



Investigating the Distance Education Process According to the Demographic Characteristics of the Notary and the Notary Employee

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Received: 23 Jul 2020

Accepted: 10 Nov 2020

Abstract

This study aims to reveal the investigating the distance education process according to the demographic characteristics for the staff of the notary and the notaries in Turkey. In this research survey method is used. The sample group consists of 317 notary and notary employees who responded voluntarily to the scale in the distance education platform. Demographic information form and distance education satisfaction scale were used as data collection tools. In the analysis, ANOVA, T-Test, Mann Whitney-U, Kruskal-Wallis and Pearson Correlation were performed in accordance with sub-problems. As a result of the analysis, it was concluded that the satisfaction of the participants was between the sub-factors and the general satisfaction between the middle and high level. All factors were found to have a high positive and significant relationship between general satisfaction and each other. The satisfaction of the participants showed a significant difference according to age, but did not show a significant difference according to gender, task type, duration of work in the profession, number of notary employees, educational level and participating in distance education previously. As a result of the research, planning the gamification, measurement and evaluation and certificate programs that the participants would provide more interaction on the platform were considered important. The contents of education were found to be effective on satisfaction.

Keywords: distance education, satisfaction, notary, notary employee, institution

INTRODUCTION

Distance education has a great impact on various fields around the world. The opportunities provided by distance education (Simonson, Zvacek, & Smaldino, 2019) make it significant. Distance education has become an indispensable method for many institutions (Rumble, 2019). The personnel receive regular education for the success of the institutions and the provision of quality service. In order to prevent the loss of work tempo of the personnel and increase their efficiency, the institutions head towards the internet based distance educations (Yılmaz & Dügenci, 2010). As the education is made possible in digital environments, most institutions offer educations by means of distance education. Banks, ministries, universities prefer distance education in personnel training. Banks provide interactive trainings and exams to their employees through distance education systems. Ministries provide in-service training to their personnel through distance education. In a similar way, in-service training of university personnel is provided in this way. Notaries Union of Turkey is among the institutions that support education through distance education with their personnel.

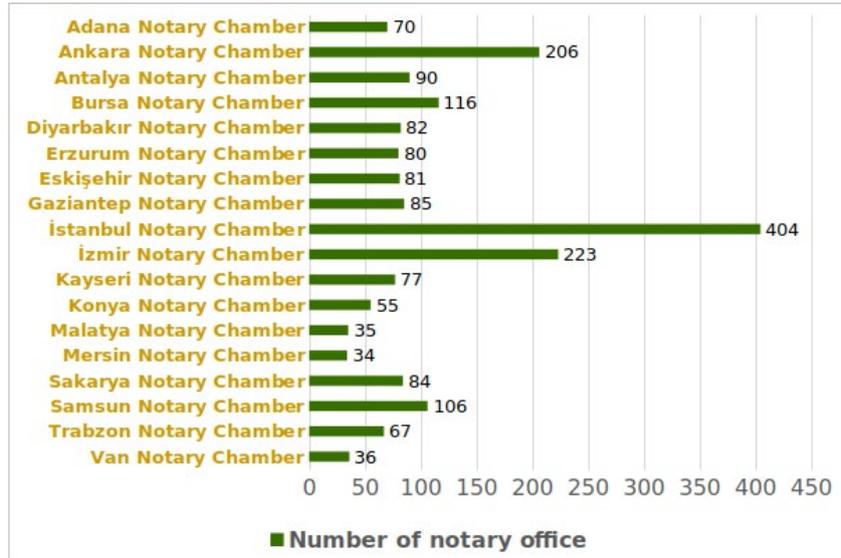


Figure 1. Notary connected to the notary chambers in Turkey

Notaries Union of Turkey is a professional organization with a legal personality as a public institution in Ankara, which was established to provide unity and cooperation among the colleagues of notary and notary employees and the development of the profession. One of the activities carried out within this organization is to provide trainings to notary employees. These trainings can be listed as procedure-based trainings given to notary employee for transactions and software trainings used in transactions. It is quite important to increase the service quality of the employees by learning the transactions quickly and to provide the service in the most accurate way with these trainings. As shown in **Figure 1**, there are 18 notary chambers in our country and there are 1931 notary chambers connected to these chambers. The total number of personnel working as a notary personnel is 9062. Providing these trainings face to face for 9062 personnel is time consuming and costly.

The Distance Education Platform was launched to reduce the cost of trainings provided for notary operations and to prevent loss of time and labor. The platform aims to offer all the trainings from a single environment and to make the follow-up easier.

DISTANCE EDUCATION AND SATISFACTION

Güeçoğlu (2012) indicated that the importance of the strategy followed in distance education processes. It has been suggested that it is important to evaluate people with different dimensions from technical and psychological sufficiency, to increase their motivation, and to measure learning activities in terms of determining the strategy to be followed. It has also been suggested that it is important to have positive attitudes of individuals in order to achieve the desired success in the trainings (Yılmaz & Düğenci, 2010). According to the literature, methods should be selected according to the profile of employees in distance education programs (Yılmaz & Düğenci, 2010) so that satisfaction can be achieved.

Gülbahar (2012) stated that it is important to reveal the satisfaction of e-learning process participants towards the process and the level of satisfaction should be checked regularly. The studies emphasized the importance of satisfaction (Joo, Lim, & Kim, 2011), suggesting that the satisfaction of the participants in distance education increases the success of the institutions (Baturay & Yükseltürk, 2015; Şahin, 2009; Karataş & Üstündağ, 2008; Eom, Wen, & Ashill, 2006). Attitude of the trainer, content quality, content availability, flexibility of courses affect satisfaction (Sun, Tsei, Finger, Chen, & Yeh, 2008). Learner satisfaction is affected by more than one factor in education and training environments (Simonson, Zvacek, & Smaldino, 2019; Kantoğlu, Torkul, & Altunışık, 2013). Some of these factors can be listed as content (Douglas & Vyver, 2004), interaction between other students and trainers (Arbaugh & Fich, 2007), time control, cost, learning, performance, experience (Adnan & Boz-Yaman, 2017), material (Sahin & Shelley, 2008) and success. It is

indicated that instructional design and organization affected the learner satisfaction positively (Shea, Pickett, & Pelz, 2003). Also, it is important that web-supported courses are accessible anytime and anywhere (Spector, Merrill, Elen, & Bishop, 2014). The quality of the system, the content quality and instructor was emphasized for satisfaction (Simonson, Zvacek, & Smaldino, 2019). It was also emphasized that trainer support, effectiveness and satisfaction are important in learner education. In this study, satisfaction, personal suitability, effectiveness, learning, evaluation of the program, technology, material, evaluation for distance education were examined in seven dimensions. The scale containing most of the dimensions obtained as a result of the literature review was used as data collection tool.

User registration of all personnel working in the Distance Education Platform has been established. Platform, video, document, training contents etc. were loaded and opened for use and distance education process was started. In addition, the procedures and the main trainings for the transactions performed by the notaries in software were conducted face to face according to the need. Face-to-face trainings are also supported by virtual classes through the platform. The distance education platform, which plays a role in the provision of important services, is deemed important in the effective design and implementation of the necessary interventions. In this study, it is aimed to determine the opinions of the personnel who have been using the distance education platform for one year and who have received the trainings about the distance education process. In this way, the process can be restructured by taking measures to make improvements and arrangements on the platform.

Sub-problems in the scope of the aim of the study are as follows.

1. What is the general satisfaction level of notary and notary employees?
2. Do notary's and notary employees's satisfaction with the distance education process differ significantly according to the following variables?
 - gender,
 - age group,
 - task type,
 - duration of work in the profession,
 - to the number of notary office worked,
 - educational level,
 - previously participating in distance education.
3. Is there a relationship between the scale's factors which given below?
 - General satisfaction
 - Personal suitability
 - Effectiveness
 - Learning
 - Evaluation of the program
 - Technology
 - Material
 - Evaluation

Table 1. Profile of the participants

Size	Group	N	%
gender	woman	118	37.2
	male	199	62.8
	total	317	100.0
age group	15-25 years	17	5.36
	26-35 years	116	36.59
	36-45 years	95	29.97
	46 years and older	89	28.08
	total	317	100.0
task type	notary	48	15.14
	protonotary	75	23.66
	clerk et al.	194	61.20
	total	317	100.0
duration of work in the profession	0-5 years	110	26.50
	6-15 years	123	38.80
	Over 15 years	84	34.70
	Total	317	100.0
the number of notary office worked	1 notary office	171	53.94
	more than 1 notary office	146	46.06
	total	317	100.0
educational level	primary and secondary school	13	4.10
	high school	120	37.85
	university	184	58.04
	total	317	100.0
previously participating in distance education	yes	208	65.6
	no	109	34.4
	total	317	100.0

METHOD

In this study, it was aimed to examine the distance education process according to the demographic characteristics of the participants. In this research survey method is used. Therefore, predictive and descriptive analysis was conducted. It has been studied predictively according to the general satisfaction and sub-dimensions of the notary employees and their demographic characteristics. Descriptively, the arithmetic mean, percent, and standard deviation values of the scores obtained from the scale were used to determine the satisfaction of the employees for the distance education process.

Participants

The participants of the study consisted of the notary and the notary employee in Turkey. 317 employee answered the scale voluntarily presented in the Distance Education Platform. The profile of the participants is given in **Table 1**.

As seen in **Table 1**, notary employees are mostly male employees (N=199). Notary public employees are mostly between the ages of 26-35 (N=116), their duties are clerk et al. (N=194) and their duration of work is between 6-15 years. It is seen that most of the noter employee work in one notary office (N=171). It is observed that most of the employees are university graduates (N=184) and have experienced the distance education process before (N=208).

Designing and Delivering an Online Course

The guides of the software were created in the form of short videos. In addition, animations of the content procedures and document of principles were created. Effective face-to-face training has also been provided, as this document consists of critical information that notaries need to know. The creation of videos has taken place as follows:

- Distance education personnel received software training.
- Then the audio texts of the training videos were written and approval was received from the software experts.
- Images and animations have been created.
- The screen and sound recording of the software was taken.
- The completed videos were printed out and uploaded to the distance education platform.
- On the distance education platform, training videos for transactions are categorized and organized.
- The trainings were then assigned to users.
- As each training is assigned, users are notified and also announced.

If users have problems accessing to the system, they have contacted the relevant technical group. They were sent messages from the system about the issues that the users did not understand about the trainings. In addition to all these trainings, face-to-face trainings were also given to the personnel from time to time.

Data Collection and Analysis

The guides of the software were created in the form of short videos. In addition, animations of the content procedures and document of principles were created. Effective face-to-face training has also been provided, as this document consists of critical information that notaries need to know. The creation of videos has taken place as follows:

The scale

The scale adapted by Eygü and Karaman (2013) was used in the research. The scale was developed to examine learner satisfaction, students' ability to learn, and satisfaction with distance education. The scale type was a 5-point Likert. These are 1 (strongly disagree), 2 (disagree), 3 (undecided), 4 (agree), 5 (strongly agree). As a result of the factor analysis, the scale resulted in 8 factors as personal suitability, effectiveness, learning, evaluation of the program, technology, materials, evaluation and support services the scale consists of 34 items. In order to measure the reliability of the survey, the Cronbach's alpha coefficient was calculated and found to be 0.930 (Eygü & Karaman, 2013).

The variances explained by the factors are as follows: Factor 1: 11.62; Factor 2: 9.94; Factor 3: 9.62; Factor 4: 9.48; Factor 5: 6.80; Factor 6: 6.41; Factor 7: 6.39; Factor 8: 5.26. Alpha coefficients according to factors are as follows: Personal suitability: 0.863; Effectiveness: 0.839; Learning: 0.753; Evaluation of the program: 0.775; Technology: 0.835; Material: 0.760; Evaluation: 0.706; Support services: 0.787. Also, some of the items related to the factors are as follows:

Factor 1- personal suitability: Distance education allows the student to learn at his own pace. /

Factor 2- effectiveness: When I had problems with the lessons, I was able to get the necessary support.

Factor 3- learning: Distance education is suitable for me because I have busy worklife.

Factor 4- evaluation of the program: Course contents were suitable for the purpose of the program.

Factor 5- technology: I have a social and friendly interaction with the trainer.

Factor 6- material: The topics in the course resources were consistent with each other.

Factor 7- evaluation: I easily accessed course contents via the system.

Factor 8- support services: The questions in the exam were consistent with the course contents.

Table 2. Test of Homogeneity of Variances

	Levene Statistic	df1	df2	P
Personal suitability-Gender	5,431	1	315	,020
Technology-Age group	3,219	3	313	,023
Evaluation-task type	4,140	2	314	,017

Table 3. Tests Used in the Study

	General satisfaction	Personal suitability	Effectiveness	Learning	Evaluation of Technology the program	Material	Evaluation
gender	T-testi	Mann Whitney-U	T-testi	T-testi	Mann Whitney-U	T-testi	Mann Whitney-U
age group	ANOVA	ANOVA	ANOVA	ANOVA	Kruskal-Wallis	Kruskal-Wallis	Kruskal-Wallis
task type	ANOVA	ANOVA	ANOVA	ANOVA	Kruskal-Wallis	ANOVA	Kruskal-Wallis
duration of work in the profession	ANOVA	ANOVA	ANOVA	ANOVA	Kruskal-Wallis	ANOVA	Kruskal-Wallis
the number of notary office worked	T-testi	T-testi	T-testi	T-testi	Mann Whitney-U	T-testi	Mann Whitney-U
educational level	ANOVA	ANOVA	ANOVA	ANOVA	Kruskal-Wallis	ANOVA	Kruskal-Wallis
previously participating in distance education	T-testi	T-testi	T-testi	T-testi	Mann Whitney-U	T-testi	Mann Whitney-U

A form was prepared to obtain demographic information with the scale. In the first part of the form, the questions prepared to determine the demographic characteristics of the participants were included. This section includes questions to provide information about the participants' gender, age, task type, number of notary personnel, duration of work in the profession, educational level, and previous participation in distance education. Scale items were included in the second part of the form. However, in this study, the support services factor was not included in the assessment because no exams were applied to the participants during the distance education process. The scale was presented on the Distance Education Platform for two months to test the satisfaction of the participants.

Analysis of data

The overall satisfaction of the participants was calculated with the average of the data obtained from the scale factors. General satisfaction is included in the data analysis. Statistical analysis of the data was carried out using the SPSS package program (Joseph, Hair, William, Black Barry & Babin Rolph, 2014, s. 69). Firstly, normal distribution was examined before parametric tests were performed. It was checked whether the data was normally distributed or not. For this, skewness and kurtosis values were also reviewed. (Joseph, Hair, William, Black Barry & Babin Rolph, 2014, s. 33-34). As a result, general satisfaction, personal suitability, effectiveness, learning, technology, evaluation sub-factors showed normal distribution. But evaluation of the program scores and materiel sub-factors scores did not show normal distribution. Secondly, the homogeneity test of the factor scores was made. The factors that were not significant in the homogeneity test results are given in **Table 2**.

As a result, it was determined that there was no homogeneous distribution between personal suitability-gender, technology-age group and evaluation-task type. In line with the analysis made the tests used in the study are given in **Table 3**. The significance rate was taken as .05 in all tests.

FINDINGS

The analyzes made in line with the sub-problems are given respectively.

Table 4. General Analysis of Satisfaction for Distance Education Process

Factor	Min.	Max.	\bar{X}	SS
General satisfaction	1.00	5.00	3.76	.75
Personal suitability	1.00	5.00	3.81	.80
Effectiveness	1.00	5.00	3.54	.87
Learning	1.00	5.00	3.83	.86
Evaluation of the program	1.00	5.00	3.92	.85
Technology	1.00	5.00	3.46	.95
Material	1.00	5.00	3.81	.82
Evaluation	1.00	5.00	3.92	.85

Table 5. Participants' Satisfaction of Distance Education Process by gender - T Test Results

Factor	Gender	N	\bar{X}	SS	SD	T	P
General satisfaction	woman	118	3,71	.63	.05	-.787	.432
	male	199	3,78	.81	.05		
Effectiveness	woman	118	3,46	.78	.07	-1.271	.205
	male	199	3,59	.92	.06		
Learning	woman	118	3,80	.74	.06	-.488	.626
	male	199	3,85	.93	.06		
Technology	woman	118	3,35	.90	.08	-1.655	.099
	male	199	3,53	.97	.06		
Evaluation	woman	118	3,84	.77	.07	-1.275	.203
	male	199	3,97	.90	.06		

Note: * $p < .05$

In the first sub-problem of the study, analysis was conducted to determine the general satisfaction of the participants. As a result of the analysis, the average scores in terms of total and factor scores were examined and given in **Table 4**.

When **Table 4** is analyzed, the average scores of the participants regarding the distance education process are; $\bar{X}=3.81$ for personal suitability, $\bar{X}=3.54$ for effectiveness, $\bar{X}=3.83$ for learning, $\bar{X}=3.92$ for evaluation of the program, $\bar{X}=3.46$ for technology, $\bar{X}=3.81$ for material, $\bar{X}=3.92$ for evaluation, $\bar{X}=3.76$ for general satisfaction. Based on these findings, it can be said that both the sub-factors and general satisfaction of the participants were between medium and high level.

Independent samples T-test and Mann-Whitney U test were used to determine whether the satisfaction scores of the participants, which is the second sub-problem of the study, for the distance education process showed a significant difference according to gender. Information on the analysis results is given in **Tables 5** and **6**.

As seen in **Table 5**, no statistically significant difference was found between the groups in the total satisfaction scores of participants regarding distance education process according to gender variable ($t=-.787$, $p>.05$). When the general average scores of satisfaction with distance education process were examined, it was seen that male participants ($\bar{X}=3.78$) had close scores with female participants ($\bar{X}=3.71$). Other factor scores were not significant. When the sub-dimensions were examined, in the effectiveness factor scores ($t=-1.27$, $p>0.05$), learning factor scores ($t=-0.48$, $p>0.05$), technology factor scores ($t = -1.65$, $p > 0.05$) and evaluation factor scores ($t = -1.27$, $p > 0.05$) did not differ according to the gender variable.

As seen in **Table 6**, personal suitability factor scores ($U=11124.5$, $p > 0.05$), evaluation of the program factor scores ($U=11209.5$, $p > 0.05$) and material factor scores ($U=11597.5$, $p > 0.05$) did not differ according to the gender variable.

Table 6. Participants' Satisfaction of Distance Education Process by gender - Mann Whitney-U Test results

Factor	Gender	N	Mean Rank	Sum of Ranks	U	P
Personal suitability	woman	118	153.78	18145.50	11124.5	.433
	male	199	162.10	32257.50		
Evaluation of the program	woman	118	154.50	18230.50	11209.5	.491
	male	199	161.67	32172.50		
Material	woman	118	157.78	18618.50	11597.5	.848
	male	199	159.72	31784.50		

Note. * $p < .05$

Table 7. Participants' Satisfaction of Distance Education Process by Age Group - ANOVA Test Results

Factor	Age group	N	\bar{X}	SS	SD	F	P	Significant differences
General satisfaction	15-25 years	17	3.67	.50	.12	4.65	.003*	2-3 3-4
	26-35 years	116	3.66	.87	.08			
	36-45 years	95	3.99	.61	.06			
	46 years and older	89	3.65	.71	.07			
Personal suitability	15-25 years	17	3.75	.51	.12	3.58	.014*	2-3
	26-35 years	116	3.66	.92	.08			
	36-45 years	95	4.02	.70	.07			
	46 years and older	89	3.79	.74	.07			
Effectiveness	15-25 years	17	3.40	.70	.16	3.31	.020*	3-4
	26-35 years	116	3.50	.96	.08			
	36-45 years	95	3.76	.79	.08			
	46 years and older	89	3.38	.82	.08			
Learning	15-25 years	17	3.83	.65	.15	2.51	.058	
	26-35 years	116	3.78	.99	.09			
	36-45 years	95	4.03	.76	.07			
	46 years and older	89	3.69	.80	.08			
Evaluation	15-25 years	17	3.84	.74	.18	2.99	.031*	2-3
	26-35 years	116	3.80	.98	.09			
	36-45 years	95	4.14	.70	.07			
	46 years and older	89	3.86	.80	.08			

Note: * $p < .05$, 1: 15-25 years, 2: 26-35 years, 3: 36-45 years, 4: 46 years and older

One-way ANOVA test and Kruskal-Wallis test were applied to determine whether the satisfaction scores of the participants, which is the second sub-problem of the study, for the distance education process show a significant difference according to age group. Information on the results of the analysis is given in **Tables 7** and **8**.

When **Table 7** is examined, general satisfaction ($F = 4.65$, $p < 0.05$), personal suitability ($F = 3.58$, $p < 0.05$), effectiveness ($F = 3.31$, $p < 0.05$) and evaluation ($F = 2.99$, $p < 0.05$) factor scores differed according to the age group variable. On the other hand, there was no significant difference in learning factor scores ($F = 2.51$, $p > 0.05$) for distance education according to age group. When the general satisfaction dimension is examined, it can be said that the 36-45 age group has more positive thoughts about the process. Bonferroni test was performed in order to determine from which group the difference observed in the satisfaction scores of participants for distance education process according to age group. As a result of these test; general satisfaction of the participants in the age group of 26-35 and 36-45 and 36-45 and 46 and over, the personal suitability of participants between the ages of 26-35 and 36-45, the effectiveness of participants between 36-45 and 46 years of age, the evaluations of participants in the 26-35 age group and the 36-45 age group differ significantly.

When **Table 8** is examined, evaluation of the program factor scores (X^2 ($sd=3$, $n=317$)=12.03, $p < 0.05$), material factor scores (X^2 ($sd=3$, $n=317$) = 13.78, $p < 0.05$) and technology factor scores (X^2 ($sd=3$, $n=317$) = 14.19, $p < 0.05$) differed according to the age group variable.

Table 8. Participants' Satisfaction of Distance Education Process by Age Group - Kruskal-Wallis Test Results

Factor	Gender	N	Mean Rank	SD	X ²	P	Significant differences
Evaluation of the program	15-25 years	17	157.88				
	26-35 years	116	147.81	3	12.03	.007*	2-3
	36-45 years	95	185.40				3-4
	46 years and older	89	145.62				
Material	15-25 years	17	157.88				
	26-35 years	116	147.81	3	13.78	.003*	2-3
	36-45 years	95	185.40				3-4
	46 years and older	89	145.62				
Technology	15-25 years	17	122.06				
	26-35 years	116	157.78	3	14.19	.003*	3-4
	36-45 years	95	184.46				
	46 years and older	89	140.47				

Note: *p<.05

Table 9. Participants' Satisfaction of Distance Education Process by Type of Task-ANOVA Test Results

Factor	Task type	N	\bar{X}	SS	SD	F	P
General satisfaction	notary	48	3.71	.60	.08		
	protonotary	75	3.73	.86	.09	.220	.803
	clerk et al.	194	3.78	.74	.05		
Personal suitability	notary	48	3.83	.67	.09		
	protonotary	75	3.77	.85	.09	.094	.910
	clerk et al.	194	3.82	.82	.05		
Effectiveness	notary	48	3.45	.75	.10		
	protonotary	75	3.49	.98	.11	.654	.520
	clerk et al.	194	3.59	.85	.06		
Learning	notary	48	3.76	.69	.10		
	protonotary	75	3.83	.96	.11	.200	.819
	clerk et al.	194	3.85	.85	.06		
Technology	notary	48	3.29	.88	.12		
	protonotary	75	3.52	1.02	.11	.931	.395
	clerk et al.	194	3.48	.93	.06		

Note: *p<.05

Mann Whitney-U test was performed in order to determine from which group the difference observed in the satisfaction scores of participants for distance education process according to age group. As a result of these test; evaluation of the program of participants in the age group of 26-35 years and 36-45 years and 36-45 years and 46 years and older, material of participants in the age group of 26-35 years and 36-45 years and 36-45 years and 46 years and older, technology for participants of 36-45 age group and 46 age group differ significantly.

One-way ANOVA test and Kruskal-Wallis test were used to determine whether the satisfaction scores of participants, which is the second sub-problem of the study, for the distance education process differ significantly according to the type of task. Information on the results of the analysis is given in **Tables 9** and **10**.

When **Table 9** is examined, general satisfaction (F=0.22, p>0.05), personal suitability (F=0.09, p>0.05), effectiveness (F = 0.65, p>0.05), learning (F=.20, p>0.05) and technology (F=.93, p>0.05) factor scores did not differ according to the task type variable.

When **Table 10** is examined, evaluation of the program factor scores (X² (sd=2, n=317) = 1.43, p>0.05), material factor scores (X² (sd=2, n=317)=.74,p>0.05) and evaluation factor scores (X² (sd=2, n=317) = 2.20, p>0.05) did not differ according to the task type variable.

Table 10. Participants' Satisfaction of Distance Education Process by Type of Task- Kruskal-Wallis Test Results

Factor	Task type	N	Mean Rank	SD	X ²	P
Evaluation of the program	notary	48	146.99			
	protonotary	75	166.87	2	1.43	.487
	clerk et al.	194	158.93			
Material	notary	48	151.59			
	Proton otary	75	155.40	2	.74	.690
	clerk et al.	194	162.22			
Evaluation	notary	48	142,25			
	protonotary	75	166,42	2	2.20	.330
	clerk et al.	194	160,28			

Note: *p<.05

Table 11. Participants' Satisfaction of Distance Education Process by Duration of Work in the Profession- ANOVA Test Results

Factor	Duration of Work in the Profession	N	\bar{X}	SS	SD	F	P
General satisfaction	0-5 years	110	3.69	.68	.06		
	6-15 years	123	3.81	.79	.07	.70	.496
	Over 15 years	84	3.76	.77	.08		
Personal suitability	0-5 years	110	3.75	.78	.07		
	6-15 years	123	3.82	.86	.07	.55	.573
	Over 15 years	84	3.87	.74	.08		
Effectiveness	0-5 years	110	3.51	.84	.08		
	6-15 years	123	3.58	.91	.08	.20	.816
	Over 15 years	84	3.54	.86	.09		
Learning	0-5 years	110	3.79	.75	.07		
	6-15 years	123	3.89	.94	.08	.40	.671
	Over 15 years	84	3.80	.89	.09		
Technology	0-5 years	110	3.35	.92	.08		
	6-15 years	123	3.59	.93	.08	2.01	.135
	Over 15 years	84	3.42	.99	.10		
Evaluation	0-5 years	110	3.86	.81	.07		
	6-15 years	123	3.97	.87	.07	.51	.596
	Over 15 years	84	3.92	.88	.09		

Note: *p<.05

One-way ANOVA test and Kruskal-Wallis test were applied to determine whether the satisfaction scores of the participants second sub-problem, which is related to distance education, according to the duration of work in the profession. Information on the results of the analysis is given in **Tables 11** and **12**.

As shown in **Table 11**, general satisfaction (F=0.70, p>0.05), personal suitability (F=0.55, p>0.05), effectiveness (F=0.20, p>0.05), learning (F=0.40, p>0.05) technology (F=2.01, p>0.05) and evaluation (F= 0.51, p>0.05) factor scores did not differ according to the duration of work in the profession variable.

As shown in **Table 12**, evaluation of the program factor scores (X² (sd=2, n=317)=.7, p>0.05) and material factor scores (X² (sd=2, n=317)=1.17, p>0.05) did not differ according to the duration of work in the profession variable.

Table 12. Participants' Satisfaction of Distance Education Process by Duration of Work in the Profession-Kruskal-Wallis Test Results

Factor	Duration of Work in the Profession	N	Mean Rank	SD	X ²	P
Evaluation of the program	0-5 years	110	153.46	2	.70	.704
	6-15 years	123	160.69			
	Over 15 years	84	163.79			
Material	0-5 years	110	152.54	2	1.17	.557
	6-15 years	123	164.90			
	Over 15 years	84	158.82			

Note: *p<.05

Table 13. Participants' Satisfaction of Distance Education Process by Number Of Notary Office Worked –T Test Results

Factor	Number of notary office worked	N	\bar{X}	SS	SD	T	P
General satisfaction	1 notary office	171	3.73	.69	.05	-.732	.115
	more than 1 notary office	146	3.79	.81	.06		
Personal suitability	1 notary office	171	3.76	.77	.05	-1.117	.494
	more than 1 notary office	146	3.86	.83	.06		
Effectiveness	1 notary office	171	3.51	.85	.06	-.636	.619
	more than 1 notary office	146	3.58	.90	.07		
Learning	1 notary office	171	3.83	.79	.06	-.012	.129
	more than 1 notary office	146	3.83	.94	.07		
Technology	1 notary office	171	3.40	.91	.06	-1.263	.254
	more than 1 notary office	146	3.54	.99	.08		
Evaluation	1 notary office	171	3.88	.80	.06	-.839	.358
	more than 1 notary office	146	3.96	.91	.07		

Note: *p<.05

Table 14. Participants' Satisfaction of Distance Education Process by Number Of Notary Office Worked - Mann Whitney-U Test Results

Factor	Number of notary office worked	N	Mean Rank	Sum of Ranks	U	P
Evaluation of the program	1 notary office	171	155.52	26593.50	11887.5	.454
	more than 1 notary office	146	163.08	23809.50		
Material	1 notary office	171	158.51	27104.50	12398.5	.913
	more than 1 notary office	146	159.58	23298.50		

Note: *p<.05

Independent samples T-test and Mann-Whitney U test were applied to determine whether the second sub-problem of the research, satisfaction scores of participants for distance education process showed a significant difference according to the number of notary office worked. Information on the analysis results is given in **Tables 13** and **14**.

When **Table 13** is analyzed, general satisfaction scores ($t=-.732$, $p>0.05$), personal suitability factor scores ($t=-1.117$, $p>0.05$), effectiveness factor scores ($t=-.636$, $p>0.05$), learning factor scores ($t=-.012$, $p>0.05$), technology factor scores ($t=-1.263$, $p>0.05$) and evaluation factor scores ($t=-.839$, $p>0.05$) did not differ according to the number of notary office worked variable. When the general satisfaction dimension is examined, it can be said that those who work in more than 1 notary personnel have more positive thoughts about the process.

When **Table 14** is analyzed, evaluation of the program factor scores ($U=11887.5$, $p>0.05$), material factor scores ($U=12398.5$, $p>0.05$) did not differ according to the number of notary office worked variable.

One-way ANOVA test and Kruskal-Wallis test were used to determine whether the satisfaction scores of the participants, which is the second sub-problem of the study, for the distance education process showed a

Table 15. Participants' Satisfaction of Distance Education Process by Education Level -ANOVA Test Results

Factor	Education level	N	\bar{X}	SS	SD	T	P
General satisfaction	primary and secondary school	13	3.89	.99	.27	.41	.659
	high school	120	3.78	.78	.07		
	university	184	3.73	.71	.05		
Personal suitability	primary and secondary school	13	4.04	.74	.2	.98	.373
	high school	120	3.85	.84	.07		
	university	184	3.76	.78	.05		
Effectiveness	primary and secondary school	13	3.43	1.04	.28	.23	.792
	high school	120	3.58	.93	.08		
	university	184	3.53	.81	.06		
Learning	primary and secondary school	13	4.01	1.21	.33	.38	.681
	high school	120	3.85	.86	.07		
	university	184	3.81	.84	.06		
Technology	primary and secondary school	13	3.71	1.12	.31	.88	.413
	high school	120	3.51	.93	.08		
	university	184	3.41	.95	.07		
Evaluation	primary and secondary school	13	4.00	1.23	.34	.05	.949
	high school	120	3.92	.89	.08		
	university	184	3.92	.80	.05		

Note: * $p < .05$

Table 16. Participants' Satisfaction of Distance Education Process by Education Level - Kruskal-Wallis Test Results

Factor	Education level	N	Mean Rank	SD	χ^2	P
Evaluation of the program	primary and secondary school	13	191.23	2	2.98	.224
	high school	120	164.70			
	university	184	153.00			
Material	primary and secondary school	13	183.54	2	1.33	.513
	high school	120	161.08			
	university	184	155.91			

Note: * $p < .05$

significant difference according to the educational level. Information on the results of the analysis is given in **Tables 15** and **16**.

As shown in **Table 15**, general satisfaction scores ($F = .41$, $p > 0.05$), personal suitability factor scores ($F = 0.98$, $p > 0.05$), effectiveness factor scores ($F = 0.23$, $p > 0.05$), learning factor scores ($F = .38$, $p > 0.05$), technology factor scores ($F = .88$, $p > 0.05$) and evaluation factor scores ($F = .05$, $p > 0.05$) did not differ according to the education level variable.

As shown in **Table 16**, evaluation of the program factor scores (χ^2 ($sd=2$, $n=317$)= 2.98 , $p > 0.05$) and material factor scores (χ^2 ($sd=2$, $n=317$)= 1.33 , $p > 0.05$) did not differ according to the education level variable.

Independent samples T-test and Mann-Whitney U test were used to determine whether the satisfaction scores of participants, which is the fourth sub-problem of the study, regarding the distance education process showed a significant difference compared to the status of participation in distance education. Information on the results of the analysis is given in **Tables 17** and **18**.

When **Table 17** is analyzed, general satisfaction scores ($t = 0.81$, $p > 0.05$), personal suitability factor scores ($t = 0.38$, $p > 0.05$), effectiveness factor scores ($t = 1.25$, $p > 0.05$), learning factor scores ($t = 1.05$, $p > 0.05$) and evaluation factor scores ($t = -0.33$, $p > 0.05$) did not differ according to whether or not he / she has participated in distance education before. The technology factor scores of the personnel who participated in distance education were higher than those who did not participate and the difference between the groups was statistically significant ($t = 2.03$, $p < 0.05$). The questions in the technology factor are as follows: (1) I have a

Table 17. Participants' Satisfaction of Distance Education Process by Previous Participation in Distance Education -T Test Results

Factor	Previous participation in distance education	N	\bar{X}	SS	SD	T	P
General satisfaction	yes	208	3.7861	.78741	.05460	.818	.414
	no	109	3.7133	.67956	.06509		
Personal suitability	yes	208	3.8248	.82546	.05724	.386	.700
	no	109	3.7880	.77062	.07381		
Effectiveness	yes	208	3.5913	.89233	.06187	1.250	.212
	no	109	3.4624	.83342	.07983		
Learning	yes	208	3.8748	.90948	.06306	1.050	.294
	no	109	3.7670	.78198	.07490		
Technology	yes	208	3.5465	.95130	.06596	2.036	.043*
	no	109	3.3180	.94432	.09045		
Evaluation	yes	208	3.9359	.89079	.06177	-.333	.740
	no	109	3.9021	.79259	.07592		

Note: *p<.05

Table 18. Participants' Satisfaction of Distance Education Process by Previous Participation in Distance Education - Mann Whitney-U Test Results

Factor	Previous participation in distance education	N	Mean Rank	Sum of Ranks	U	P
Evaluation of the program	yes	208	162.08	33712.00	10696.000	.399
	no	109	153.13	16691.00		
Material	yes	208	161.93	33682.00	10726.000	.407
	no	109	153.40	16721.00		

Note: *p<.05

Table 19. Relationship Between the Scale's Factors

	General satisfaction	Personal suitability	Effectiveness	Learning	Evaluation of the program	Technology	Material	Evaluation
General satisfaction	1	.902**	.862**	.864**	.928**	.786**	.924**	.854**
Personal suitability		1	.741**	.791**	.852**	.586**	.821**	.752**
Effectiveness			1	.654**	.747**	.698**	.768**	.660**
Learning				1	.804**	.586**	.737**	.721**
Evaluation of the program					1	.626**	.884**	.780**
Technology						1	.696**	.565**
Material							1	.757**
Evaluation								1

**. Correlation is significant at the 0.01 level (2-tailed)

social and friendly interaction with the education manager in distance education (2) I have a social and friendly interaction with other participants in distance education. (3) In distance education, I can be like myself in my communication with the education manager and show what kind of participant I really am. These items include situations that require interaction in the distance education platform. The experience of participants who have previously had distance education experience may have supported this finding.

When **Table 18** is analyzed, evaluation of the program factor scores (U=10696, p>0.05) and material factor scores (U=10726, p>0.05) did not differ according to whether or not he / she has participated in distance education before.

The data related to the Pearson correlation between the seven factors in the scale, which is the third sub-problem of the study, is given in **Table 19**.

Table 20. Findings of the Study

Problem	Result							
Do the general satisfaction of the participants differ?	Satisfaction of the participants is between medium and high levels of both sub-factors and general satisfaction.							
Do the participants' satisfaction with the distance education process differ significantly according to the following variables?	General satisfaction	Personal suitability	Effectiveness	Learning	Evaluation of the program	Technology	Materiel	Evaluation
• gender	x	x	x	x	x	x	x	x
• age group	√	√	√	x	√	√	√	√
• task type	x	x	x	x	x	x	x	x
• duration of work in the profession	x	x	x	x	x	x	x	x
• the number of notary office worked	x	x	x	x	x	x	x	x
• educational level	x	x	x	x	x	x	x	x
• previously participating in distance education	x	x	x	x	x	√	x	x
Is there a relationship between the scale's factors?	There is a high positive and significant relationship between overall satisfaction of all factors.							

X: not significant; √: significant

When **Table 19** is examined, it is seen that there is a high positive and significant relationship between all factors and general satisfaction. When the factors were examined one by one;

- there was a high positive and significant relationship between general satisfaction material, $r=0.924$, $p<.01$.
- there is a high positive and significant relationship between personal suitability and program evaluation, $r=0.852$, $p<.01$.
- there is a high positive and significant relationship between efficacy and material, $r=0.768$, $p<.01$.
- a high positive and significant relationship between learning and personal suitability, $r=0.791$, $p<.01$.
- there is a high positive and significant relationship between the evaluation of the program and the material, $r=0.884$, $p<.01$.
- a high positive and significant relationship between technology and effectiveness, $r=0.698$, $p<.01$.
- There is a high positive and significant relationship between evaluation and program evaluation, $r=0.780$, $p<.01$.

All findings of the study are summarized in **Table 20**.

DISCUSSIONS AND CONCLUSION

Distance education plays a major role in the development of human resources in institutions (Martin, Massy, & Clarke, 2003). Trainings are usually conducted to ensure maximum profitability for organizations. Platforms offered to users through distance education prevent cost and loss of time (Macpherson, Homan, & Wilkinson, 2005; Mwanza & Engeström, 2005; Yılmaz & Düğenci, 2010). In this case, distance education platforms are offered to users as a solution instead of a tool (Adams, 2004; Alonso, López, Manrique, & Viñes, 2005). Justice (2005) also described the primary benefit of distance education environments as supporting education and development. The development of technology and communication, employees working in institutions must constantly improve their competencies (Yılmaz & Düğenci, 2010). On the other hand, distance education is indispensable for large-scale organizations, especially for institutions that serve the whole country or the world (Yılmaz & Düğenci, 2010). It is also quite important for institutions whose legislation or content is

frequently changed, as e-content through distance education can be easily updated. In addition, distance education provides an environment for the personnel to gain new talent and skills (Toker Gökçe, 2008). In this study, the advantages provided by the distance education platform to the personnel are effective in the high level of satisfaction of the personnel for the distance education process. In the study of Öztürk, Kara, Özkeskin, and Uça Güneş (2017), it was found that learners were highly satisfied with the system and the content provided in the system. Gürpınar, Zayim, Başarıcı, Gündüz, Asar, and Oğuz (2009) stated that the satisfaction of the learners towards the e-learning environment was high in the study where they examined the learner satisfaction towards the e-learning environment they developed for cardiology students. In line with the data obtained within the scope of the research, it was considered important to increase the functionality of the platform by defining gamification, measurement and evaluation and certificate programs in the distance education platform used in the institution. In his book, he emphasizes the system that includes activities where different groups and organizations can take responsibility and collaborate on distance education platforms (Rumble, 2019).

In this study, it was concluded that there was a high level of positive and significant relationship between general satisfaction, personal suitability and program evaluation dimensions compared to other dimensions. From this point of view, the satisfaction of distance education users is shaped according to the content and functionality of the education materials in the process.

It was inferred that the satisfaction of the personnel did not show a significant difference according to gender. According to the learning management system used in Anadolu University and the content presented in the system, learner satisfaction was analyzed according to various demographic characteristics. At the end of the study, learner satisfaction did not differ significantly by gender (Öztürk, Kara, Özkeskin, & Uça Güneş, 2017). In Adnan and Boz Yaman's (2017) study, the satisfaction of learners towards e-learning did not differ significantly by gender. In the study where the perceptions of distance education of university students were examined, it was determined that there was no statistically significant difference between male and female students (Kırali & Alcı, 2016). In the study of Kurt and Özkan (2014), the satisfaction levels of learners for distance education did not differ significantly by gender. It has been stated that the distance education system satisfaction and satisfaction levels of women who are educated with distance education method are lower than male students (Demiray, 2013). In Kaba, Güneş, and Altıntaş's (2012) study, it was stated that the level of satisfaction of learners with e-learning environments did not show significant differences according to gender.

The satisfaction of the participants showed a significant difference according to the age group. Korkmaz, Çakır, and Tan (2015) examined the readiness and satisfaction levels of e-learning among the learners, and it was found that there were differences in factor scores between different age groups in terms of satisfaction levels. On the other hand, in the study of Kurt and Özkan (2014), the satisfaction levels of learners for distance education did not show a significant difference according to age group. The satisfaction of the participants did not differ significantly according to the type of task. When the general satisfaction dimension is examined, it can be said that the first clerks and others have more positive thoughts about the process. This may be due to the fact that the participants have a majority in the clerk and other tasks. Similarly, the satisfaction of the participants did not differ significantly according to the year of work in the profession and the number of notaries. When the general satisfaction dimension was examined, it was found that those who worked in the profession for 6 years and more and those who worked in more than 1 notary personnel had more positive thoughts about the process than the others. The satisfaction of the participants with experience in the profession for the distance education process may be high as they realize the advantages of distance education in the process. The satisfaction of the participants did not differ significantly according to the educational level. When the general satisfaction dimension was examined, it was found that primary and secondary school graduates had more positive thoughts about the process than the others. In this case, distance education materials can be said to be effective at all levels. The satisfaction of the participants did not differ significantly according to their previous experience of distance education. Similar to the finding in the study of Adnan and Boz Yaman (2017), the satisfaction of learners for e-learning did not differ significantly according to their e-learning experience. In the study of Kurt and Özkan (2014), the satisfaction levels of the

learners for distance education did not show a significant difference compared to the experience of distance education.

The recommendations of the study are as follows:

- In this study, the opinions of the participants were not taken before the distance education process, but were taken in the process. Attitudes of the participants towards the process can be examined by applying scales before and after the distance education process. Thus, the effects of the designed distance education process on employees and the organization can be clearly shown.
- During the distance education process, a qualitative study can be conducted by obtaining open-ended questions from the participants. Thus, the participants' views about the process can be clearly revealed and innovations or improvements can be made in the process.
- The opinions of the participants can be examined according to the types of content presented (such as video, document and picture). Thus, improvements can be made by learning which type of content is preferred.
- A mixed study can be done by examining the contents created in the distance education process according to design principles.

ACKNOWLEDGEMENTS

Thank you to the Notaries Union of Turkey, Department of Education, notary, protonotary, clerk et al.

REFERENCES

- Adams, A. (2004). Pedagogical underpinnings of computer-based learning. *Journal of Advanced Nursing*, 46(1), 5-12. <https://doi.org/10.1111/j.1365-2648.2003.02960.x>
- Adnan, M., & Boz Yaman, B. (2017). *Profile of engineering undergraduates on readiness and satisfaction for e-learning. Turkish Journal of Computer and Mathematics Education*, 8(2), 218-243. <https://doi.org/10.16949/turkbilmat.280165>
- Alonso, F., López, G., Manrique, D., & Viñes, J. M. (2005). An instructional model for web-based e-learning education with a blended learning process approach. *British Journal of Educational Technology*, 36(2), 217-235. <https://doi.org/10.1111/j.1467-8535.2005.00454.x>
- Arbaugh, J.B., & Fich R.B. (2002). The importance of participant interaction in online environments. *Decision Support Systems*, 43(3), 853-865. <https://doi.org/10.1016/j.dss.2006.12.013>
- Baturay, M.H., & Yükseltürk, E. (2015). The role of online education preferences on student's achievement. *Turkish Online Journal of Distance Education*, 16(3), 3-12. <https://doi.org/10.17718/tojde.47810>
- Demiray, E. (2013). Distance learning and its importance in education of woman. *Journal of Research in Education and Teaching*, 2(2), 155-168. Retrieved from http://www.jret.org/FileUpload/ks281142/File/18._emine_demiray.pdf
- Douglas, D. E., & Van Der Vyver, G. (2004). Effectiveness of e-learning course materials for learning database management systems: An experimental investigation. *Journal of Computer Information Systems*, 44(4), 41-48. <https://doi.org/10.1080/08874417.2004.11647594>
- Eom, S. B., Wen H. J., & Ashill N., (2006). The determinants of students' perceived learning outcomes and satisfaction in university online education: an empirical investigation. *Decision Sciences Journal of Innovative Education*, 4(2), 215-235. <https://doi.org/10.1111/j.1540-4609.2006.00114.x>

- Eygü, H., & Karaman, S. (2013). A study on the satisfaction perceptions of the distance education students. *Kırıkkale University Journal of Social Sciences*, 3(1), 36-59. Retrieved from https://www.researchgate.net/profile/Hakan_Eygu/publication/263968079_A_Study_On_The_Satisfaction_Perceptions_Of_The_Distance_Education_Students/links/58bfc5cd92851cd83aa13c1b/A-Study-On-The-Satisfaction-Perceptions-Of-The-Distance-Education-Students.pdf
- Güeçoğlu, E. (2012). *Determination of satisfaction levels of people employed in institutions for distance education* (Master's Dissertation), Marmara University Graduate School of Social Sciences, İstanbul.
- Gülbahar, Y. (2012). Study of developing scales for assessment of the levels of readiness and satisfaction of participants in e-learning environments. *Ankara University Journal of Faculty of Educational Sciences*, 45(2), 119-138. https://doi.org/10.1501/Egifak_0000001256
- Gürpınar, E., Zayim, N., Başarıcı, İ., Gündüz, F., Asar, M., & Oğuz, N. (2009). E-learning and problem based learning integration in cardiology education. *Anatol J Cardiol.*, 9(3),158-164. Retrieved from <http://www.anatoljcardiol.com/jvi.aspx?pdid=anatoljcardiol&plng=eng&un=AJC-94475>
- Joo, Y. J., Lim, K. Y., & Kim, E. K. (2011). Online university students' satisfaction and persistence: Examining perceived level of presence, usefulness and ease of use as predictors in a structural model. *Computers & Education*, 57(2), 1654-1664. <https://doi.org/10.1016/j.compedu.2011.02.008>
- Joseph, F., Hair, Jr., William, C., Black Barry J., & Babin Rolph E., (2014). *Multivariate Data Analysis*, Anderson Seventh Edition. Retrieved from <https://pdfs.semanticscholar.org/6885/bb9a29e8a5804a71bf5b6e813f2f966269bc.pdf>
- Justice, P. (2005). *Achieving Value from e-Learning*.
- Kaba, A. U., Güneş, A., & Altıntaş, T. (2012). The effect of support services on learner satisfaction in e-learning. *Journal of Educational Technologies Research*, 3(2), Retrieved from <http://www.idealonline.com.tr/IdealOnline/lookAtPublications/paperDetail.xhtml?uid=12662>
- Kantoğlu, B., Torkul, O., & Altunışık, R. (2013). A Study on the Factors Affecting Student's Satisfaction in E-learning: A Model Proposition. *Business & Economics Research Journal*, 4(1). Retrieved from <http://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=0&sid=914c575e-47ca-47c7-a25a-a6b82271f365%40sdc-v-sessmgr01>
- Karataş, S., & Üstündağ, M.T. (2008). The relationship between students' internet-based distance education satisfactions and demographical properties in Gazi University distance education program. *Yüzüncü Yıl University Journal of Education*, 5(2), 62-73. Retrieved from http://efdergi.yyu.edu.tr/uploads/sercin_karatas-1542114380.pdf
- Kıralı, F., & Alıcı, B. (2016). University student opinions regarding the perception of distance education. *Journal of Istanbul Aydın University*, 8(30), 55-83. Retrieved from <https://dergipark.org.tr/tr/pub/iaud/issue/30078/324645>
- Korkmaz, Ö., Çakır R., & Tan, S. S. (2015). Students e-learning readiness and satisfaction levels and effects on the academic achievement. *Journal of Kirsehir Education Faculty*, 16(3), 219-241. Retrieved from <http://kefad.ahievran.edu.tr/Kefad/Archivellssues/Detail/3bfb96e8-6352-e711-80ef-00224d68272d>
- Kurt, N., & Özkan, Y. (2014). Factors affecting the academical success in distance education. *Journal of Hasan Ali Yücel Faculty of Education*, 11(2). Retrieved from <https://search.proquest.com/openview/582f5fca9de1bdcf36f8fe1de6ec1f77/1?pq-origsite=gscholar&cbl=1796367>
- Macpherson, A., Homan, G., & Wilkinson, K. (2005). The implementation and use of e-learning in the corporate university. *Journal of Workplace Learning*, 17(1), 33-48. <https://doi.org/10.1108/13665620510574441>

- Martin, G., Massy, J., & Clarke, T. (2003). When absorptive capacity meets institutions and (e) learners: adopting, diffusing and exploiting e-learning in organizations. *International Journal of Training and Development*, 7(4), 228-244. <https://doi.org/10.1046/j.1360-3736.2003.00183.x>
- Mwanza, D., & Engeström, Y. (2005). Managing content in e-learning environments. *British Journal of Educational Technology*, 36(3), 453-463. <https://doi.org/10.1111/j.1467-8535.2005.00479.x>
- Öztürk, A., Kara, Y., Özkeskin, E., & Uça Güneş, E. (2017). Satisfaction of open and distance learners regarding learning management system and learning materials. *Journal of Open Education Practices and Research*, 3(4), 81-107. Retrieved from <https://dergipark.org.tr/en/pub/auad/issue/34247/378486>
- Parasuraman, A., V. A. Zeithaml & L. L. Berry. (1988). *SERVQUAL: A Multiple-Item*. Retrieved from https://www.researchgate.net/profile/Valarie_Zeithaml/publication/225083802_SERVQUAL_A_multiple-Item_Scale_for_measuring_consumer_perceptions_of_service_quality/links/5429a4540cf27e39fa8e6531/SERVQUAL-A-multiple-Item-Scale-for-measuring-consumer-perceptions-of-service-quality.pdf
- Rumble, G. (2019). *The planning and management of distance education*. London: Routledge. <https://doi.org/10.4324/9780429288661>
- Şahin, A. E. (2009). Assessing service quality in faculty of education via student satisfaction scale (fe-sss). *Hacettepe University Journal of Education*, 37, 106-122. Retrieved from http://www.efdergi.hacettepe.edu.tr/shw_artcl-495.html
- Sahin, I., & Shelley, M. (2008). Considering students' perceptions: The distance education student satisfaction model. *Journal of Educational Technology & Society*, 11(3), 216-223. Retrieved from https://www.jstor.org/stable/jeductechsoci.11.3.216?seq=1#metadata_info_tab_contents
- Shea, P., Pickett, A., & Pelz, W. (2003). A follow-up study of teaching presence in the online program. *Journal of Asynchronous Learning Networks*, 7(2), 61-80. Retrieved from https://www.researchgate.net/publication/228831416_A_follow-up_investigation_of_teaching_presence_in_the_SUNY_Learning_Network/link/02e7e53bee224063e4000000/download
- Simonson, M., Zvacek, S. M., & Smaldino, S. (2019). *Teaching and Learning at a Distance: Foundations of Distance Education 7th Edition*. IAP. Retrieved from https://books.google.com.tr/books?id=qh-3DwAAQBAJ&printsec=frontcover&hl=tr&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
- Sırakaya, M., Sırakaya, D. A., & Kılıç Çakmak, E. (2015). Investigation of the level of distance education students' attitude towards online exam. *Kastamonu Education Journal*, 23(1), 87-104. Retrieved from <https://dergipark.org.tr/tr/pub/kefdergi/issue/22600/241466>
- Spector, J. M., Merrill, M. D., Elen, J., & Bishop, M. J. (2014). *Handbook of research on educational communications and technology*. New York, NY: Springer. <https://doi.org/10.1007/978-1-4614-3185-5>
- Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y., & Yeh, D. (2008). What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction. *Computers & education*, 50(4), 1183-1202. <https://doi.org/10.1016/j.compedu.2006.11.007>
- Toker Gökçe, A. (2008). Küreselleşme sürecinde uzaktan eğitim. *Journal of Dicle University Ziya Gökalp Faculty of Education*, (11), 1-12. Retrieved from <https://dergipark.org.tr/tr/pub/zgefd/issue/47957/606765>
- Yılmaz, H., & Düğenci, M. (2010). Different approach in-service training: e-service training. *12th Academic Informatics Conference*, 67-74. Retrieved from http://ab.org.tr/ab10/kitap/yilmaz_dugenci_AB10.pdf

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