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Investigation of Attitudes of Teachers Working in Turkish Ministry of National Education towards Distance Education According to Various Variables

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Abstract

This research was carried out in order to examine the level of teachers' attitudes towards distance education and to investigate the attitudes of these teachers according to some variables. This study was carried out using the descriptive survey model, which is one of the quantitative research methods. The universe of the research consisted of teachers working in public schools in Eskişehir in the 2020-2021 academic year. In this study, in which stratified sampling type was used, 921 teachers working in kindergarten, primary school, secondary school and high school serving under the Ministry of National Education were reached. According to the results of the research, it has been determined that most of the teachers have positive attitudes towards distance education. According to the results obtained, it was concluded that female teachers' attitudes towards distance education were more positive than male teachers. According to the branch variable; in this study, in which there was a statistically significant difference, it was concluded that the attitudes of General Culture Teachers towards distance education were more positive than those of Vocational Courses teachers. Teachers' attitudes towards distance education differ according to the variables of Faculty of Education, Faculty of Arts and Sciences, Faculty of Technical Education, Faculty of Health Sciences. In the study, it was concluded that the attitudes of teachers working in Primary and Secondary schools towards distance education have a more positive attitude than teachers working in High schools. According to the results of the research, there was no significant difference between the teachers' attitudes towards distance education according to the degree of education (associate degree, undergraduate, postgraduate, doctorate) and seniority.

Keywords: Distance education, Teacher Education, Online in Service Courses, Attitude

Milli Eğitim Bakanlığı'nda Görev Yapan Öğretmenlerin Uzaktan Eğitime Yönelik Tutumlarının Çeşitli Değişkenlere Göre İncelenmesi

Öz

Bu araştırma öğretmenlerin uzaktan eğitime yönelik tutum düzeylerini incelemek ve bu öğretmenlerin tutumlarını bazı değişkenlere göre incelemek amacıyla yapılmıştır. Bu çalışma nicel araştırma yöntemlerinden biri olan betimsel tarama modeli kullanılarak gerçekleştirilmiştir. Araştırmanın evrenini 2020-2021 eğitim-öğretim yılında Eskişehir'deki devlet okullarında görev yapan öğretmenler oluşturmuştur. Tabakalı örnekleme türünün kullanıldığı bu çalışmada Milli Eğitim Bakanlığına bağlı anaokulu, ilkokul, ortaokul ve lisede görev yapan 921 öğretmene ulaşılmıştır. Araştırma sonuçlarına göre öğretmenlerin büyük çoğunluğunun uzaktan eğitime yönelik olumlu tutuma sahip olduğu tespit edilmiştir. Elde edilen sonuçlara göre kadın öğretmenlerin uzaktan eğitime yönelik tutumlarının erkek öğretmenlere göre daha olumlu olduğu sonucuna ulaşılmıştır. Branş değişkenine göre; istatistiksel olarak anlamlı bir farklılığın bulunduğu bu araştırmada Genel Kültür Öğretmenlerinin uzaktan eğitime yönelik tutumlarının Meslek Dersleri öğretmenlerine göre daha olumlu olduğu sonucuna ulaşılmıştır. Öğretmenlerin uzaktan eğitime yönelik tutumları Eğitim Fakültesi, Fen-Edebiyat Fakültesi, Teknik Eğitim Fakültesi, Sağlık Bilimleri Fakültesi değişkenlerine göre farklılık göstermektedir. Araştırmada İlk ve Ortaokullarda görev yapan öğretmenlerin uzaktan eğitime yönelik tutumlarının Liselerde görev yapan öğretmenlere göre daha olumlu tutuma sahip olduğu sonucuna ulaşılmıştır. Araştırma sonuçlarına göre öğretmenlerin uzaktan eğitime yönelik tutumları arasında öğrenim gördükleri derece (önlisans, lisans, yüksek lisans, doktora) ve kıdeme göre anlamlı bir farklılık bulunmamıştır.

Anahtar Kelimeler: Uzaktan Eğitim, Öğretmen Eğitimi, Çevrim İçi Hizmet İçi Eğitim Kursları, Tutum

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Introduction

In our age, formal education is insufficient to meet the educational needs of individuals. In this case, distance education emerges as a complement to formal education as an alternative. Especially, students' repeating the subjects they cannot understand at school, accessing additional resources, benefiting from different options of information tools such as printed texts, TV broadcasts and other audio-visual tools reveals the necessity of distance education (Tırnovalı, 2012, p. 15). In this context; the students enable autonomous learning by making their own personal learning plan by benefitting different people and different sources and improving their self-direction capacity (Moore & Kearsley, 1996, p. 205).

The most important requirement of distance education is that it makes educational activities possible for individuals who cannot benefit from formal education due to some reasons such as cultural, religious, political, war, immigration and etc. (Weimin, 1999, p. 11). On the other hand, distance education gives the chance individuals who leave any level of formal education due to various reasons the to continue their education. In order to solve this situation, countries support the infrastructure of distance education and provide teaching materials to their citizens free of charge (Tırnovalı, 2012, p. 16).

Today, it is possible to reach thousands of people at the same time, to meet simultaneously, to carry out teaching activities and to interact with individuals with high-tech informatics and electronic tools in distance education (Balaban, 2012, p. 27-28). For this reason, virtual classrooms are created, web services are expanded, and open education high schools and faculties are established. In this case, the education expenditures of the countries decrease and the educational goals are achieved with more affordable costs (İşman, 2011, p. 8).

On the other hand, in-service training of the teachers is vital. In order to bring the educational quality of the countries to certain standards, there is a need for some training of professional teachers who carry out education and training activities. To meet these needs, lifelong training of teachers has become necessary. For this reason, the goverments have turned to open and distance in-service training as an alternative way, since traditional approaches cannot meet all demands for the profession (UNESCO, 2002, p. 8). Since 2013, the Ministry of National Education has started to include in-service training courses and seminars to be given through distance education in the "Professional Development Training Plan of Teachers" published at the beginning of each year. In 2020, with the holiday of schools during the Covid 19 Pandemic process, the in-service training seminars and courses given to teachers via distance education increased.

Adults have to give importance to their personal and professional development in order to meet their individual needs throughout life. For this reason, individuals attend in various certificate programs throughout their lives and participate in various courses and educational programs to keep their professional knowledge up to date (Gökkaya, 2014, p. 73). These trainings are generally provided by non-formal education institutions. However, recently, these activities for various occupational groups are also carried out through distance education through various institutions. Thus, these in-service training activities, which are carried out with modern methods, are cost-effective for both employers and individuals. On the other hand, conveniences are provided for individuals in terms of time and space (Duman, 1992, p. 287). In this period when technological developments take place in all areas of business and education life, distance education method is effectively used in in-service training of teachers through various platforms. In this context, teachers' attitudes towards distance education have a great importance in the efficiency of in-service training to be conducted by the Ministry of National Education. Thus, first of all, teachers' attitudes towards distance education should be determined in order that it can effectively and efficiently implement in-service trainings through distance education provided by the Ministry of National Education. For this reason, this research is thought to be important because it will contribute to the field in determining the attitudes of teachers towards distance education in this period when the distance education provided by the Ministry of National Education became widespread. In addition, it is important to investigate teacher attitudes towards distance education in terms of demographic variables. Because, determining how the distance education attitudes of teachers differ in terms of various variables can contribute expert and guide future research conducted in the education field. In this context, the aim of this study is to determine the attitudes of teachers towards distance education and to compare their existing attitudes in terms of different variables. The sub-problems determined in this direction are as follows:

1. What are the teachers' attitudes towards distance education?
2. Do teachers' distance education attitudes differ according to some demographic variables?
   2.1. Do teachers' attitudes towards distance education show a significant difference according to the gender variable?
   2.2. Do teachers' attitudes towards distance education show a significant difference according to the branch variable of teachers?
   2.3. Do teachers' attitudes towards distance education show a significant difference according to the variable of seniority?
   2.4. Do teachers' attitudes towards distance education show a significant difference according to the graduated higher education institution variable?
   2.5. Do teachers' attitudes towards distance education show a significant difference according to the degree of education graduated?
   2.6. Do teachers' attitudes towards distance education show a significant difference according to the variable of the school type they work in?

Method

Research Design

In this study, which was carried out to determine the attitudes of teachers towards distance education, it was carried out using a descriptive survey design based on the general survey model, which is one of the quantitative research methods. Quantitative approach means that the targeted questions can be answered systematically by enabling the development of useful information. This model, which is most preferred in Social Sciences, is the quantitative research model that describes the beliefs, opinions, characteristics of individuals, their past or present behaviors (Punch, 2014, p. 229). The attitudes of the teachers participating in the research towards distance education were described as they were without any intervention. Therefore, this study was determined as a survey model

Universe and Sample

The universe of this study consists of teachers working in kindergartens, primary schools, secondary schools and high schools affiliated to the Ministry of National Education in Eskişehir. Stratified sampling was used in the selection of the sample. It is a situation that should be considered in cases where there are subunits and groups in a universe with borders. Stratified sampling is a type of sampling used to increase the representative power of the sample and to obtain accurate data (Yıldırım & Şimşek, 2011, p. 105). The sample of this research consisted of 921 teachers who worked in public schools in the center and other districts of Eskişehir, affiliated to the Ministry of National Education, and participated in in-service training courses through distance education between 2017 and 2021. The distribution of the teachers participating in the research are given in Table 1.

Table 1. *Demographic Characteristics of the Teachers Participating in the Research*

Demographic Characteristics		Frequency	Percent
Gender	Male	357	38,8
	Female	564	61,2
Seniority year	1-5	73	7,9
	6-14	324	35,2
	15-20	205	22,3
	21 and above	319	34,6
Graduated higher education institution,	Faculty of Education	593	64,4
	Faculty of Arts and Sciences	196	21,3
	Faculty of Technical Education	45	4,9
	Faculty of Health Sciences	20	2,2
	Other Faculties	67	7,2
Graduated education degree	Associate degree	14	1,5
	Licence	738	80,1
	Degree	157	17
	Doctorate	12	1,3
The school type they work	Kindergarten	22	2,4
	Primary school	245	26,6
	Secondary school	255	27,7
	High school	399	43,3
Branch	Class Teacher	192	20,8
	English	89	9,7
	Turkish Language and Literature	64	6,9
	Maths	52	5,6
	Turkish	47	5,1
	Religious Culture and Moral Knowledge	39	4,2
	Pre-school Teacher	34	3,7
	Guidance	30	3,3
	Elementary Mathematics	29	3,1
	Science	26	2,8
	Social studies	25	2,7
	History	25	2,7
	Physical education	22	2,4
	Vocational Courses	20	2,2
	German	18	2,0
	Geography	18	2,0
	Patient and Elderly Services	18	2,0
	Chemistry/Chemical Technology	18	2,0
	Machine	18	2,0
	Special Education Teacher	17	1,8
	Physical	15	1,6
	Visual arts	15	1,6
	Biology	14	1,5
	Information technologies	13	1,4
	Metal Technology	11	1,2
	Music	9	1,0
	Electrical-electronics	8	,9
	Technology and Design	8	,9
	Child Development and Education	6	,7
	Philosophy	5	,5
	French	3	,3
	Clothing Production Technology	3	,3
	Imam Hatip High School Vocational Courses	3	,3
	Motor Vehicles Technology	3	,3
	Arabic	2	,2
	Furniture and Interior Design	2	,2
	Total	921	100

Data Collection Tools

In this study, Online Learning Attitude Scale, one of the quantitative data collection tools, was used in accordance with the research model. In the study, the "Online Learning Attitude Scale" developed by Usta, Uysal, and Okur (2016) was used to determine teachers' attitudes towards distance education. The validity and reliability study of the scale was conducted by Usta et al. (2016). This developed Online Learning Attitude Scale consists of four factors and 20 items. Scale factors are titled as "general acceptance", "individual awareness", "usability (time-labor cost)" and "implementation effectiveness (effective participation)". Usta et al. (2016, p. 2219) conducted a validity and reliability study for this scale. In the confirmatory Factor Analysis for this scale they developed, the KMO value was 0.928 and the Barlett test ((χ^2=1952.953; p <0.000) was found to be significant. The eigenvalues of the analyzed items were gathered under 4 factors above 1.00. The variance rate of the four factors in the scale is 63,821%. The factor load values of the items vary between -0.43 and 0.81 (Usta et al, 2016 p. 2219). The factor loading value is a coefficient that explains the relationship of the items with the factors.

A pilot study was conducted to determine the validity and reliability of the Online Learning Attitude Scale and to identify the problems to be experienced in the application. As a result of the confirmatory factor analysis, the ratio of the chi-square value to the degrees of freedom was found to be (χ2/sd=1.94) and it was seen that the model was compatible. Other goodness-of-fit values obtained as a result of the confirmatory factor analysis of the Online Learning Attitude Scale also show that the available data confirm the modelled factor structure [RMSEA=.07, SRMR=.07, =CFI=.89, TLI=.87]. Chi-square fit test (χ^2/df) in Confirmatory Factor Analysis should be less than 3.0, Root Mean Square Errors of Approximate (RMSEA) value should not exceed 0.08; Root Mean Errors (SRMR) index should show values below 0.08 and Comparative Fit Index (CFI) should be above 0.85 or 0.95. Normized Compliance Index (NFI), also known as TLI, threshold values such as TLI 0.80, as well as threshold values such as TLI 0.95 are found in the literature (Büyüköztürk, 2014; Elderyoğlu, 2017, pp. 80-81; Erdoğan, 2019, p. 33, 37).

The analyzes were made for the reliability study of the Online Learning Attitude Scale by using the data obtained from the pilot study The Cronbach Alpha formula, one of the reliability methods, was used to determine the reliability of the Online Learning Attitude Scale. The internal consistency coefficients (Cronbach alpha) of the sub-dimensions of the scale were found to be 0.741 for the "General Acceptance" factor, 0.791 for the "Individual Awareness" factor, 0.789 for the "Usability" factor, and 0.662 for the "Application Effectiveness" factor. The internal consistency coefficient of the whole scale was calculated as 0.883. These results are similar to Usta et al (2016). According to these results, it can be concluded that the Attitude Scale towards Online Learning is reliable. Accordingly, this scale can be used to determine individuals' attitudes towards online learning. The fact that a reliability coefficient of 0.70 or higher for a test is considered to be sufficient for the reliability of the test scores (Büyüköztürk, 2014, p. 183). The fact that the alpha value (α) is greater than 0.90 indicates that the reliability of that scale is at a very high level and that it can be used safely in the formation of scientific judgments with high validity and reliability about the phenomenon (Akyüz, 2018, p. 2).

Data Collection and Analysis

The research was applied to the teachers and administrators working in public schools within the borders of Eskişehir Province in the Central Anatolia region in the 2nd term of the 2020-2021 academic year. The research was applied to 921 teachers and administrators working in kindergarten, primary school, secondary school and high school. Statistical Package for the Social Sciences (SPSS) analysis program was used to analyze the datum. The skewness coefficient was calculated to find out whether the distribution of the data obtained in the study was normal. It was found that the skewness and kurtosis coefficients of the groups were between -1.5 and +1.5 and the points in the Q-Q graph were close to the 45-degree line. Since this value for the scales is between -1.5 and +1.5, it was found to be normally distributed. Levene's homogeneity test was applied to determine whether parametric and non-parametric tests would be used in the analysis of the data, and according to the results of this test, independent sample t-test for the first sub-problem of the second main problem, one-way analysis of variance (ANOVA) for the third, fourth, fifth and sixth sub-problems, and Kruskal Wallis test and Post Hoc (LSD) test for the second sub-problem of the second main problem were used.

Findings

Findings Related to the First Problem of the Study

Findings on the evaluation of the "general acceptance" sub-dimension of teachers' attitudes towards distance education

Table 2. *The Evaluation of the "General Acceptance" Sub-dimension of Teachers' Attitudes Towards Distance Education (n=921)*

Expressions	I strongly disagree		I do not agree		I am undecided		I agree		I strongly Agree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
1. I think I got enough feedback from the trainer in online learning.	37	4	189	20,5	231	25,1	394	42,8	70	7,6	921	100
2. The lack of face-to-face interaction in online learning disturbs me	227	24,6	372	40,6	134	14,5	145	15,7	43	4,7	921	100
3. Online learning should be expanded.	48	5,2	155	16,8	246	26,7	335	36,4	137	14,9	921	100
4. Most teachers prefer online learning to face-to-face learning	197	21,4	267	29	178	19,3	178	19,3	101	11	921	100
5. Online environments facilitate the solution of many educational problems through rich learning activities.	62	6,7	207	22,5	243	26,4	322	35	87	9,4	921	100
6. Online learning increases access to education and training.	72	7,8	195	21,2	184	20	342	37,1	128	13,9	921	100
7. I find online learning more economical.	76	8,3	168	18,2	129	14	361	39,2	187	20,3	921	100

When Table 2 is examined, half of the teachers (50.4%) thought that they would receive sufficient feedback from the trainer in online learning, while a significant portion (24.5%) did not express a positive opinion on first judgment. However, the number of teachers (231 teachers) who are undecided about this judgment is also significant. When Table 2 is examined, "24.6% of the teachers (227 teachers) strongly disagree with second statement, 40.4% (372 teachers) disagree, 14.5% (134 teachers) are undecided, 15.7%" 145 teachers (145 teachers) agreed, 4.7% (43 teachers) strongly agree. Accordingly, the vast majority of teachers expressed a negative opinion about this judgment. According to these datum, it is thought that the absence of face-to-face interaction in online learning in online courses does not disturb the teachers. When looked in to the results of the 3rd judgment of the General Acceptance sub-dimension, a significant portion of the teachers (51.3%) expressed their opinion in favor of disseminating online learning while a significant portion of the teachers (22%) expressed their opinion not to expand online learning, However, the number of teachers who are undecided on this judgment is at a remarkable rate (26.7%).

According to these datum of he 4th judgment, most of the teachers (50.4%) do not prefer online learning to face-to-face education, while a significant portion prefer online learning to face-to-face education. When the results are examined about the 5th judgment, the majority of teachers (44.4%) think that online environments facilitate the solution of many educational problems through rich learning activities. A significant number of teachers (29.2%) expressed a negative opinion about this judgment. On the other hand, those who are undecided about this judgment constitute a significant portion (26.4%) of the teachers. For the 6th judgment, a significant portion of them approached this judgment negatively (28%) while the majority of teachers (51%) expressed a positive opinion about this judgment, A significant number of teachers were undecided about whether online learning increases access to education and training. For the 7th judgment of the General Acceptance sub-dimension, the majority of teachers (59.3%) found online learning more economical, while a significant portion of them stated that online learning was not economical.

Findings on the evaluation of the " Individual Awareness " sub-dimension of teachers' attitudes towards distance education

Table 3. *Findings Regarding the Evaluation of the Self-awareness Sub-dimension of Teachers' Attitudes Towards Distance Education (n=921)*

Expressions	I strongly disagree		I do not agree		I am undecided		I agree		I strongly Agree		Total	
	N	%	N	%	N	%	N	%	N	F	N	F
1. If I had the opportunity, I would take other courses and seminars online.	82	8,9	177	19,2	167	18,1	325	35,3	170	18,5	921	100
2. I prefer online learning environment to face-to-face learning environment.	213	23,1	278	30,2	162	17,6	167	18,1	101	11	921	100
3. I feel comfortable in the online learning environment.	72	7,8	183	19,9	152	16,5	386	41,9	128	13,9	921	100
4. I can learn better in an online learning environment.	121	13,1	270	29,3	239	26	208	22,6	83	9	921	100
5. Taking online classes makes me feel privileged.	136	14,8	326	35,4	214	23,2	176	19,1	69	7,5	921	100
6. I prefer to learn online as I don't want to carry notebooks and books.	177	19,2	315	34,2	152	16,5	199	21,6	78	8,5	921	100

When Table 3 is examined, According to these findings, the majority of teachers (53.8%) stated that they could take other courses and seminars online if they were given the opportunity, while a significant portion (28.1%) did not prefer to take other courses and seminars online. Very few of the participants (18.1%) expressed a negative opinion on this judgment. According to the data for 2nd judgment, the majority of teachers (53.3%) preferred face-to-face learning environment, while a significant portion (29.1%) preferred online learning environment. A very few of the participants expressed undecided opinions about preferring face-to-face and online learning environments. For the 3rd judgment, a significant portion (27.7%) stated that they did not feel comfortable in the online environment while the majority of the teachers (55.8%) stated that they felt comfortable in the online environment.

According to the results of the 4th judgment, there is a differentiation in the answers given to the statement "I can learn better in the online learning environment". Accordingly, the majority of teachers (42.4%) think that they cannot learn better online, while a significant portion (31.6%) think that they can learn better online. On the other hand, a significant portion (26%) reported that they were undecided in this judgment. For the 5th judgment, there is variation in the responses of the participants to this judgment. According to these findings, the majority of teachers (50.2%) stated that taking online courses does not make them feel privileged. A significant portion of the participants (26.6%) responded positively to this judgment, while those who were undecided about this judgment (23.2%) also had a significant proportion. When Table 3 is examined, , the majority of teachers (53.4%) expressed a negative opinion on the statement " I prefer to learn online as I don't want to carry notebooks and books.", while a significant portion (30.1%) expressed a positive opinion.

Findings on the evaluation of the "Usability (time-labor cost)" sub-dimension of teachers' attitudes towards distance education

Table 4. *Findings Regarding the Evaluation of the "Usability (time-labor cost)" Sub-dimension of Teachers' Attitudes Towards Distance Education (n=921)*

Expressions	I strongly disagree		I do not agree		I am undecided		I agree		I strongly Agree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
1. I can make up for missed lessons with online learning	30	3,3	104	11,3	117	12,7	493	53,5	177	19,2	921	100
2. Online learning enables efficient use of time	53	5,8	132	14,3	192	20,8	407	44,2	137	14,9	921	100
3. The online learning course makes it easy for me to follow constantly.	67	7,3	192	20,8	183	19,9	353	38,3	126	13,7	921	100

When we examned the 1st judgment of the Usability (time-labor cost) sub-dimension, the vast majority of teachers (72.7%) think that they can make up for the missed lessons on their own with online learning. Very few of the teachers were undecided on this judgment and very few (14.6%) were in a negative opinion. For the 2nd judgment, the majority of teachers (59.1%) expressed the opinion that

online learning provides efficient use of time, while very few (20.1%) did not agree with this opinion. Those who are undecided about this judgment constitute a very small portion (20.8%) of the teachers. According to the results of the 3rd judgment, the majority of the teachers (52) thought that "online learning makes it easier to follow the course continuously, while a significant portion (28%) expressed a negative opinion on this judgment. Very few of the teachers (19.9%) were undecided on this judgment.

Findings on the evaluation of the "Implementation effectiveness (effective participation)" sub-dimension of teachers' attitudes towards distance education

Table 5. *Findings Regarding the Evaluation of the "Implementation Effectiveness" Sub-dimension of Teachers' Attitudes Towards Distance Education (n=921)*

Expressions	I strongly disagree		I do not agree		I am undecided		I agree		I strongly Agree		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
1. I am aware that I need to come to class more prepared in online environments.	58	6,3	137	14,9	149	16,2	399	43,3	178	19,3	921	100
2. I can communicate with my friends more easily online environment.	92	10	252	27,4	196	21,3	281	30,5	100	10,9	921	100
3. Online lessons encourage active participation of students.	51	5,5	128	13,9	123	13,4	378	4,1	241	26,2	921	100
4. I think educators should come to class more prepared in online environments.	27	2,9	88	9,6	103	11,2	399	43,3	304	33	921	100

According to the research findings, the majority of teachers (62.6%) think that they should come to the lesson more prepared in online environments, while a significant portion (21.2%) think that they do not need to come to the lesson more prepared in online environments. It is seen that the rate of teachers who are undecided about this judgment is very low (16.2%). For the 2nd judgment of the Implementation effectiveness (effective participation) sub there is variation in expressing opinion on this judgment. Accordingly, the vast majority of teachers (41.4%) thought that they could communicate more easily with their friends in online environments, while a significant number (37.4%) expressed a negative opinion on this judgment. A significant portion (21.3%) stated that they were undecided on this judgment. According to these findings, about the 3rd judgment of the, the majority of teachers (67.2%) think that online courses require the active participation of teachers, while a very few (19.4%) think that online courses do not require active participation of teachers. Finally, according to the research findings, the majority of teachers (76.3%) think that educators should come to the lesson more prepared in online environments.

Evaluation of teachers' attitudes towards distance education according to various variables

Evaluation of teachers' attitudes towards distance education according to the gender variable

Table 6. *Unrelated Sample T-Test Results of of Teachers' Levels of Online Learning Attitudes Regarding the Gender Variable*

Dimension	Gender	n	$\bar{x}$	S	sd	t	p
1. General acceptance	Female	564	3,1155	,75279	919	1,188	,235
	Male	357	3,0544	,77222			
2. Individual awareness	Female	564	2,9944	,97654	919	2,833	,005
	Male	357	2,8072	,97772			
3. Usability	Female	564	3,6005	,89775	919	3,77	,000
	Male	357	3,3632	,97968			
4. Implementation effectiveness	Female	564	3,5838	,80184		1,36	,172
	Male	357	3,5077	,85590	919		
Online Attitude Scale overall scores	Female	564	3,2456	,72400		2,56	,011
	Male	357	3,1172	,76576	919		

According to the independent sample t-test, there was no statistical difference in "General Acceptance" and "Application Effectiveness" sub-dimensions according to gender (p> ,05). However, there is a statistically significant difference between the sub-dimensions of "Individual Awareness" and "Usability" and the overall total of the scale (p< ,05). There is a significant difference in favor of female teachers in the sub-dimension of "Individual Awareness" (X = 2.99), and in favor of female teachers in the sub-dimension of "Usability" (X = 3.60). According to the analysis, it is seen that the average of female teachers' attitudes towards distance education is (X = 3.24) and the average of male teachers' attitudes towards distance education is (X = 3.11) in the overall scale total. Considering the analyzes,

teachers' online learning attitudes differ statistically according to the gender variable [t(919) = 2.56, p= ,011<,05]. The numerical difference is in favor of female teachers.

Evaluation of teachers' attitudes towards distance education according to the teaching branch

Table 7. *Kruskal Wallis-H Test Results of the Teachers' Online Learning Attitude Levels Regarding the Branch Variable*

	Teaching Branch	N	SO	sd	x^2	p	Fark (LSD)
Online Learning Attitude Scale	Class Teacher	192	491,31	34	73,57	,00	Physical Education <Arabic Geography<Arabic Religious Culture and Moral Knowledge<Arabic Science< Arabic Physics< Arabic Visual arts< Arabic Sick Elderly Services< Arabic English<Arabic Math< Arabic
	German	18	436,94				
	Arabic	2	794,75				
	Physical education	22	441,36				
	Information Technologies	13	470,31				
	Biology	14	394,21				
	Geography	18	462,31				
	Child Development and Education	6	262,42				
	Religious Culture and Moral Knowledge	39	422,17				
	Electric-Electronic Tech./Electrical	8	395,19				
	Philosophy	5	317,10				
	Science	26	495,52				
	Physical	15	342,97				
	French	3	311,67				
	French	3	311,67				Metal technology<< Arabic Preschool< Arabic History< Arabic Literature< Arabic Machine< Arabic Turkish< Clothing Production Technology Machine<Elementary Mathematics Metal Technology< Special education History< Special Education-
	Clothing Production Teknology	3	590,83				
	Visual arts	15	359,40				
	Patient and Elderly Services	18	413,86				
	I.H.L. Vocational Courses	3	429,00				
	Elementary Mathematics	29	564,88				
	English	89	460,39				
	Chemistry/Chemical Technology	18	453,11				
	Maths	52	477,75				
	Metal Technology	11	215,23				
	Furniture and Interior Design	2	386,50				
	Motor Vehicles Technology	3	594,67				
	Music	9	406,33				
	Pre-school teaching	34	477,57				
	Special education	17	645,65				
	Guidance	30	391,02				
	Social studies	25	516,46				
	History	25	317,16				
	Technology and design	8	360,75				
	Turkish language and literature	64	484,92				
	Turkish	47	385,11				
	Machine	18	250,47				
	Total	901					

Considering Table 7, as a result of the Kruskal Wallis – H Test, according to the Branch variable of the teachers; It was concluded that there was a statistically significant difference in terms of the total dimensions of the online learning attitude scale (x^2=73.57; p<.05).

Evaluation of teachers' attitudes towards distance education according to the Seniority year

Table 8. *ANOVA Results of Teachers' Online Learning Attitude Levels Regarding the Year of Seniority Variable*

Sub-Dimension	Year of Seniority	N	X̄	Ss	F	p	Difference (LSD)
1. General acceptance	1-5	73	3,13	,70563	1,290	0,28	
	6-14	324	3,12	,75800			
	15-20	205	3,14	,80942			
	21 and above	319	3,03	,74145			
	Total	921	3,09	,76054			
2. Individual awareness	1-5	73	2,96	,90423	,815	0,49	
	6-14	324	2,97	,99582			
	15-20	205	2,92	,99196			
	21 and above	319	2,85	,97550			
	Total	921	2,92	,98072			
3. Usability	1-5	73	3,68	,71241	3,330	0,02	21 and above<1-5 year
	6-14	324	3,59	,94796			21 and above <6-14 year
	15-20	205	3,48	1,00291			
	21 and above	319	3,39	,91637			
	Tota	921	3,50	,93700			
4. Implementation effectiveness	1-5	73	3,62	,81556	4,00	0,01	15-20<6-14 year
	6-14	324	3,66	,80379			21 and above < 6-14 year
	15-20	205	3,51	,80574			
	21 and above	319	3,44	,84479			
	Total	921	3,55	,82359			
Online Scale Total Scale Score	1-5	73	3,26	,66695	2,160	0,91	
	6-14	324	3,25	,73818			
	15-20	205	3,20	,78320			
	21 and above	319	3,11	,73273			
	Total	921	3,19	,74269			

According to the results in Table 8, There was not statistically significant difference (p> .05) in the "general acceptance" (F=1,290), "individual awareness" (F=,815) sub-dimensions and "general online learning attitude" (F=2.16) distributions as a result of the analysis studies according to the variable of seniority of the teachers. According to this result, teachers' online learning attitude levels do not change significantly according to "general acceptance", "individual awareness" and "general online learning scale" distributions. However, significant differences emerged in the dimensions of "Usability" (F=3.33) and "Implementation effectiveness"(F=4.00). (p<.05).

Evaluation of teachers' attitudes towards distance education according to the graduated higher education institution

Tablo 9. *ANOVA Results of Teachers' Online Learning Attitude Levels Regarding the Graduated Higher Education İnstitution*

Sub-Dimension		N	X̄	Ss	F	p	The Difference (LSD)
1. General acceptance	Faculty of Education	593	3,1335	,76230	2,33	0,05	The faculty of Health Sciences<Faculty of Education
	Faculty of Arts and Sciences	196	3,0641	,74326			
	Faculty of Technical Education	45	2,9365	,76299			
	Faculty of Health Sciences	20	2,7214	,62438			
	Other Faculties	67	3,0192	,79807			
	Total	921	3,0918	,76054			
2 .Individual awareness	Faculty of Education	593	3,0037	,99908	4,08	0,03	The Faculty of Arts and Sciences <Faculty of Education, The Faculty of Technical Education <Faculty of Education, The Faculty of Health Sciences<Faculty of Education
	Faculty of Arts and Sciences	196	2,8427	,94706			
	Faculty of Technical Education	45	2,5519	,89951			
	Faculty of Health Sciences	20	2,5333	,67017			
	Other Faculties	67	2,7935	,94908			
	Total	921	2,9218	,98072			
3. Usability	Faculty of Education	593	3,5627	,92221	,807	0,13	
	Faculty of Arts and Sciences	196	3,4626	,91910			
	Faculty of Technical Education	45	3,3037	1,07737			
	Faculty of Health Sciences	20	3,3000	,74063			
	Other Faculties	67	3,3632	1,04242			
	Total	921	3,5085	,93700			
4. Implementation effectiveness	Faculty of Education	593	3,5995	,78575	2,01	0,09	
	Faculty of Arts and Sciences	196	3,5077	,83662			
	Faculty of Technical Education	45	3,3611	1,03840			
	Faculty of Health Sciences	20	3,2375	,84478			
	Other Faculties	67	3,5149	,91792			
	Total	921	3,5543	,82359			
Online Scale Total Scale Score	Faculty of Education	593	3,2521	,73920	3,552	0,01	Faculty of Technical Education< Faculty of Education, Faculty of Health Sciences < Faculty of Education
	Faculty of Arts and Sciences	196	3,1462	,72711			
	Faculty of Technical Education	45	2,9611	,79228			
	Faculty of Health Sciences	20	2,8550	,51168			
	Other Faculties	67	3,1022	,78376			
	Total	921	3,1958	,74269			

When the results in Table 9 are examined, There wasn't statistically significant difference for the distribution of Usability (F=0.81), Application Effectiveness (F=2.01) sub-dimensions as a result of the analysis studies performed according to the variable of the higher education institution graduate (p). > .05). However, There were significant differences in terms of General Online Learning Attitude (F=3.55) and General Acceptance (F=2.33) and İndividual Awareness (F=4.08) sub-dimensions. (p<.05).

Evaluation of teachers' attitudes towards distance education according to the graduated education degree education institution

Tablo 10. *ANOVA Results of Teachers' Online Learning Attitude Levels regaRding the Graduated Education Degree*

Sub-Dimensions	The graduated education degree	N	X̄	Ss	F	p
1.General acceptance	Associate degree	14	2,7347	,86054	1,91	0,13
	Licence	738	3,0790	,75733		
	Master	157	3,1692	,74754		
	Doctorate	12	3,2857	,92180		
	Total	921	3,0918	,76054		
2. Individual awareness	Associate degree	14	2,5952	,88847	1,45	0,23
	Licence	738	2,9013	,97512		
	Master	157	3,0329	1,01159		
	Doctorate	12	3,2857	,92180		
	Total	921	29218	,98072		
3. Usability	Associate degree	14	3,1190	,88295	2,224	0,08
	Lice	738	3,4869	,93392		
	Master	157	3,6178	,95989		
	Doctorate	12	3,8611	,68841		
	Total	921	3,5085	,93700		
4.İmplementation effectiveness	Associate degree	14	3,2857	,88174	,80762	0,49
	Licence	738	3,5495	,82937		
	Master	157	3,5860	,81193		
	Doctorate	12	3,7500	,47673		
	Total	921	3,5543	,82359		
Online Scale Total Scale Score	Associate degree	14	2,8607	,76590	2,05216	0,11
	Licence	738	3,1810	,74048		
	Master	157	3,2790	,74788		
	Doctorate	12	3,4125	,68062		
	Total	921	3,1958	,74269		

When we considered the results of the analysis studies carried out according to the variable of the teachers' the graduated education degree (p> ,05), there was not statistically significant difference for the distributions "general acceptance" (F=1.91), "Individual awareness" (F=1.45), "Usability" (F=2.224), "Implementation Effectiveness" (F=.81) sub-dimensions and "General Attitudes towards Online Learning" (F=2.05).

Evaluation of teachers' attitudes towards distance education according to The school type the teacher work

Tablo 11. *ANOVA Results of Teachers' Online Learning Attitude Levels Regarding the School Type Which the Teacher Work*

Sub-Dimensions	School Type	N	X̄	Ss	F	p	Fark (LSD)
1.General acceptance	Kindergarten	22	3,0455	,75127	2,89	0,03	High School< Primary
	Primary	245	3,1837	,74971			
	Secondary	255	3,1311	,79637			
	High School	399	3,0129	,73852			
	Total	921	3,0918	,76054			
2.Individual awareness	Kindergarten	22	2,6364	1,00084	11,21	0,00	Kindergarten< Primary
	Primary	245	3,1796	1,04266			Secondary<Primary
	Secondary	255	2,9758	,98588			High School<Primary
	High School	399	2,7448	,89719			High School< Secondary
	Total	921	2,9218	,98072			
3. Usability	Kindergarten	22	3,5758	,69146	6,015	0,00	High School< Primary
	Primary	245	3,5646	,93603			High School < Secondary
	Secondary	255	3,6706	,91812			
	High School	399	3,3668	,94340			
	Total	921	3,5085	,93700			

…Tablo 11.

Sub-Dimensions	School Type	N	X̄	Ss	F	p	Fark (LSD)
4.Implementation effectiveness	Kindergarten	22	3,4318	,90034	6,623	0,00	High School<Primary
	Primary Secondary School	245	3,6520	,77954			High School < Secondary
		255	3,6755	,78044			
	High School	399	3,4236	,85477			
	Total	921	3,5543	,82359			
Online Scale Total Scale Score	Kindergarten	22	3,0795	,69121	8,07	0,00	High School< Primary
	Primary Secondary	245	3,3333	,75401			High School < Secondary
		255	3,2743	,75050			
	High School	399	3,0677	,71346			
	Total	921	3,1958	,74269			

As a result of the analysis studies carried out according to the school type variable in which the teachers work, statistically significant difference was found for General Acceptance (F=2.89), Individual awareness (F=11.21), Usability (F=6.015), Implementation effectiveness (F=6.623) sub-dimensions and general online learning attitudes (F=8.07). (p< .05). In the total dimension of online learning attitude scale, it was concluded in favor of primary and secondary school students compared to high school teachers.

Discussion, Conclusion and Suggestions

Conclusion, discussıon on the evaluation of teachers' attitudes towards distance education

According to the results of the research, it has been determined that the majority of teachers have positive attitudes towards distance education. When the literature was examined, it was determined that many studies carried out supported this result. In a study which was conducted by Ağır (2007, p. 54) to determine the attitudes of primary school teachers working in public and private schools towards distance education and their views on distance education technologies, it was revealed that teachers' attitude levels towards distance education were positive. Çalimfidan (2007, p. 84) revealed that teachers generally had positive opinions about the applicability and participation of the program in his study to determine the opinions of class and branch teachers about the "Computer Training of Teachers with Distance In-Service Training Method" program. The results obtained in these studies coincide with the result that teachers' attitudes towards distance education are positive. Kokoc et al. (2011, p. 80), Tok and Dos (2010, p. 334), Ergin (2010, p. 51-52), Erdogan et al. (2017, p. 536), Kocayiğit and Uşun (2020, p. 296) concluded that the teachers participating in the research have a positive attitude about distance education practices as a result of their work. The results of these studies also support the results of our study.

On the other hand, the result of the research conducted by Tekin and Özaydınlık (2019, p. 30) has similar results with the result of this study, in terms of that the teacher have positive attitudes of teachers towards distance education. In this experimental study conducted by Tekin and Özaydınlık (2019, p. 30), it was concluded that the "In-Service Computer Training Program Provided by Distance Education Method" positively affected teachers' attitudes towards computers and their perceptions of computer self-efficacy. In addition, at the end of this research, it was suggested that the Distance Education Method be used together with the in-service training of teachers. Because in-service trainings given by web-based distance education method are important in terms of being faster, more useful, cheaper and appealing to wider audiences than face-to-face in-service training. For this reason, distance education method can be used as an alternative method in in-service training of teachers and administrators.

When the literature is examined, there are also studies that do not coincide with the results of this research. Ateş and Altun (2008, p. 135) revealed that the attitudes of computer teacher candidates towards distance education are close to the undecided level. Ülkü (2018, p. 76), which conducted in his research to determine the attitudes of teachers working in primary schools towards distance education, revealed that there was no statistically significant difference in the attitudes of teachers towards distance education, except for educational status. From this point of view, it was seen that the attitudes of teachers working in primary school towards distance education were not positive. When the researches are examined, it is seen that the opinions of the teachers working in the Ministry of National Education about distance education are generally positive, although there are studies showing that teachers' attitudes towards distance education are negative. According to the results of this research, it can be stated that the teachers working

in the Ministry of National Education are willing to receive in-service training through distance education, where educational technologies are effectively used. Kokoc et al. (2011, pp. 80-81) concluded that teachers have a positive view of receiving in-service training through distance education as teachers find efficient technological infrastructure, efficient use of resources, easier communication, including disabled people in the system, flexibility of time and space as positive features of online in-service training activities. Because the teachers experienced problems such as not doing the activities at a time suitable for them in the face-to-face in-service trainings, seeing the courses as vacations, using them outside the course purpose, and accommodation. Thus, the teachers thought that effective use of their resources could be encouraged by online in-service training activities. It is thought that this may be due to the fact that distance education has more advantages than face-to-face education. The preferability of distance education and increasing the motivation of teachers are seen as an important advantage of time and place flexibility of distance education. On the other hand, enriching distance education with visuals, videos and animations motivates teachers and increases the effective learning of trainees. In addition, it is seen that supporting online courses with printed materials positively affects teachers' attitudes towards distance education (Taşlıbeyaz, et al. 2014; p. 154).

Conclusion, discussıon on the evaluation of teachers' attitudes towards distance education according to variables

According to the results obtained, teachers' online learning attitudes differed statistically according to the gender variable. In the study, it was concluded that female teachers' attitudes towards distance education were more positive than male teachers. When the literature is examined, there are studies that support the results of our research. Tekin and Aydınlık (2019, p. 29) revealed that female teachers developed a more positive attitude towards distance education than male teachers and their self-efficacy levels improved more. Özen and Baran (2020, p. 633) revealed in their study that female teachers expressed a more positive view of distance education than male teachers. . However, Ağır (2007, p. 56), Özdem (2007, p. 64), Ergin (2010, p. 52), Özavcı (2015, p. 84) Yavuz (2016, p. 68), Fidan (2016) , p. 542) and Ülkü (2018, p. 78) did not reveal a significant difference between the scores of attitudes towards distance education according to the gender variable. According to the results of the research conducted by Tok and Dos (2010, p. 334); although the opinions of the teachers about the online in-service training course did not differ significantly in terms of gender, it was determined that the teachers had a positive attitude towards the online in-service training course. It was concluded that the teachers wanted to receive their in-service training online from now on. According to these results, it can be said that the attitudes of male and female teachers towards distance education are close to each other, and there is no difference in the attitudes of female and male teachers.

When the results of the research were examined, it was concluded that there was a statistically significant difference in terms of the total dimensions of the online learning attitude scale according to the branch variable. It has been concluded that Arabic teachers have a more positive attitude towards distance education than Physical Education, Geography, Religion, Science, Physics, Visual Arts, Patient and Elderly Services, English, Mathematics, Metal Technology, Preschool, History, Literature, Machinery Branches. According to the results of the analysis, it was seen that Clothing Production teachers had a more positive attitude towards distance education than Turkish teachers. It was also seen that Elementary Mathematics teachers had more positive attitude towards distance education than Machine teachers. Moreover, it was determined Special Education teachers were more positive towards distance education than Metal Technologies and History teachers. When we look at the results of the research, in general, it can be said that General Culture teachers' attitudes towards distance education are more positive than Vocational Course teachers according to the branch variable.

When the literature is examined, it is seen that there are studies showing that there is a statistically significant difference in the attitudes of teachers towards distance education in terms of the branch variable. It has been determined that the result of the research conducted by Ağır (2007, p. 56) on the attitudes of primary school teachers working in private and public schools towards distance education is in line with the current research. According to the findings obtained in this study, it was concluded that there is a significant difference between the status of being a classroom or branch teacher and the attitude towards distance education. According to the results of the research obtained by Fidan (2016, p. 543), it was concluded that the epistemological belief levels of the students differed significantly according to the departments they studied. It has been determined that the students of the Sociology and Turkish Language and Literature department have higher attitudes towards distance education than the students in

the Computer Programming department and those who take common courses with these students. This result has similarities with the result that General Culture course teachers have a more positive view of distance education than teachers of Vocational courses that require practice.

It was determined that there was no statistically significant difference according to the seniority variable regarding the total online learning attitude scale of the teachers participating in the research. It was concluded that teachers with more than 21 professional seniority towards distance education had a more positive attitude than teachers with 6-14 years of professional seniority. And also, teachers with 15-20 years of professional seniority have a more positive attitude than teachers with 6-14 years of professional seniority. When the literature is examined, there are results that are in line with the results we obtained. Kocayiğit and Uşun (2020, p. 294) investigated whether teachers' attitudes towards distance education differ in terms of the advantages and disadvantages of distance education according to their professional seniority. In this study, it was concluded that teachers' attitudes did not differ in the general total of the scale and in the dimension of the advantages of distance education. But, it was found there was a significant difference in the attitudes of the teachers in the dimension of the disadvantages of distance education. In the light of these data, when the average scores of the attitude scores according to the professional seniority are examined, it is concluded that the teachers with the highest professional seniority have a more positive perspective on distance education than the teachers with the least professional seniority. In addition to, Baek et al. (2017, p. 162) conducted a study examining teachers' attitudes towards mobile learning in Korea. In this study, where there is a significant difference between seniority, it has been revealed that teachers with more than 15 years of teaching experience have a more positive attitude towards mobile learning. Therefore, teachers with more experience had a positive attitude towards mobile learning than teachers with less experience. The result of this research we conducted coincides with the result obtained from these two studies. In this context, although the attitudes towards distance education do not change according to seniority, teachers with more teaching experience have more positive attitudes towards distance education than less experienced teachers within the scope of sub-dimensions.

According to the results of the research, teachers' attitudes towards distance education show a statistically significant difference according to the graduated higher education institution variable. Teachers' attitudes towards distance education differ according to the variables of Faculty of Education, Faculty of Arts and Sciences, Faculty of Technical Education, Faculty of Health Sciences. It has been observed that teachers who graduated from education faculties have a more positive attitude towards distance education than those who graduated from the Faculty of Health Sciences and Technical Education. In general, it was seen that teachers who graduated from education faculties have a more positive attitude towards distance education than those who graduated from the faculty of Arts and Sciences, the faculty of Health Sciences and the Faculty of Technical Education. The reason why the attitudes of teachers who graduated from education faculties towards distance education are more positive than those who graduated from other faculties may be due to the fact that they attend general culture courses and it is easy to transfer theoretical knowledge with distance education tools. Another reason for this may be that the teachers who graduated from the Faculty of Arts and Sciences, Faculties of Health Sciences and the Faculty of Technical Education have problems in teaching vocational courses through distance education. Because they can think that practical courses will be beneficial with face-to-face education. When appropriate Software programs and tools are used, giving theoretical courses through distance education increases success. On the other hand, giving practical courses with distance education may result in failure and the attitudes of participants towards distance education may be negative (Yaman, 2009, p. 10).

According to the results of the research, there was no significant difference between the teachers' attitudes towards distance education according to the graduated education degree (associate degree, undergraduate, master degree, doctorate) variable. However, the views of master degree and doctorate graduates towards distance education are more positive than those of undergraduate and associate degree graduates. When the literature is examined, it has been seen that there are studies that overlap with the results of our research. Begimbetova (2015, p. 75) and Kocayiğit and Uşun (2020, p. 294), in their research, concluded that teachers' attitudes towards distance education do not differ according to their educational status (associate degree, undergraduate, doctorate). Ağır (2007, p. 63) has obtained findings that support the current research results. In his research, he determined that there is no statistically significant difference between the level of attitude towards distance education and the educational status of primary school teachers working in private and public schools. However, Ağır (2007, p. 63) found that

teachers with a master's degree had higher attitude scores towards distance education than teachers with associate and undergraduate degrees. These findings show that master degree teachers have a more positive attitude towards distance education. According to the results of the research, it can be said that attitudes of master degree teachers towards distance education are higher than those with undergraduate and associate degree graduates although teachers have positive attitudes towards distance education. In this context, it can be concluded that as the education level of the teachers increases, their interest and positive attitudes towards educational technologies increase, the teachers understand the place and importance of technology in daily life. And it can be suggested that distance education is a part of their professional life, and the willingness of teachers to participate in in-service training increases thanks to distance education. Because an expert teacher is an individual who can use technology effectively, share information, prepare course content and materials, and apply various teaching methods (Barış & Çankaya, 2016, p. 409). In addition, Alabaş et al. (2012, p. 100) stated that one of the reasons why teachers prefer master education is to ensure their personal development. The studies on personal development can be listed as self-development in the field, producing solutions to educational problems, scientific curiosity, competence in education programs, and following innovations.

As a result of the analysis made according to the variable of school type where the teachers work, there was statistically significant difference was in terms of teachers' attitudes towards distance education. In the study, it was concluded that the attitudes of teachers working in primary and secondary schools towards distance education have a more positive attitude than teachers working in high schools. There are very few studies investigating the attitudes of teachers towards distance education according to the variable of school type they work in. Baek et al. (2017, p. 161), in their study examining the attitudes of secondary and primary school teachers towards mobile learning, concluded that secondary school teachers have more positive attitudes towards mobile learning applications than primary school teachers. Secondary school teachers thought that mobile learning was more effective in conducting learning and teaching activities. On the other hand, Yahşi and Kırkıç (2020, p. 3837) found that teachers' attitudes towards distance education did not show a significant difference in terms of the type of school (primary school, secondary school, high school) variable, which contradicted the results of the current research. Özen and Baran (2020, p. 633) concluded that there is no significant difference between teachers' attitudes towards distance education in terms of the type of school (primary school, secondary school, high school) variable. However, it has been stated that the desire of teachers working in primary schools to receive distance education is higher than their colleagues working in other institutions.

According to the research findings, the attitudes of teachers working in primary school towards distance education are more positive than teachers working in secondary and high schools. It can be said that this situation may be due to the belief of primary school teachers that in-service training courses given by distance education are more efficient. If the educational technologies employed in distance education are well structured, it can be more beneficial than face-to-face education. Because distance education is an educational process that brings learning to the fore; It is an educational method in which a learning facilitator, usually separated from the student by spatial or mental distance, collects, blends and presents information by accepting the learners' responsibility for learning. It is also a learning environment where effective learning takes place (Biao, 2012, p. 6). In addition, distance education allows the courses offered as an alternative to face-to-face education to meet the expected needs in a shorter time. Because, thanks to distance education, it becomes very easy to reach the courses at the desired time and place (Tekin and Aydınlık, 2019; p. 24).

Suggestions

The following recommendations were made based on the results of the research:

Although the attitudes of the teachers working in the Ministry of National Education towards distance education are positive, the number of teachers who gave undecided opinions on some of the scale items is remarkable. For this reason, distance trainings to be given to teachers can be arranged in such a way that the trainers will give feedback to the teachers during the lesson. Distance learning environments can be created where teachers can communicate more easily with both the trainer and their friends. Online courses for teachers through distance education should be expanded. Online environments can be supported with richer learning activities in trainings given through distance education. Since teachers' attitudes towards distance education, which has become widespread today, are

related to keeping up with technological developments, seminars can be given to all teachers to be informed about current technological developments.

In this study, teachers working in schools were taken as a sample. Similar studies can be carried out by sampling university lecturers and pre-service teachers with undergraduate education in order to determine the distance education infrastructure and needs of universities. This research was carried out by sampling all teachers working in kindergarten, primary school, secondary school and high school, a study can be conducted by taking a sample from each level separately.

Ethical Declaration

During the writing process of the study titled " *Investigation Of Attitudes Of Teachers Working In Turkish Ministry Of National Educatıon Towards Distance Education Accordıng To Various Variables* ", scientific rules, ethics and citation rules were followed; There was no tampering with the data collected and this study was not sent to any other academic publication environment for evaluation. The necessary ethics committee permissions were obtained at the meeting of Eskişehir Osmangazi University Social and Human Sciences Research and Publication Ethics Committee dated 24.12.2020 and numbered 2020-24.

Declaration of Researchers' Contribution Rate

Since this study was prepared from a doctoral thesis, the 1st author is the thesis writer and the 2nd author is the thesis advisor.

Conflict Declaration

There is no potential conflict of interest in the study.

Note

This article was produced from the doctoral thesis titled "*Suggestions for Evaluation and Development of In-service Training Programs Given by the Ministry of National Education Through Distance Education* ".

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TÜRKÇE GENİŞ ÖZET

Günümüz toplumların gelişimini etkileyen önemli faktörlerden biri eğitimdir. Bu nedenle bir taraftan ülkeler ilk, orta ve yüksek öğretimdeki öğrencilerine eğitim faaliyetlerini en iyi şekilde vermek zorundadır. Diğer taraftan ise herhangi bir okul seviyesinde eğitime devam edemeyen bireylere ve işbaşında olan personele çeşitli yollarla eğitim imkanı vermenin çaresine bakmak zorundadır (İşman, 2011. s. 5-6). Bir ülkenin tüm vatandaşlarına yüz yüze eğitimle ulaşmak çok pahalıya mal olduğundan onlara ulaşmak için alternatif yollara başvurmak zorundadır. Çağımızda bu ihtiyacı karşılayacak en önemli yöntem uzaktan eğitimdir. Yetişkinler, hayat boyu bireysel ihtiyaçlarını karşılamak için kendi bireysel ve mesleki gelişimlerine önem vermek zorundalar. Bu sebeple, bireyler hayatları boyunca çeşitli sertifika

programlarına katılmak, mesleki bilgilerini güncel tutmak için çeşitli kurs ve eğitsel programlara katılmaktadırlar (Gökkaya, 2014, s. 73). Bu eğitimler genelde yaygın eğitim kurumları ile karşılanmaktadır. Ancak, son zamanlarda çeşitli meslek gruplarına yönelik bu faaliyetler uzaktan eğitim yoluyla da gerçekleştirilmektedir. Böylece, çağdaş yöntemlerle yapılan bu hizmet içi eğitim faaliyetleri hem işveren için hem de bireyler için ucuza mal olmaktadır. Öte yandan bireyler için zaman ve mekan açısından kolaylıklar sağlanmaktadır (Duman, 1992, s. 287). Teknolojik gelişmelerin, iş ve eğitim yaşamının her alanında yer aldığı bu dönemde, uzaktan eğitim yöntemi çeşitli platformlar aracılığıyla öğretmenlerin hizmet içi eğitimlerde etkin bir biçimde kullanılmaktadır. Bu bağlamda öğretmenlerin uzaktan eğitime olan tutumları Milli Eğitim Bakanlığı tarafından yapılacak hizmet içi eğitimlerin verimli olmasında büyük öneme sahiptir. Milli Eğitim Bakanlığı tarafından yapılan uzaktan eğitim yoluyla yapılan hizmet içi eğitimlerin etkili ve verimli bir şekilde uygulanabilmesi için öncelikle öğretmenlerin uzaktan eğitime olan tutumlarının belirlenmesi gerekmektedir. Bu sebeple bu araştırma, Milli Eğitim Bakanlığının uzaktan eğitim yoluyla verdiği eğitimlerin yaygınlaştığı bu dönemde, öğretmenlerin uzaktan eğitime olan tutumlarının belirlenmesi alana katkı sağlayacak olması nedeniyle önemli olduğu düşünülmektedir. Ayrıca, uzaktan eğitime ilişkin öğretmen tutumlarının demografik değişkenler açısından araştırılması önemlidir. Çünkü değişkenler açısından farklı okul kademelerindeki öğretmelerin uzaktan eğitim tutumlarının ne şekilde farklılık gösterdiğinin belirlenmesiyle araştırma eğitim alanı ile uzmanlarına katkı sunabilir ve rehberlik edebilir. Bu bağlamda bu araştırmanın amacı, öğretmenlerin uzaktan eğitime ilişkin tutum düzeylerini tespit etmek ve var olan tutumlarını farklı değişkenler açısından karşılaştırmaktır. Öğretmenlerin uzaktan eğitime yönelik tutum düzeylerini belirlemek için gerçekleştirilen bu çalışmada, nicel araştırma yöntemlerinden genel tarama modeline dayalı Betimsel tarama deseni kullanılarak gerçekleştirilmiştir. Bu çalışmanın evrenini Eskişehir ilinde Milli Eğitim Bakanlığına bağlı anaokulu, ilkokul, ortaokul ve liselerde çalışan öğretmenler oluşturmaktadır. Bu okullarda görev yapan öğretmenlerin sayısı 10955 tir. Örneklem seçiminde tabakalı örnekleme yoluna gidilmiştir. Bu çalışmada araştırma modeline uygun olarak amacıyla nicel veri toplama araçlarından Çevrimiçi Öğrenme Tutum Ölçeği, kullanılmıştır. Araştırmada öğretmenlerin uzaktan eğitime karşı tutumlarını belirlemek amacıyla Usta, Uysal ve Okur (2016)'nın geliştirdikleri "Çevrimiçi Öğrenme Tutum Ölçeği" kullanılmıştır. Çevrimiçi Öğrenme Tutum Ölçeği, İç Anadolu bölgesinde bulunan Eskişehir İl sınırları içinde bulunan devlet okullarında çalışan öğretmenlere ve yöneticilere uygulanmıştır. Araştırmada kullanılan ölçek ve anketler anaokulu, ilkokul, ortaokul ve lise türlerinde çalışan öğretmenlere ulaşılmasına dikkat edilmiştir. Verilerin analizinde Statistical Package for the Social Sciences (SPSS) analiz programı kullanılmıştır. Öğrencilerin ölçek ve anketlere vermiş oldukları cevaplardan elde edilen veriler analiz yapılırken betimsel analizlerden yararlanılmıştır. Araştırma sonuçlarına göre öğretmenlerin büyük çoğunluğunun uzaktan eğitime olan tutumlarının olumlu olduğu tespit edilmiştir. Bu olumlu sonucun uzaktan eğitimin yüz yüze eğitime göre bazı avantajlarından kaynaklanabileceği düşünülmektedir. Uzaktan eğitimin tercih edilebilirliği ve motivasyonu artırması uzaktan eğitimin zaman ve yer esnekliğinin önemli bir avantajı olarak görülmektedir. Diğer yandan uzaktan eğitimde görseller, videolar ve animasyonlar ile zenginleştirilmesi öğretmenlerin motivasyonunu artırmakta, öğrencilerin etkili öğrenmelerini sağlamaktadır. Buna ilaveten, çevrimiçi kursların basılı materyallerle desteklenmesi öğretmenleri uzaktan eğitime olan tutumlarını olumlu yönde etkilediği görülmektedir (Taşlıbeyaz, vd. 2014; s. 154). Araştırmaya katılan öğretmenlerin çevrimiçi öğrenme tutum ölçeğinin toplam ve alt boyutlarına ilişkin cinsiyet değişkenine göre istatistiksel olarak anlamlı bir farklılık olup olmadığı belirlemek için bağımsız örneklem t-testi yapılmıştır. Elde edilen sonuçlara göre öğretmenlerin çevrimiçi öğrenme tutumları cinsiyet değişkenine göre istatistiksel olarak farklılaşma görülmüştür. Araştırmaya katılan öğretmenlerin çevrimiçi öğrenme tutum ölçeğinin toplam boyutlarına ilişkin Branş değişkenine göre yapılan analiz sonucunda öğretmenlerin Branş değişkenine göre; çevrimiçi öğrenme tutum ölçeğinin toplam boyutları açısından istatistiksel olarak anlamlı bir farklılık gösterdiği sonucuna ulaşılmıştır. Genel olarak, araştırma sonuçlarına baktığımızda Branş değişkenine göre Genel Kültür öğretmenlerinin uzaktan eğitime olan tutumları Meslek Dersleri öğretmenlerine göre daha olumlu olduğu söylenebilir. Bu sonuçların yanında öğretmenlerin uzaktan eğitime olan tutumları Eğitim Fakültesi, Fen Edebiyat Fakültesi, Teknik Eğitim Fakültesi, Sağlık Bilimleri Fakültesi değişkenlerine göre farklılaşmaktadır. Eğitim fakültelerinden mezun olan öğretmenlerin uzaktan eğitime karşı, Sağlık Bilimleri ve Teknik Eğitim Fakültesinden mezun olanlara göre daha olumlu bir tutuma sahip oldukları görülmüştür. Öğretmenlerin görev yaptığı okul türü değişkenine göre yapılan analiz sonucunda öğretmenlerin uzaktan eğitime olan tutumları açısından istatistiksel olarak anlamlı farklılık bulunmuştur. Araştırmada, ilkokul ve ortaokulda görev yapan öğretmenlerin uzaktan eğitime olan tutumlarının lisede görev yapan öğretmenlere göre daha olumlu bir tutum içinde olduğu sonucuna ulaşılmıştır. Öte yandan, yapılan analiz sonucunda öğretmenlerin kıdem değişkenine göre; çevrimiçi öğrenme tutum ölçeğinin toplam boyutları açısından istatistiksel olarak anlamlı bir farklılaşma olmadığı

belirlenmiştir. Yine, araştırma sonuçlarına göre öğretmenlerin uzaktan eğitime yönelik tutumlarının mezun olunan öğrenim derecesi (ön lisans, lisans, yüksek lisans, doktora) değişkenine göre anlamlı bir farklılık bulunmamıştır.