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Research Article

How Satisfactory is Distance Education for Pre-Service English Language Teachers?

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Abstract: Several national and international higher education institutions had already started offering distance education to their students; however, the global outbreak of the Covid-19 pandemic in the first quarter of 2020 accelerated this process and educational institutions at all levels had to switch to distance education in line with the precautions taken by the governments. It can be argued that neither the educational institutions nor the teachers/instructors and students were well-prepared for such a swift shift. Therefore, the aim of this study is to identify distance education satisfaction levels of pre-service English language teachers by shedding light on the variables that may have an influence on their perceptions. A mixed methods research design, involving 122 pre-service English language teachers studying at a state university in Turkey, was employed within the study and both qualitative and quantitative data were collected and analyzed. For the analysis of the quantitative data, descriptive statistics, independent samples t-test, one-way analysis of variance (ANOVA) and Mann-Whitney U test were utilized. Likewise, qualitative data was analyzed via content analysis. The results of the analyses indicate that the implementation of distance education is regarded as satisfactory in some respects and unsatisfactory in some other respects. It can be hypothesized that the specification of these aspects will possibly help both educational institutions and teachers/instructors design and implement their distance education operations more effectively since the opinions and perceptions of the students as to the implementation of distance education are revealed within the study.

Keywords: *Distance Education, Online Education, ELT.*

INTRODUCTION

It has become a fact that the field of education in general is constantly in a state of change and evolution as a direct result of sociological, psychological, technological, political, economic and demographic changes. As computers and the internet have become readily available and affordable, this transformation has reached an unprecedented scale in the last four decades in higher education (McAvinia, 2016). Today's university students, who can be defined as digital natives, are actively busy with the latest technology in their daily lives (Boettcher & Conrad, 2016); thus, in an effort to cater for the needs, preferences and peculiarities of digital natives, several higher education institutions already started integrating technology and online education into their operations and practices (Boz Yüksekdağ, 2016; Kavrat & Türel, 2013; Krusekopf, 2019). A few years ago, Boettcher and Conrad (2016) projected that "we are now rapidly approaching a time in which there are no traditional face-to-face courses; all courses will use some digital gathering and communications tools and spaces such as those offered by course management systems" (pp. 10-11). In a similar manner, Altman et al. (2019) argued that "traditional, on-site education is enhanced, supplemented or even replaced by teaching and learning in the digital space" (p. 1). Accordingly, the sudden outbreak of the Covid-19 pandemic has accelerated this process of digitalization and led to a radical and irreversible transformation in the field of education among many other fields and sectors both globally and nationally in that usual educational operations had to be suspended in an effort to minimize or avoid physical contact among the teachers and the students. To be more precise, starting from the second quarter of 2020, all

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educational institutions around the globe as well as in Turkey stopped traditional face-to-face education and started distance education in line with the precautions taken by the governments against Covid-19 pandemic; however, the extent to which distance education has been effective and satisfactory needs to be investigated.

LITERATURE REVIEW

Distance Education

Distance education (DE), in itself, is not a new phenomenon in that it has been practiced for nearly three centuries. As has been reported by Moore and Kearsley (2011), the beginnings of DE can be traced back to 1720s when written correspondence between the teachers and the learners in the form of letters took place. The invention of radio and television at the turn of the 20th century greatly contributed to DE in the form of educational broadcasts. Finally, the diffusion of personal computers and the internet accelerated the process of DE via online learning. As can be understood, DE covers a broad field of action in which learners are geographically separated from both the teacher and the educational institution (Burns, 2011; Hartnett, 2016) and many other terms such as *distance learning, distance teaching, open learning, blended learning, hybrid education, online learning, asynchronous learning, e-learning* and *tele-education* can be used interchangeably to express the same or similar phenomenon (Caner, 2016; Ustabulut & Keskin, 2020); nevertheless, for the purposes of clarity, the umbrella term *distance education* has been preferred throughout this study. It is highly difficult to present an all-agreed definition for the concept of DE (Karasu & Sarı, 2019). As a result, though a plethora of definitions exist in the relevant literature, the concept of distance education here can be defined as "…the use of the internet to access materials; to interact with the content, instructor, and other learners; and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and to grow from the learning experience" (Ally, 2008, p. 5). As can be understood from the definition, utilization of the internet is regarded crucial for delivering the materials and course content, ensuring interaction and offering support to the learners, who are expected to take on greater responsibility of their own learning.

It should be noted that DE brings certain advantages as well as drawbacks with it. To start with, DE offers great flexibility to learners by removing temporal and geographical restrictions that are inherent in traditional face-to-face education (Boz Yüksekdağ, 2016; Burns, 2011; Hartnett, 2016). To be more precise, learners have the freedom to decide for themselves what, where, when, how and how much to learn in DE (Simonson et al., 2015). Additionally, DE may provide the learners with a productive and effective instructional context if the course and materials are well-designed, which improves learners' autonomy, self-regulation and life-long learning skills (Devran & Elitaş, 2016). It should also be noted that DE has the potential to cater for the needs of learners with a variety of learning styles and experiences (Burns, 2011; Simonson et al., 2015). Moreover, the implementation of DE will possibly contribute to the digital literacy levels of both the teachers and the students. Furthermore, equity of access to education may be enhanced thanks to DE (Koç, 2020) and it tends to be cheaper to run once the initial investments are made. In a similar vein, it may be easier for the teachers to update their course materials after they have created them.

On the other hand, digital divide emerges as the main disadvantage of DE (Simonson et al., 2015) since it is hardly possible to claim that every learner has equal access to powerful and modern computers with reliable and consistent internet connection. Likewise, DE has been criticized on the grounds that it may limit interaction among the learners, thereby impairing their social development (Devran & Elitaş, 2016). Moreover, it has been noted that learners lacking in autonomy and self-regulation skills may not get the best from the implementation of DE. The number of students enrolled in a DE course is also an important factor in that in overcrowded online courses, the teacher may not spare enough time to each student, leading to problems in terms of interaction and feedback (Gürer et al., 2016). As has been argued by Bayrak et al. (2017), learners need more support in DE as they are expected to take on their own learning responsibility; thus, the interaction between the teacher and the

student should be more effective and frequent in distance education. It should not go without saying that courses with practical components (such as microteaching) may not lend themselves easily to DE.

It should be pointed out at this stage that the global fight against Covid-19 pandemic required instant action; therefore, educational institutions did not have enough time to prepare for such a sudden and radical transformation. It would be justified to argue that neither the teachers nor the learners were ready for such swift switch to DE; however, it emerged as the only best option under the circumstances of emergency. Nevertheless, the concept of DE has been discussed extensively in Turkey since 1920s and correspondences in the form of letters were applied between 1950 and 1975 (Bozkurt, 2017; Devran & Elitaş, 2016). Television and radio broadcasts were also utilized till the last decade of the 20th century with the aim of providing Turkish learners with DE. Eventually, the internet became commonly available across the country at the turn of the 21st century and online DE has been employed by various educational institutions in varying forms and intensity (Bozkurt, 2017; Devran & Elitaş, 2016; Gürer, et al., 2016; Karasu & Sarı, 2019; Kavrat & Türel, 2013). In this respect, Simonson et al. (2015) consider the readiness of institutions, teachers and students as crucial for the successful implementation of DE arguing that "no organization should enter into the distance education marketplace without a clearly thought-out plan that has gained the consensus approval of all key players" (p. 281). Nonetheless, such a harsh shift to DE as a result of Covid-19 pandemic has raised several questions such as: *a)* To what extent are the educational institutions prepared for DE?, *b)* To what extent are the teachers/instructors prepared for DE?, *c)* To what extent are the students prepared for DE? and *d)* Are the technical and technological infrastructures of both the educational institutions and students sufficient for a proper DE process? As can be inferred, the undertaking of distance education is highly multifaceted and students are arguably the most significant stakeholders throughout the process as they are the recipients, or more precisely clients, of distance education.

It is highly probable that the compulsory shift to DE due to Covid-19 has been the first DE experience for most of the teachers/instructors and students across the country. It is also highly likely that DE will continue to be employed throughout the globe either as a supplement to or as a substitution for traditional face-to-face education (Rennell, 2020). Simonson et al. (2015) view DE as a dramatic idea and maintain that "it may change, even restructure, education, but only if it is possible to make the experience of the distant learner complete, satisfying, and acceptable" (p. 26). Moving from such line of reasoning, it can be argued that the perceptions of students as to the process of DE is crucial for their achievement and the design of the DE needs to be prepared in line with the expectations, preferences, needs and provisions of the students (Başar et al., 2019; Kışla, 2016; Yıldırım et al., 2014). In line with this, if the students do not hold positive perceptions towards DE, the overall success of the instruction will be seriously impaired (Birişçi, 2013). The findings of studies conducted so far demonstrate that learners' anxiety about technology; teachers' attitudes towards DE; flexibility, quality and perceived usefulness of the course; user-friendliness of the platform by which DE is delivered; and variety of assessment procedures employed have an influence on the learners' perceived satisfaction with their DE experience (Sun et al., 2008). In a similar vein, Ozkan and Koseler (2009) argue that the quality of the instructor, system and content are also linked to learners' satisfaction.

The aim of this study, therefore, is to reveal *a)* whether pre-service English language teachers are satisfied with their DE experience, *b)* the extent to which pre-service English language teachers are satisfied with their DE experience and *c)* the opinions held by pre-service English language teachers as to the process of DE. Accordingly, the significance of this study lies in the fact that the findings of the study will help both educational institutions and teachers/instructors design and implement their distance education operations more efficiently since the opinions and perceptions of the students as to the implementation of distance education will have been exposed by the end of the study.

Research Questions

This study aims to identify DE satisfaction levels of pre-service English language teachers by shedding light on the variables that may have an influence on their perceptions. Therefore, the research questions to be dealt with in this study are:

1. What is the level of overall satisfaction of pre-service English language teachers with distance education?
2. Does the satisfaction of pre-service English language teachers with distance education differ according to:
2.1. their gender?
2.2. their grade level?
2.3. their level of digital literacy?
2.4. the time they daily spend online?
3. What makes DE satisfying and/or dissatisfying for pre-service English language teachers?

METHODOLOGY

In line with the aim of the research, a mixed-methods research design has been adopted within the study since mixed methods research design promises to minimize the weaknesses of relying on solely qualitative or quantitative research designs and makes it possible to conduct a multi-level analysis of the phenomenon under investigation (Dörnyei, 2007). Detailed information as to the research design, the participants, data collection tools and procedures, the process of data analysis as well as research ethics has been provided within the following sub-sections.

Research Design

The study is a combination of both a quantitative and a qualitative research design. In the quantitative dimension of the study, a quantitative research method; namely correlational model, one of the scanning models, has been employed. The main purpose of the study is to reveal the current state of a situation that has been experienced or is being experienced (İslamoğlu, 2003). Accordingly, the aim of studies that employ correlational model is to be able to reveal the co-change between two or more variables (Karasar, 2013). To be more specific, a five-point Likert-type self-report questionnaire (SRQ) has been utilized for the collection of quantitative data with the aim of identifying: *a)* whether pre-service English language teachers are satisfied with the process of DE they have experienced, *b)* the extent to which pre-service English language teachers are satisfied with DE and *c)* the variables that influence their perceptions. In addition, the participants have been asked to express and write about their opinions as to their experience of DE in response to an open-ended question at the end of the questionnaire, which constitutes the qualitative dimension of the research design employed within the study. Therefore, with the aim of eliminating the possible weaknesses of utilizing only one research design, conducting a multi-level analysis of a complex issue and improving validity (Dörnyei, 2007), a mixed-methods research design has been adopted throughout the study.

Data Collecting Tool

A self-report questionnaire (SRQ) has been utilized in order to collect the quantitative data for this study. A SRQ has been defined as an instrument "…in which participants typically are presented with a set of specific statements, questions, or prompts and must respond to each by selecting one of several options provided on the instrument" (Wolters & Won, 2017, p. 308). The set of specific prompts, questions, or statements enables researchers to collect the participants' perceptions, attitudes, beliefs, knowledge, abilities, or behaviors as to the subject under scrutiny. The reason why a SRQ has been adopted within the study is that a SRQ is comparatively more convenient and cheaper to produce, administer, score and analyze. Thus, in line with the title of this study, the *Satisfaction Perceptions of Distance Education Students Scale* (SPDESS), developed by Eygü and Karaman (2013), was

employed as the quantitative data collection tool. The original scale includes two sections: a) demographic information and b) scale items. However, in order to enable a multi-level analysis of the implementation of distance education and improve the validity and reliability of the study, an extra open-ended question requesting participants to express their opinions about distance education was added at the end of the data collection tool. In the first section of the SRQ, demographic variables such as the ages, genders and grade levels of the participants were collected. The second section of the SRQ consists of 34 items and the participants were asked to express their opinions on these statements by filling out a five-point Likert-type scale (*1: Strongly Disagree; 2: Disagree; 3: Undecided; 4: Agree; 5: Strongly Agree*). In the third section of the SRQ, the participants were requested to provide their answers for an open-ended question (*Could you please express your ideas as to the whole process of distance education with a specific view to what was satisfying and what was not so satisfying for you?*).

Satisfaction Perceptions of Distance Education Students Scale (SPDESS)

The SPDESS was developed and validated by Eygü and Karaman (2013) in Turkish context by scanning various satisfaction scales in several sectors and adapting them into Turkish distance education context. The SPDESS consists of 34 items grouped under 8 factors (1: *personal suitability [items 1-9],* 2: *efficiency/communication [items 10-14],* 3: *learning [items 15-19],* 4: *programme evaluation [items 20-23],* 5: *technology/social interaction [items 24-26],* 6: *materials[items 27-29],* 7: *technical support [items 30-32],* 8: *assessment [items 33-34]*), and the results of the exploratory factor analysis conducted indicate that the eight factor structure of the SPDESS exhibits a high level of inner validity. Additionally, it was reported by Eygü and Karaman (2013) that the SPDESS featured a high level of reliability ($\alpha = 0{,}93$). In a similar vein, the reliability of the SPDESS is computed as $\alpha = {,}962$ in the present study. Since all the participants' native language is Turkish, the original form of the SPDESS has been employed without any modifications.

Study Group

The participants of the study are 122 pre-service English language teachers studying at the English Language Teaching (ELT) department, School of Education, Suleyman Demirel University (SDU), Isparta, Turkey. Pre-service English language teachers from all grade levels (freshman, sophomore, junior, and senior) studying during 2020/2021 academic year participated in the study. Due to limitations mandated by the precautions against Covid-19 pandemic, the technique of 'convenience sampling' (Dörnyei, 2007; Nunan, 1992) had to be adopted in this study in that the participants were selected because of their convenient accessibility, availability, proximity and willingness. All the participants attended DE courses conducted by the institution (SDU) between April 2020 and July 2021. Descriptive statistics as to the demographic characteristics of the participants are presented in Table 1.

Table 1. Demographic Information of the Participants

Grade level	**Number of Participants**			
	Female	Male	**Total**	**Grade level %**
Freshman	24 (%77)	7 (%23)	31 (%100)	%25
Sophomore	22 (%73)	8 (%27)	30 (%100)	%25
Junior	24 (%77)	7 (%23)	31 (%100)	%25
Senior	14 (%47)	16 (%53)	30 (%100)	%25

Total	84 (%69)	38 (%31)	122	%100

Table 1 demonstrates that, of the 122 pre-service English language teachers who participated in the study, % 69 (n=84) are female whereas % 31 (n=38) are male. As to the grade levels of the participants, it is possible to claim that an equal distribution has been observed since almost an equal number of participants from four grade levels has taken part in the study.

Data Analysis

Following the data collection process, both quantitative and qualitative data were gathered. For the analysis of the quantitative data, independent samples t-test and one-way analysis of variance (ANOVA) test needed to be conducted. However, the following assumptions should be met before these analyses can be performed (Mertler & Vannatta, 2005; Tabachnick & Fidell, 2014; Thode, 2002):

1. The data must be continuous: The data of this research consisted of the responses obtained from the SPDESS. Continuity of the data (SPDESS scores) were examined and it was observed that the data were appropriate. Thus, as the scores obtained from the SPDESS are continuous, the first assumption is satisfied.

2. The data should feature normal distribution: The results of the analyses conducted to confirm the normal distribution of the data are presented below. Table 2 demonstrates the skewness and kurtosis coefficients of the data to determine normality and the results are interpreted.

Table 2. Skewness and Kurtosis coefficients of the variable

Variable	Kurtosis	Kurtosis standard error	Skewness	Skewness standard error
SPDESS	-0.300	0.435	0.257	0.219

First of all, the values obtained by dividing the skewness and kurtosis coefficients of the data into standard errors need to be checked to ensure normality (Gnanadesikan, 1997; Howitt & Cramer, 2011; Tabachnick & Fidell, 2014) and it was observed at the end of this analysis that the skewness value was outside the ± 2 limit. However, the skewness and kurtosis coefficients are not enough to decide on normality. Thus, Shapiro-Wilk test was also conducted for the SPDESS and Table 3 shows that the data were distributed homogenously.

Table 3. Normality test

	Shapiro-Wilk Statistics	**sd**	**p**
SPDESS	0.987	121	0.283

3. Homogeneity of variances needs to be ensured for independent samples t-test and one-way analysis of variance (ANOVA) test (Tabachnick & Fidell, 2014): This assumption is dealt with separately prior to the analyses to be conducted for each research question. To sum up, it was observed that the data to be analyzed in the study satisfied the required assumptions and statistical computations were implemented.

On the other hand, with the aim of shedding light on the personal opinions held by pre-service English language teachers as to the implementation of DE and identifying the aspects of DE that are regarded as satisfying and dissatisfying, a set of qualitative data was also collected. The technique of

content analysis was employed for the analysis of the qualitative data, which can be defined as "…a strict and systematic set of procedures for the rigorous analysis, examination and verification of the contents of written data" (Cohen et al., 2007, p. 475). Thus, the responses of pre-service teachers for the open-ended question were read, compared, and reread repeatedly and emerging codes were identified and classified. Following the classification process, sub-themes were pinpointed and organized into broader major themes.

Research Procedures

Following the SDU Scientific Research Ethics Committee's approval of the implementation of the data collection tool (14/09/2020-96/4), the SPDESS was uploaded on an online platform (docs.google.com/forms). As a next step, the participants were informed about the aim and content of the SPDESS and they were requested to complete the SPDESS after agreeing to participate in the study. The process of data collection started in June 2021 and lasted for a month. The total number of students enrolled in the ELT department was 197; however, 122 of them agreed to participate in the study. Since the SPDESS involved items related to assessment practices throughout the process of DE, the researcher intentionally waited for the announcements of all the exams' scores conducted in the department so as not to contaminate the validity and reliability of the study. Therefore, all the participants were informed about their own grades from all the courses and assumed to express their opinions in an honest and wholehearted manner.

FINDINGS AND DISCUSSION

In this section of the study, the results of the analyses conducted for each research question have been presented and discussed.

What is the level of overall satisfaction of pre-service English language teachers with distance education?

The arithmetic mean and standard deviation values for the SPDESS and its factors are given in Table 4 with the aim of answering the first research question.

Table 4. Statistics for SPDESS and its factors

Factors / SPDESS	X / Percentage of Scores	SD	Maximum scores that can be achieved
PS	22.62 / 50.26	8.76	45
E/C	15.12 / 60.48	4.54	25
L	11.97 / 47.88	6.06	25
PE	11.49 / 57.45	4.01	20
T/SI	8.23 / 54.86	3.40	15
M	10.62 / 70.8	2.80	15
TS	8.12 / 54.13	3.13	15
A	7.13 / 71.3	2.26	10
SPDESS	95.30 / 56.05		170

27.99

PS: Personal Suitability, E/C: Efficiency/Communication, L: Learning, PE: Programme Evaluation, T/SI: Technology/Social Interaction, M: Materials, TS: Technical Support, A: Assessment

All the items in the SPDESS are positive and the mean scores of the responses given to all the items are computed. In addition, as the number of items in the factors is different from each other, the total scores that can be obtained are different. Therefore, with the aim of making comparisons among the factors possible and easier, mean scores of the participants' responses are converted into percentages by correcting them according to the total score. Accordingly, the highest mean score is observed in the '*Assessment*' factor with a score of % 71.3. There are 2 items in this factor of the SPDESS. The highest score that can be obtained here is 10 whereas the lowest possible score is 2. It can be argued that participants' perceptions on the assessment factor of the SPDESS are relatively high and they mostly agree with the items under the factor of assessment. Similarly, the percentage of scores in the '*Materials*' factor is % 70.8. There are 3 items in this factor of the SPDESS. While the highest score that can be obtained in this factor is 15, the lowest possible score is 3. It can be claimed that the participants' perceptions on the materials factor of the SPDESS are somewhat high and they mostly agree with the items under the factor of materials. The percentage of scores in the '*Efficiency/Communication*' factor is % 60.48. There are 5 items in this factor of the SPDESS. The highest score that can be obtained in this factor is 25 while the lowest possible score is 5. It can be contended that participants' perceptions on the efficiency/communication factor of the SPDESS are at moderate level. In other words, they agree with some of the items under the factor of efficiency/communication while they disagree with some other items. In a similar way, the factor of '*Programme Evaluation*' contains 4 items and the percentage of scores in this factor has been computed as % 57.45. It would be justified to argue that the participants, in line with the wording of the SPDESS, neither agree nor disagree with the items in the factor of programme evaluation. Likewise, the factor of '*Technology/Social Interaction*' involves 3 items and the percentage of scores has been calculated as % 54.86, which also indicates that the participants neither agree nor disagree with the items under this factor. As to the factor of '*Technical Support*', the percentage of scores has been computed as % 54.13, which again shows that the participants do not agree or disagree with the items under the factor of technical support. Similarly, the factor of '*Personal Suitability*' contains 9 items and the percentage of scores has been computed as % 50.26, which reveals that the participants do not agree or disagree with the items under the factor of personal suitability. Finally, the lowest percentage of scores has been observed in the factor of '*Learning*' with a score of % 47.88. Thus, it can be argued that the participants maintain neutral or negative opinions as to the learning factor of the SPDESS.

When it comes to the participants' overall perceptions of the SPDESS, the percentage of their scores in the SPDESS is % 56.05. There are a total of 34 items in the SPDESS. Therefore, while the highest score that can be obtained in the SPDESS is 170, the lowest possible score is 34. Considering this figure, it can be argued that the participants' perceptions on the SPDESS are at moderate level. More precisely, in line with the wording of the 5-point Likert-type items in the SPDESS, their mean score shows that they '*neither agree nor disagree*' rather than '*agree*' or even '*strongly agree*', which implies that the pre-service English language teachers are partly satisfied and partly dissatisfied with their experience of distance education. This conclusion concurs with Almusharraf and Khahro (2020)'s study conducted in the Kingdom of Saudi Arabia, Dinh and Nguyen (2020)'s study carried out in Vietnam, and Avsheniuk et al. (2021)'s study implemented in Ukraine during the Covid-19 pandemic in that some features of DE were welcomed while some other features were regarded as far from satisfactory in their study. On the other hand, in another study conducted in Jordan context revealed that learners' level of satisfaction with the DE was low (Hamdan et al., 2021).

Does the satisfaction of pre-service English language teachers with distance education differ according to their gender?

In line with the second research question, pre-service English language teachers' descriptive statistics on their perceptions of the SPDESS are presented in Table 5 below.

Table 5. Descriptive statistics on the SPDESS according to gender

Groups		N	Mean	SD
SPDESS	Female	84	94.98	27.05
	Male	38	96.03	30.32

As can be inferred from Table 5, female pre-service English language teachers' mean score on the SPDESS is 94.98 and standard deviation is 27.05 whereas male pre-service English language teachers' mean score is 96.03 and standard deviation is 30.32. The mean scores of female and male participants are different from each other. Hence, independent samples t-test has been conducted in order to determine whether the observed difference is statistically significant. In this respect, Table 6 indicates that variance homogeneity is confirmed for the independent samples t-test.

Table 6. Independent samples t-test of the SPDESS according to gender

		Equality of Variance Levene Test		Independent samples t-test			
		F	Sig.	t	SD	p	Mean Difference
SPDESS	Variances Equal	.249	,619	-.191	120	.849	-1.05
	Variances Unequal			-.183	64.707	.855	-1.05

Levene test results presented in Table 6 indicate that the assumption of variance homogeneity has been confirmed (sig=.619; sig>,05). Therefore, the last assumption for independent samples t-test has been satisfied. However, independent samples t-test results of the SPDESS according to gender reveal that the observed difference between the female and male pre-service English language teachers is not statistically significant (p=.849; p>,05). In this respect, it can be argued that gender has no influence on the SPDESS perceptions of the participants. This conclusion has been confirmed by the findings of many other previous studies (Bayrak et al., 2020; Tseng et al., 2022; Zhang & Lin, 2020).

Does the satisfaction of pre-service English language teachers with distance education differ according to grade level?

In line with the third research question, one-way analysis of variance (ANOVA) test is to be conducted to determine whether the satisfaction of pre-service English language teachers with distance education differ according to their grade level. Table 7 demonstrates that the assumption of variance homogeneity has been confirmed for the ANOVA test.

Table 7. ANOVA test variance equality of the SPDESS according to grade level

	Variance Equality Levene Test	ANOVA Test		
	F	df1	df2	p
SPDESS	1.28	3.00	118.00	0.29

Levene test results given in Table 7 indicate that the assumption of variance homogeneity has been confirmed (F=1.28, sig=.29; sig>,05). Consequently, the last assumption for the ANOVA test has been fulfilled. ANOVA test results to determine whether the satisfaction of pre-service English language teachers with distance education differs according to their grade level are presented in Table 8.

Table 8. ANOVA test of the SPDESS according to grade level

Grade Level	N	Mean	SD	Source of variance	KT	SD	KO	F	P
Freshman	31	98.87	23.87	Between Groups	895.55	3	298.52		
Sophomore	30	91.33	27.36	Within Groups	93870.23	118	795.51		
Junior	31	96.10	26.87	Total	94765.78	121		0.38	0.77
Senior	30	94.77	33.94						
Total	122	95.30	27.99						

ANOVA test results of the SPDESS according to grade level presented in Table 8 reveal that the difference between and among the pre-service English language teachers from different grade levels (freshman, sophomore, junior and senior) is not statistically significant (F= 0.38, p= .77; sig>,05). As a result, it can be argued that grade level has no influence on the SPDESS perceptions of the participants. In a similar vein, Tseng et al. (2022) concludes that grade level has no correlation with DE satisfaction while Hamdan et al. (2021) implies that the grade level of the students have a positive correlation with their level of satisfaction with DE.

Does the satisfaction of pre-service English language teachers with distance education differ according to their level of digital literacy?

In line with the fourth research question, one-way analysis of variance (ANOVA) test is to be conducted to determine whether the satisfaction of pre-service English language teachers with distance education differ according to their level of digital literacy. Table 9 demonstrates that the assumption of variance homogeneity has been confirmed for the ANOVA test.

Table 9. ANOVA test variance equality of the SPDESS according to level of digital literacy

	Variance Equality Levene Test	ANOVA Test		
	F	df1	df2	p
SPDESS	0.12	2.00	119.00	0.89

Levene test results given in Table 9 indicate that the assumption of variance homogeneity has been confirmed (F=0.12, sig=.89; sig>,05). Hence, the last assumption for the ANOVA test has been satisfied. ANOVA test results to determine whether the satisfaction of pre-service English language teachers with distance education differ according to their level of digital literacy have been presented in Table 10.

Table 10. ANOVA test of the SPDESS according to level of digital literacy (LDL)

LDL	N	Mean	SD	Source of variance	KT	SD	KO	F	p
B	35	96.57	25.79	Between Groups	1976.97	2	988.48		
G	54	98.44	28.02	Within Groups	9278.81	119	779.74	1.27	0.29
VG	33	88.82	29.87	Total	94765.78	121			
T	122	95.30	27.99						

(B: Basic; G: Good; VG: Very Good; T: Total)

ANOVA test results of the SPDESS according to level of digital literacy presented in Table 10 show that the difference between and among the pre-service English language teachers with different levels of digital literacy (basic, good and very good) is not statistically significant (F= 1.27, p= .29; sig>,05). Consequently, it can be contended that level of digital literacy has no influence on the SPDESS perceptions of the participants. It should be noted that this finding is not supported by the findings of previous studies (Bayrak et al., 2020; Hamdan et al., 2021; Wei & Chou, 2020; Zhang et al., 2020) in that they maintain that comfort with using technology and the internet is determinant for DE satisfaction.

Does the satisfaction of pre-service English language teachers with distance education differ according to the time they daily spend online?

In line with the fifth research question, independent samples t-test is to be conducted to determine whether the satisfaction of pre-service English language teachers with distance education differ according to the time they daily spend online. However, the assumption of variance homogeneity has been examined for independent samples t-test and it has been observed that the assumption has not been satisfied (F=8.24, p=.01; p<.05). Therefore, Mann-Whitney U test, which can be regarded as the non-parametric equivalent of independent samples t-test, has been conducted and the results have been presented in Table 11.

Table 11. Mann-Whitney U test of the SPDESS according to time daily spent online (TDSO)

TDSO	N	Mean Score	Rank Sum	U	p
1-3 Hours	52	56.11	2917.50	1539.50	0.15
4-6 Hours	70	65.51	4585.50		

As can be inferred from Table 11, SPDESS mean scores of the pre-service English language teachers who daily spend 4-6 hours online (65.51) is higher than their counterparts who daily spend 1-3 hours online (56.11). Nevertheless, the results of the Mann-Whitney U test indicate that the observed difference is not statistically significant (U=1539.50, p=.15; p > 0,05). Put differently, it can be argued that time daily spent online has no influence on the SPDESS perceptions of the participants. Likewise, Ke and Kwak (2013) claimed that higher time committed to using the internet cannot be linked to satisfaction with DE.

What makes DE satisfying and/or dissatisfying for pre-service English language teachers?

The researcher has also aimed to arrive at a deeper understanding of the participants' perceptions and pinpoint the perceived strengths and weaknesses of the DE by adding an open-ended question at the end of the data collection tool. Thus, as to the qualitative dimension of the study, it has been observed that 105 out of 122 participants have responded to the open-ended question. 67 of the participants have stated that they are not satisfied with their experience of DE at all. Similarly, 30 of

the participants have declared mixed opinions in that they are satisfied with the opportunities provided by DE and dissatisfied with certain shortcomings of DE. Only 8 of the participants have expressed absolute satisfaction with DE. Figure 1 below summarizes the findings of the content analysis conducted.

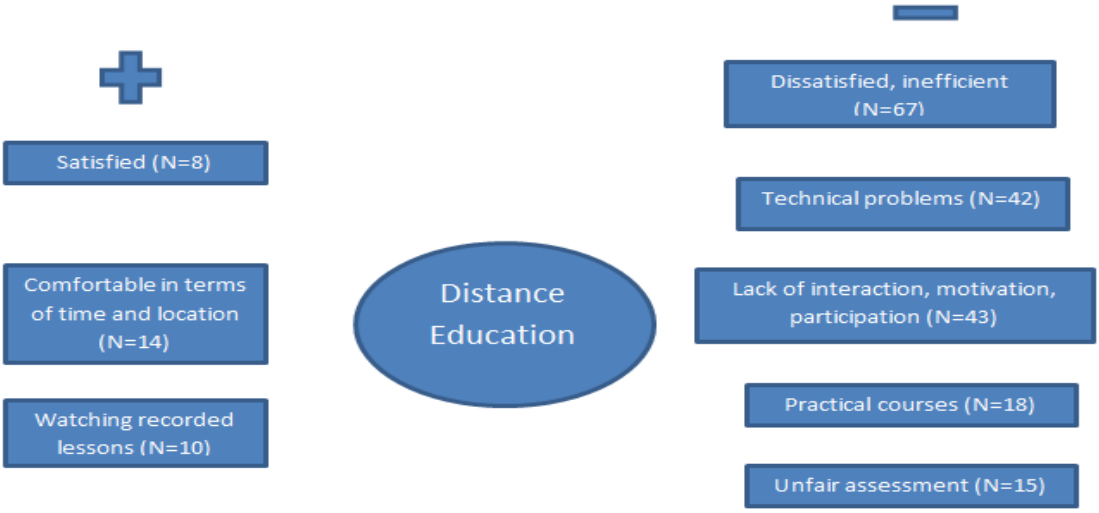

Fig. 1. Qualitative Analysis Findings

The main strength of DE is closely associated with its flexible nature (Simonson et al., 2015). More precisely, many pre-service English language teachers (13%) stated that they enjoyed the comfort and flexibility offered by DE in terms of time and location, which is corroborated by the findings of previous researches (Harsasi & Sutawijaya, 2018; Landrum et al., 2021; Van Mart et al., 2019). As they had the chance to watch the recorded lessons anytime and anywhere they wished (10%), DE provided the learners with greater freedom and autonomy thanks to its asynchronicity feature. On the other hand, a great majority of the participants (64%) expressed their dissatisfaction and highlighted that DE was inefficient and inadequate in instructional terms. Nearly half of the participants (41%) have complained about technical problems they have encountered throughout the process and similar problems are identified in other studies (Avsheniuk et al., 2021; Dinh & Nguyen, 2020; Harsasi & Sutawijaya, 2018; Ilgaz & Gülbahar, 2015). In plain words, the prevention of technical problems was regarded as the responsibility of the institution by some participants; however, some of the participants stated that they did not own the required technological equipment (such as laptops, tablets, etc.) or reliable internet connection. Furthermore, many of the participants argued that lack of interaction led to decreased motivation for and participation in the courses. It should not go without saying that the important role played by interaction in DE has been echoed by Alqurashi (2019), Avsheniuk et al. (2021), Baber (2020), Ilgaz and Gülbahar (2015) and Landrum et al. (2021). The implementation of courses with practical components (such as microteaching and practicum studies) was also regarded as a weakness inherent to DE (17%) and it has also been voiced by Almusharraf and Khahro (2020). As a final note, assessment processes in DE were viewed as unfair and unreliable by some of the participants (14%). More precisely, it was noted by some of the participants that cheating and plagiarism were common during online exams.

CONCLUSION AND SUGGESTIONS

Studies conducted so far with the aim of identifying distance learners' satisfaction indicate that such factors as *teacher presence, learner-instructor interaction, communication, motivation, connectedness, sense of community, institutional reputation, physical infrastructure* and *instructor empathy* correlate with academic achievement and satisfaction perceptions of the learners (Allen et al., 2019; Gnanadass & Sanders, 2019; Hartnett, 2019; Stavredes & Herder, 2019; Swan, 2021; White,

2003). Furthermore, Simonson et al. (2015) assert that teacher's perception of DE, quality of the course, perceived usefulness of the course content, flexibility of the course and students' technology anxiety are among the factors that have an effect on distance learners' satisfaction. In a similar vein, Allen et al. (2019) underscore the significant role played by the instructional design process for the satisfaction of learners in that the content of the course should not be too easy and/or difficult but at the optimum level of challenge.

Simonson et al. (2011) reported that learners held positive attitudes towards DE and believed that they can learn as well and much as face-to-face learners as a result of the literature review they conducted on DE; however, the findings of this research clearly indicate that pre-service English language teachers were partly satisfied and partly dissatisfied with the process of DE they experienced during the Covid-19 pandemic. This conclusion concurs with the conclusion of an earlier study conducted in Turkish context by Birişçi (2013). To be more precise, while the pre-service English language teachers agree with some of the items in the SPDESS, they disagree with some others, which implies that the overall design of the DE needs to be revised and improved in several respects. To start with, the implementation of assessment has been perceived as satisfactory by a majority of participants though there are also certain concerns as to the reliability of the assessment practices. As the researcher is part of the context where the study is conducted and well-informed about the whole process of DE, he assumes that the comparatively high satisfaction of the participants with the assessment practices can be attributed to the fact that alternative assessment practices (such as project work, performance assessment and portfolio development) rather than traditional paper-and-pencil tests have been encouraged and adopted by the institution. In a similar vein, the aspect of materials employed throughout the DE process was also perceived as satisfactory by most of the participants. This tendency implies that the content of the materials used in distance education were well-designed by the instructors. As to the efficiency/communication aspect, it can also be argued that the participants are somewhat satisfied with the process, which indicates that the participants were able to communicate with their instructors efficiently. The necessity of effective communication for high level of satisfaction in DE has been underlined by Korres (2015) and the findings of the study conducted by Koç (2020) indicate that lack of interaction was perceived as the main disadvantage of DE. In fact, the institution (SDU) designed an application (SDUMobil) that allowed instant messaging between the students and the instructors, which enabled efficient communication between and among the instructors and the students. In addition, it was highlighted in the comments of the participants that DE provided them with the freedom of attending online courses anytime and anywhere. The participants expressed their satisfaction with the opportunity to be able to watch the recorded lessons, referring to the fact that it enhanced the accessibility of education. This finding also concurs with the findings of a recent research conducted in Turkish context by Koç (2020).

On the other hand, the findings of this research reveal that the pre-service English language teachers neither agree nor disagree with the aspects of program evaluation, technology/social interaction, technical support and personal suitability. In this regard, it can be argued that the overall design of the DE program was not welcomed by the participants, which may be linked to the harsh and compulsory transition to DE without adequate planning and preparation due to the emergency of the situation. It should also be noted that the participants experienced difficulties in interacting with their peers via technology and some of the participants may have undergone a period of social isolation as a direct consequence of the long lockdown periods (Ustabulut & Keskin, 2020). In plain terms, many of the participants remarked that they did not participate in DE courses since they did not feel motivated, which was confirmed by the findings of an earlier study (Birişçi, 2013). Montebello (2018) acknowledges the role played by motivation in every learning context and adds that it is much more significant for achievement in DE. Therefore, the facilities offered by the learning management system, website or application in terms of interaction between the instructor and the students as well as among the students bear great importance in that it should enable efficient communication between the stakeholders to eliminate the sense of isolation and to increase motivation. Furthermore, the learning management system or website or application utilized for distance education is a crucial factor for the satisfaction of both the teachers and the learners (Kışla, 2016; Simonson et al., 2015). First of all, it should be as user-friendly as possible and it should support learners' autonomous and self-regulated

learning skills (Wang, 2019). Bayrak et al. (2017) observed that some learners tended to become passive and socially absent in DE; thus, the media used for DE should provide the learners with the opportunity to express themselves freely and share their opinions with the aim of improving their sense of belonging and social presence, which will possibly lead to higher satisfaction on the part of the learners (Eygü & Karaman, 2013; Rennell, 2020; Zhan & Mei, 2013).

Some of the participants also complained about their lack of technological equipment and technical support throughout the process, which indicates that 'digital divide' is, unfortunately, a reality in Turkey. Nevertheless, this issue emerges as a global problem in that the findings of a study conducted by Khafaga (2021) in Saudi context underlines similar technical problems encountered by distance learners. Additionally, problems related to technical support from the institution in the process of DE was also reported by Birişçi (2013). As an institutionalized solution for the problem of technical support, a virtual help desk may be organized and serve the users 24 hours. Moreover, some of the participants expressed their dissatisfaction with DE on the grounds that it is not compatible with their personality and learning styles and it cannot replace traditional face-to-face education. Boettcher and Conrad (2016) maintain that learners need to be more active and take on more responsibility in DE because they are expected to think, read, write, plan, reflect, share, interact, collaborate and peer-review more frequently in comparison to traditional face-to-face education. Such additional duties may not suit the personality and capability of each individual learner; hence, they may need more guidance and scaffolding throughout the process of DE.

The study also aimed to identify whether the satisfaction of pre-service English language teachers with DE differed according to their gender, grade level, level of digital literacy and the time they daily spent online. With this aim in mind, qualitative data was collected and properly analyzed; however, the findings of the analyses revealed that none of these variables (gender, grade level, level of digital literacy and the time they daily spend online) had any statistically meaningful influence on the satisfaction perceptions of pre-service English language teachers with DE.

It should not go without saying that such shift to DE was an obligation rather than a selection or preference due to the global Covid-19 pandemic. The significance of readiness has been highlighted by many scholars such as Dinh and Nguyen (2020), Ilgaz and Gülbahar (2015), Van Mart et al. (2019), and Wei and Chou (2020). However, it would hardly be possible to argue that educational institutions, teachers and students were sufficiently ready for this transformation. Moreover, it was the first DE experience for most of the stakeholders (Baber, 2020; Bokayev et al., 2021; Hamdan et al., 2021); thus, the findings of the present study might yield contradictory outcomes if all the stakeholders had sufficient time and resources to prepare for the shift to DE.

Finally, as can be inferred from the findings of the study, DE urges both the instructors and the students to take on additional roles and responsibilities; however, these new roles, competences and responsibilities of instructors and students have yet to be defined (Kavrat & Türel, 2013; Rennell, 2020). To exemplify, the instructors need to take on a techno-pedagogical role by guiding and supporting learners in using technology for educational purposes (Kışla, 2016). The second step should be to orient all the stakeholders for their new roles and responsibilities as well as operation of the learning management system, website or application. In this respect, Burns (2011), Rennell (2020) and Simonson et al. (2015) advocate that distance teachers need to: *a)* be aware of the fact that each student may not have the same or equal opportunity in terms of access to the internet and technology; *b)* plan and design their courses in line with the peculiarities of DE rather than uploading or even dumping their face-to-face course content onto the web; *c)* inform the students as to the organization and requirements of the course as well as their responsibilities; *d)* make use of learner-centered instructional methods and make room for interaction; *e)* manage courses effectively and construct a positive classroom climate; *f)* encourage and motivate students for participation in the courses; *g)* provide timely and constructive feedback; *h)* assess the performance of students rather than their rote memory by employing higher order thinking skills; *i)* make use of a variety of assessment methods such as formative and summative assessment. To conclude, as Allen et al. (2019) suggest, rather than

questioning whether DE is a satisfactory experience from the perspectives of the learners, strategies should be sought for maximizing their satisfaction.

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