed, and those who use the internet for 2-5 hours and more than 5 hours, in favour of those who use the internet more. Therefore, it can be said that the teacher candidates who use the internet for 2-5 hours and more than 5 hours are significantly more satisfied with the distance education applications than the candidates who have the habit of using the internet for 1 hour and when needed.

Findings on the Digital Media Preference Variable

The findings regarding the relationship between the satisfaction levels of teacher candidates towards distance education and the daily digital media preference variable are shown in Table 8:

Table 8. Findings regarding the digital media preference variable

	Digital Media	N	Grade average	Standard deviation	F _(4,432)	p
Distance (Online) Education Satisfaction Level	e-mail	20	3,2446	,84732	6,245	,000
	Social Media	115	3,4037	,96035		
	Websites	28	4,2296	,79352		
	Messaging Apps	47	3,5342	1,08432		
	More than one	227	3,7524	,94559		

As seen in Table 8, the satisfaction levels of teacher candidates towards distance education vary according to their preferences for using digital media. According to the findings, the candidates with the highest satisfaction level are the students who prefer to use websites more ($\bar{x}=4.22$). It is followed by those who prefer more than one digital environment and application simultaneously ($\bar{x}=3.75$). It is seen that the students who prefer to use e-mail ($\bar{x}=3.24$) have the lowest satisfaction with distance education, and then those who prefer social media environments ($\bar{x}=3.40$) and messaging applications ($\bar{x}=3.24$). When the satisfaction levels of the candidates for distance education were evaluated according to the digital media preference variable, it was determined that there was a significant difference between the averages in terms of the preferred digital media ($F(4.432)=6.245$, $p<0.05$). Post-Hoc LSD analysis was performed in order to see how much the variable of time spent on the Internet had an effect on the level of satisfaction with distance education, and the results are presented in Table 9:

Table 9. Post Hoc LSD analysis

Digital Media Preference (I)	Digital Media Preference (J)	Average Difference (I-J)	p
e-mail	Social media	-,15908	,491
	Websites	-,98495 [*]	,000
	Messaging apps	-,28955	,255
	More than one	-,50772 [*]	,023
Social Media	e-mail	,15908	,491
	Websites	-,82587 [*]	,000
	Messaging apps	-,13047	,429
	More than one	-,34863 [*]	,001
Websites	e-mail	,98495 [*]	,000
	Social media	,82587 [*]	,000
	Messaging apps	,69540 [*]	,002
	More than one	,47723 [*]	,013
Messaging Apps	e-mail	,28955	,255
	Social media	,13047	,429
	Websites	-,69540 [*]	,002
	More than one	-,21817	,154
More than one	e-mail	,50772 [*]	,023
	Social media	,34863 [*]	,001
	Websites	-,47723 [*]	,013
	Messaging apps	,21817	,154

According to Table 9, it is seen that there is a significant difference between the satisfaction levels of teacher

candidates towards distance education in favour of those who prefer websites in terms of digital media preference. Therefore, it can be said that the candidates who prefer to use websites more are more satisfied with distance learning when compared to those who prefer e-mail, social media, messaging applications and more than one environment. According to the findings, it is understood that the candidates who prefer more than one digital environment are more satisfied with distance education applications than those who prefer only the social media and e-mail environment.

CONCLUSION AND DISCUSSION

Research obtained the following results in the study, which aimed to determine the satisfaction levels of teacher candidates' who received pre-service education towards distance (online) education practices and to reveal the effect of various variables on the satisfaction level:

The study's findings showed that the satisfaction average of teacher candidates towards distance education corresponds to the range of 3.64 and "Agree". This result can be explained as teacher candidates' satisfaction with distance learning being above the average and at a positive level. In Gökbulut's (2021) study on the subject, it was seen that university students' perceptions of distance education were moderate. Yıldız's research (2016) obtained similar results study on the attitude toward distance learning. The results obtained in the study of Paydar and Doğan (2019), in which teacher candidates determined their views on distance learning environments, also support the findings. Among the findings, the satisfaction levels of the teacher candidates do not differ significantly according to the class they are studying, and the highest satisfaction is among the findings of last year's candidates. Göldağ's (2021) study on the attitudes of vocational school students towards distance education obtained results in favour of seniors. In addition, it was determined that the 2nd-grade students had the lowest satisfaction with distance education. It shows that the grade level does not cause a regular increase or decrease in the satisfaction of teacher candidates with distance learning. It is noteworthy that teacher candidates have above-average satisfaction with distance learning starting from the first grade. It can be said that the habits and tendencies of the candidates regarding computers, the internet and digital tools as a generation are effective in this result. Those born after the 2000s are the Z generation and digital natives. It is thought that the Z generation is based on the experiences of the previous generations, especially the Y generation, regarding the internet and media. In addition, according to Odabaş and Aydın (2020), the Z generation shows commitment/addiction to their smartphones, the internet and social media. Çağır (2010) attributes the easy adaptation of students to the internet and technology since the first year of university to the effort to spend more time with friends to create a social environment.

As with the grade variable, it was determined that the satisfaction levels of teacher candidates towards distance education did not differ significantly according to the undergraduate program. The study of Korucu et al. (2019) on teacher candidates' attitudes toward mobile learning concluded that the class variable was not a determinant. According to the findings, the candidates studying in the English Language Teaching program have the highest level of satisfaction. Afterwards, it was seen that the candidates studying in Turkish, Guidance and Psychological Counselor, and Social Studies Teaching programs had more satisfaction. In the research conducted by Karakuş and Erşen (2021) on teachers, results supporting this finding were obtained. In the related study, English and Mathematics teachers are positively differentiated from others in terms of attitudes toward distance education. Again, based on the findings, the Mathematics, Classroom and Preschool Education program candidates have the lowest level of satisfaction with distance education. This result can be attributed to the candidates' generational interest and tendency to use digital tools and environments. The fact that university students are prone to the internet, media and digital as a generation

brings with them that they welcome distance learning practices regardless of the content of the program they are studying.

It has been determined that the satisfaction levels of teacher candidates towards distance education vary significantly according to the time they spend on the Internet. Accordingly, candidates who use the Internet for more than 5 hours daily are highly satisfied with distance learning. Then, candidates who use the Internet for 2-5 hours and 1 hour follow. It has been observed that the teacher candidates who use the Internet need the lowest satisfaction regarding distance education. The low level of satisfaction of the candidates who do not have the habit of using the Internet for a certain period but use the Internet when needed can be explained by being familiar with the digital environment and tools. In addition, the fact that most teacher candidates spend more than 1 hour on the Internet daily and that this positively affects the level of satisfaction with distance education proves this. In the study of Maden (2018) on the digital reading of the candidates, it was concluded that the duration of internet use is an effective variable. In the study of Çilacar-Sagnak et al. (2022) on teachers' self-efficacy regarding online education applications, results were obtained in favor of those who work more hours. In the study of Özdirek and Cicerali (2021), it was observed that the habit of using computers has a positive effect on university students' attitudes towards distance education. Contrary to this result, Yenilmez, Balbağ, and Turgut's (2017) study on teacher candidates' attitudes towards distance education revealed that the duration of internet users did not significantly affect the attitude.

As with the time spent on the Internet variable, it was determined that the satisfaction levels of teacher candidates towards distance education changed significantly according to their preferences for using digital media. According to this, the satisfaction of those who choose to use the websites about distance learning is higher than the others. In the study of Maden (2018) on the reading habits of candidates in the digital environment, it was seen that using and owning a web page is a crucial variable. After those who prefer a website, some candidates prefer to use more than one environment and application. On the other hand, candidates who choose to use e-mail have the lowest satisfaction with distance education. This finding can be attributed to the fact that distance learning applications are offered in web-based environments that provide more online access and interaction. Yahşi and Kırkıç's (2020) study on teachers' attitudes towards distance education determined that the level of technology use affects attitudes. In this respect, it can be considered normal that the candidates who prefer to use websites more and use more than one digital environment besides this environment have a high satisfaction level with distance (online) education. In addition, the preference for messaging applications and social media environments, which will have a lower impact than web pages in providing candidates with information and experience regarding distance learning applications, has a particular effect on the level of satisfaction. Because distance education applications also include messaging and social sharing features at the same time.

As a result of the research, it was determined that the teacher candidates who received pre-service training had a positive level of satisfaction with distance (online) learning practices in the Agree range. It was seen that the grade in which the candidates studied did not significantly affect satisfaction with distance education, but 4th-grade students had higher satisfaction. In addition, it has been revealed that those who study English Language Teaching have the highest satisfaction according to undergraduate programs. In addition, the important results are the change in satisfaction in favour of those who are more on the internet and those who prefer to use a website.

RECOMMENDATIONS

Based on the research results, the following suggestions can be given.

- It has been observed that teacher candidates are generally satisfied with distance learning applications. This situation can provide superiority and benefit in teacher candidate education. For this reason, by evaluating the satisfaction and tendencies of the candidates, the courses in the undergraduate process can be supported with activities involving distance learning.
- It is seen that teacher candidates have a high habit of using the web environment, which positively affects their approach to distance education. In undergraduate education, some courses or applications, as well as certificate programs on teaching professional competencies, can be made through web-supported platforms.

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