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## THE RELATIONSHIP BETWEEN TEACHERS' TEACHING STYLES AND THEIR ATTITUDES TOWARDS DISTANCE EDUCATION

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#### ABSTRACT

The purpose of this research was to determine the relationship between teachers' teaching styles and their attitudes towards distance education. In the study, the data were collected from teachers working in Mersin province public schools in the 2021 spring semester. As data collection tools, the Distance Education Attitude Scale and Grasha Teaching Style Scale were used. According to the findings, there were significant differences per different variables, but no relationship existed between the two scales.

Keywords: Teaching styles; distance education; teachers

# ÖĞRETMENLERİN ÖĞRETME STİLLERİ İLE UZAKTAN EĞİTİME YÖNELİK TUTUMLARI ARASINDAKİ İLİŞKİ

## ÖZET

Bu çalışmanın amacı öğretmenlerin sahip oldukları öğretme stilleri ile uzaktan eğitime yönelik tutumları arasındaki ilişkiyi ortaya koymaktır. Araştırma verileri 2021 Bahar döneminde Mersin ilinde resmi okullarda görev yapan öğretmenlerden toplanmıştır. Veri toplama aracı olarak Uzaktan Eğitime Yönelik Tutum Ölçeği ve Grasha Öğretme Stili Ölçeği kullanılmıştır. Elde edilen bulgulara göre farklı değişkenler bakımından anlamlı farklar tespit edilirken iki ölçek arasında ilişki tespit edilememiştir.

Anahtar Kelimeler: Öğretme Stilleri; uzaktan eğitim; öğretmenler

## **INTRODUCTION**

Teachers and students are the primary constituents of educational activities, that play a substantial role in the development and progress of societies. In order to carry out the educational

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activities effectively, taking account of individual differences of students and adopting a student-fronted approach is important. In addition, like other primary constituents of educational activities, individual differences of teachers and their teaching styles are also of great significance because every teacher has their unique way of addressing topics and transferring knowledge.

Teaching style could be described as behaviors that teachers constantly and consistently demonstrate in their interactions with students during the teaching-learning process or as their ways of presenting knowledge and their interaction quality with students (Grasha, 2002; Felder, 1995). Some teachers often believe that some specific teaching styles are best for them due to suiting their personality and teaching psychology. However, in general, teachers should have teaching styles that can address different student personalities and their different learning styles and attitudes stemming from these personality differences. This is because teaching styles are the principal factors that shape complicated teaching-learning process and play the most significant part in leading this process to success (Artvinli, 2010). In order to develop a teaching style-oriented course design, educators should first determine their own adult style characteristics. This effort helps educators to get to know themselves. At present, many educators may reveal the characteristics of their styles with years of experience (Babadoğan, 2000).

Teaching styles are also one of the most influential factors in fulfilling learning, which is called the behavior change process (Ünal, 2017). Teaching styles are an important area of subject competence in the pedagogical formation dimension of the teaching profession that prospective teachers should acquire (Yeşilyurt, Okudan, & Kızılaslan, 2020). Content knowledge, pedagogical competence, professional self-efficacy, communication skills, and teaching experience of teachers are very important in achieving teaching goals. Teaching experiences of teachers and some of their personal characteristics (intelligence, interests, sociocultural levels, etc.) also shape their teaching styles. Presenting or teaching the same subject/unit in different ways is closely related to teachers' teaching styles as well as their professional competence (Maden, 2012).

Human beings are inherently in need of learning and change throughout their lives. Considering that learning is one of the basic needs of humans, offering education through different methods, improving and delivering it to everyone, and valuing the needs and individual differences come to the forefront. In an environment where change and innovation are felt and necessary at all times, it is unacceptable for learning and teaching to stand still (Ergin, 2010). The rapid spread of multimedia and communication technologies has increased the opportunities for lifelong learning and education at different times and places. With the introduction of the internet into our lives, higher education institutions have been trying to respond to the need for distance education by effectively integrating these technologies into their systems (Kavrat & Türel, 2013).

The Covid-19 pandemic has put negative impacts on all areas from health to socioeconomic life and caught countries unprepared. One of the areas affected the most by these impacts was the education system of counties. This process forces the established systems to reshape and make radical changes. These changes are observed in all levels of education, severely affecting all components of education, especially teachers and students. With the transition to distance education, there has been confusion among stakeholders, and the consequences encountered in the continuum of this process are something unclear (Kaynar, Kurnaz, Doğrukök, & Şentürk Barışık, 2020).

Currently, there is an ongoing fight against a global outbreak and because of this outbreak, which rapidly spread throughout the world, a number of disruptions occurred in educational activities. Along with this outbreak, countries had to suspend face-to-face education and include all students in a system they already used. On the one hand, the students who received the education and on the other hand the teachers who gave the education were affected by the methods and practices known as distance education and they all tried to keep up with the situation (Kurnaz, Kaynar, Şentürk Barışık, & Doğrukök, 2020). Many teachers who had face-to-face education experiences and had developed their teaching styles accordingly started using the distance education system for the first time with this unexpected situation and tried to adapt to it.

Distance education refers to educational activities in which students, teachers, and educational tools located in different places are brought together through communication technologies. The first emergence of distance education was in vocational, social, or family education subjects. Such kind of education eliminates the time and space problems. The use of satellite technology for educational televisions in the 1990s improved the flexibility of time and space. In addition, the new opportunities that distance education brings in enriching the curriculum and its affordability compared to traditional education have played a significant role in its proliferation (TUENA, 1998).

In distance education, a more effective education opportunity can be offered to individuals by creating a flexible, rich, and interactive education environment, going beyond the stereotyped structure in traditional education. Distance education also plays an important role in reducing the cost of education by avoiding many factors such as buildings, classrooms, teachers, and educational materials that limit the capacity of students to participate in education. Considering all these, it is seen how important distance education is (Özbay, 2015). In addition to making positive contributions to the current education system, the distance education system also has disadvantages such as lack of communication, being antisocial, and difficulty of measurement and evaluation (Bozdağ & Dinç, 2020).

The utilization of information and communication technologies and distance education systems have been debated as an alternative system even before the Covid-19 outbreak. However, the fact that millions of students had to stay home speeded up providing distance education services. Education Information Network (EBA), which was already in use, began to fulfill an important task in this process (Demir & Özdaş, 2020). The Ministry of National Education currently offers distance education opportunities to students through the Education Information Network infrastructure in all primary and secondary education institutions (Uyar, 2020). Like many countries, through distance education systems, Turkey has been trying to solve the education issue, which has affected millions with the prolongation of the Covid-19 outbreak. After improving technological infrastructures, distance education practices started at all levels in a short time and these practices are still in progress. However,

the extent to which distance education alone is effective has been a matter of debate recently and, like in many countries, the option of continuing face-to-face education comes to the fore in Turkey.

Teachers should adapt their experiences and teaching strategies to this system to get effective results from distance education practices. In addition, online developers should know various learning approaches to select the most appropriate teaching strategies. Strategies should motivate learners, address individual differences, encourage meaningful learning and interaction, and provide relevant feedback (Ally, 2008). This study aimed to examine the distance education attitudes of teachers with different teaching styles according to various variables (gender, professional seniority, and professional status). Answers were sought to the following research questions.

1- What teaching style do teachers adopt when conducting distance education activities?

2- How do teachers with different teaching styles evaluate distance education activities during the Covid-19 outbreak?

3- What are the teachers' views on distance education per their teaching styles?

#### METHOD

This study was carried out using a correlational survey model to examine the relationship between teachers' attitudes towards distance education and their teaching styles. Correlational survey model targets revealing the relationship between two or more variables (Karasar, 2003).

## **Study Group**

The data of the study were collected from 316 teachers working in Mersin province public schools in the 2021 spring semester. As a result of the normality analysis conducted on the research data, seven cases distorting normal distribution were removed and the analyses were carried out with data from 309 teachers. The distribution of data is shown in Table 1 per gender, branch, and seniority. **Table 1.** Distribution of Teachers Who Participated in the Study

		Ν	%
Gender –	Female	148	47.9
Gender	Male	161	52.1
Dronoh	Classroom Teacher	141	45.6
Branch —	Branch Teacher	168	54.4
	0-5 years	35	11.3
	6-10 years	68	22.0
Sopierity	11-15 years	85	27.5
Seniority –	16-20 years	67	21.7
	21 years or more	54	17.5

Considering the distribution of research participants, there were 148 (47.9%) female and 161 (52.1%) male teachers. Classroom and branch teachers were 141 (45.6%) and 168 (54.4%) in number, respectively. Considering the distribution of their seniority, 35 (11.3%) teachers had 0-5, 68 (22%) had 6-10, 85 (27.5%) had 11-15, 67 (21.7%), and 54 (17.5%) had 21+ years of seniority.

#### **Data Collection Tools**

*Distance Education Attitude Scale*: This scale was developed by Ağar (2007) to measure the attitudes of teachers towards distance education. It consisted of two sub-dimensions, the advantages of distance education and limitations of distance education. The advantages of distance education refer to positive opinions regarding distance education. However, the limitations of distance education comprise negative opinions regarding distance education. As such, the total score of the scale was not computed. Instead, separate analyses were conducted with each sub-dimension. The Cronbach's alpha value relating to the scale reliability was 0.903 for the Advantages of Distance Education subscale and 0.854 for the Limitations of Distance education.

*Grasha Teaching Styles Scale*: Grasha (1994) developed this scale to measure the teaching styles used by teachers. Then, Sarıtaş and Süral (2010) adapted it into Turkish culture. The Grasha Teaching Styles Scale consists of five sub-dimensions and 40 items, with eight items under each sub-dimension. These sub-dimensions were Expert, Formal Authority, Personal Model, Facilitator, and Delegator,

respectively. The total score was not obtained because each sub-dimension measured a different teaching style. The Cronbach's alpha reliability coefficients of the sub-dimensions of the scale were computed. Accordingly, the reliability value was 0.786 for Expert, 0.752 for Formal Authority, 0.814 for Personal Model, 0.771 for facilitator, and 0.806 for Delegator.

## FINDINGS

Scores that teachers who participated in the study obtained from the Distance Education Attitude Scale and Grasha Teaching Styles Scale are shown in Table 2.

Scale	Sub-dimension	Ν	$ar{X}$	SD
Distance Education	Advantages of Distance Education	309	2.83	.66
Attitude Scale	Limitations of Distance Education	309	3.67	.77
	Expert	309	3.77	.31
Creacha Taoahina	Formal Authority	309	3.60	.40
Grasha Teaching Styles Scale	Personal Model	309	4.20	.39
Styles Scale	Facilitator	309	4.43	.33
	Delegator	309	3.57	.43

Table 2. Descriptive Statistics Relating to the Sub-dimensions of Scales

Considering the mean scores of the sub-dimensions of the teachers' attitude scale, the mean score relating to the advantages of distance education was low ( $\bar{x} = 2.83$ ). Accordingly, teachers may have demonstrated a negative attitude towards the advantages of distance education. Moreover, the mean score relating to the limitations of distance education subscale was  $\bar{x} = 3.67$ , showing that teachers had moderate views concerning the limitation of distance education.

Considering the scores obtained from the Teaching Styles Scale sub-dimensions, teachers obtained the highest score from the facilitator sub-dimension ( $\bar{x}$ =4.43). Teachers see themselves at a higher level in the Facilitator sub-dimension. Scores obtained from the personal model sub-dimension was ( $\bar{x}$ =4.20), which shows that teachers consider themselves at a high level in this sub-dimension. Considering other sub-dimensions, scores obtained from the Expert, Formal Authority, and Delegator sub-dimensions were ( $\bar{x}$ =3.77), ( $\bar{x}$ =3.60), and ( $\bar{x}$ =3.57), respectively. Accordingly, one could contend that teachers find themselves at moderate levels in these three sub-dimensions.

T-test results relating to gender differences in teachers' attitudes towards distance education are presented in Table 3.

**Table 3.** Results of T-Tests Applied to the Sub-dimensions of Distance Education Attitude Scale

 According to the Gender Variable

Distance Education	Gender	N	$\bar{V}$	SD			
Attitude Scale	Genuer	1 V	Λ	SD	t	df	р
Advantages of	Female	148	2.81	.63			
Distance Education	Male	161	2.85	.68	600	307	0.549
Limitations of	Female	148	3.77	.75			
<b>Distance Education</b>	Male	161	3.58	.78	2.185	307	0.030*
* <i>p</i> < 0.05							

According to the results of t-tests conducted to measure whether teachers' views on distance education significantly differed by gender variable, there was no significant gender difference in the Advantages of Distance Education sub-dimension. Contrarily, scores of female teachers ( $\bar{x}$ =3.77) from the Limitations of Distance Education sub-dimension significantly differed from those of male teachers ( $\bar{x}$ =3.58). Female teachers were more concerned about the limitations of distance education than male teachers.

Furthermore, the t-test results on whether the gender variable makes a difference in the subdimension of teaching styles are presented in Table 4.

**Table 4.** Results of T-Tests Applied to the Sub-dimensions of Grasha Teaching Styles Scale According to the Gender Variable

Grasha Teaching Styles Scale	Gender	Ν	Ā	SD	t	df	р
Export	Female	148	3.82	.33	- 2.994	307	.003
Expert	Male	161	3.72	.29	- 2.994	307	.005
Formal Authority	Female	148	3.75	.39	- 6.651	307	.000
Formal Authority	Male	161	3.46	.35	- 0.031	307	.000
Personal Model	Female	148	4.37	.42	- 7.729	307	.000
Personal Wodel	Male	161	4.05	.29	- 1.129		.000
Facilitator	Female	148	4.50	.33	— 3.435	307	.000
Facilitator	Male	161	4.37	.32	- 5.455	307	.000
Delegator	Female	148	3.74	.39	7 122	307	.001
Delegator	Male	161	3.41	.40	- 7.133	507	.001
*m < 0.05							

\*p < 0.05

As seen in Table 4, there were significant gender differences in all sub-dimensions of teachers' teaching styles. The scores female teachers had in all sub-dimensions were significantly higher than those of male teachers. Considering the sub-dimensions, female and male teachers obtained ( $\bar{x}$ =3.82) and ( $\bar{x}$ =3.72) from the Expert, ( $\bar{x}$ =3.75) and ( $\bar{x}$ =3.46) from the Formal Authority, ( $\bar{x}$ =4.37) and ( $\bar{x}$ =4.05) from the Personal Model, ( $\bar{x}$ =4.50) and ( $\bar{x}$ =4.37) from the Facilitator, plus ( $\bar{x}$ =3.74) and ( $\bar{x}$ =3.41) from the Delegator sub-dimension, respectively. Gender variable yielded significant differences in the sub-dimensions of the Grasha Teaching Styles Scale.

The results of t-tests performed to examine the differences between the classroom and branch teachers' attitudes towards distance education are presented in Table 5.

Table 5. Results	of T-Tests	Applied to	the Su	b-dimensions	of	Distance	Education	Attitude	Scale
According to the H	Branch Varia	able							

Distance Education Attitude Scale	Gender	Ν	Ā	SD	t	df	р
Advantages of	Classroom Teacher	141	2.71	.62	3.029	307	.003
<b>Distance</b> Education	Branch Teacher	168	2.93	.68	-5.029	507	.005
Limitations of	Classroom Teacher	141	3.82	.69	- 3.127	307	.002
Distance Education	Branch Teacher	168	3.55	.82	5.127	307	.002
* <i>p</i> < 0.05							

When the differences between scores teachers obtained from the sub-dimensions of the Distance Education Attitude Scale were examined per branch variable, there were significant differences in both sub-dimensions between classroom and branch teachers. While the mean score of classroom teachers relating to the advantages of distance education was ( $\bar{x}=2.71$ ), the mean score of branch teachers was ( $\bar{x}=2.39$ ). Similarly, the mean score of classroom teachers relating to the limitations of distance education was ( $\bar{x}=3.82$ ), but that of branch teachers was ( $\bar{x}=3.55$ ). Accordingly, classroom teachers had more negative attitudes towards distance education in both-sub-dimensions than branch teachers.

The results of t-tests performed on whether the branch variable makes any difference in the subdimensions of teaching styles are presented in Table 6.

Grasha Teaching Styles Scale	Gender	Ν	$\bar{X}$	SD	t	df	р
Export	Classroom Teacher	141	3.82	.23	- 2.597	307	.010*
Expert	Branch Teacher	168	3.73	.37	2.391	307	.010
Formal Authority	Classroom Teacher	141	3.68	.31	- 3.158	307	.002*
Formal Authority	Branch Teacher	168	3.53	.45	5.156	307	.002
Personal Model	Classroom Teacher	141	4.35	.37	- 6.096	307	.000*
	Branch Teacher	168	4.08	.38	0.090	307	.000*
Facilitator	Classroom Teacher	141	4.48	.30	- 2.702	307	.007*
Facilitatoi	Branch Teacher	168	4.38	.35	2.702	307	.007*
Delegator	Classroom Teacher	141	3.65	.36	- 3.213	307	.005*
Delegator	Branch Teacher	168	3.49	.48	5.215	307	.003*

Table 6. Results of T-Tests Applie	ed to the Sub-dimensions	of the Grasha	Teaching Styles Scale
According to the Branch Variable			

\*p < 0.05

As shown in Table 6, significant differences were found according to the branch variable in all teaching styles that teachers used. In all sub-dimensions, classroom teachers obtained significantly higher scores than branch teachers. Considering these sub-dimensions, classroom and branch teachers obtained scores of ( $\bar{x}$ =3.82) and ( $\bar{x}$ =3.73) from the Expert, ( $\bar{x}$ =3.68) and ( $\bar{x}$ =3.53) from the Formal Authority, ( $\bar{x}$ =4.35) and ( $\bar{x}$ =4.08) from the Personal Model, ( $\bar{x}$ =4.48) and ( $\bar{x}$ =4.38) from the Facilitator, and ( $\bar{x}$ =3.65) and ( $\bar{x}$ =3.49) from the Delegator sub-dimension, respectively. The branch variable yielded significant differences in the sub-dimensions of the Grasha Teaching Styles Scale. Classroom teachers had significantly higher scores than branch teachers.

Scale		Seniority	Ν	$\overline{\mathbf{X}}$	df	F	р	Significant Difference	
	-	0-5 years 6-10 years	35 68	3.13 2.96	<u>.</u>			Between 20	
	Advantages of Distance	11-15 years	85	2.90		7.591	.000*	<ul><li>years or more and all others;</li><li>Between 0-5</li></ul>	
	Education	16-20 years	67	2.75	-			and 16-20 years and	
Distance Education	-	20 years or more	54	2.47	4-304			more	
Attitude Scale		0-5 years	35	3.33				Between 20	
Seale	-	6-10 years	68	3.53	-			years or more and 0-5, 6-10,	
	Limitations	11-15 years	85	3.61	•	5.950	.000*	and 11-15	
	of Distance - Education	16-20 years	67	3.79	•	5.950	.000*	years	
		20 years or more	54	4.02	-			Betwen16-20 and 0-5 and 6- 10 years	

**Table 7.** ANOVA Results Relating to the Views of Teachers on Distance Education According to the

 Seniority Variable

\*p < 0.05

Considering the ANOVA results relating to the views of teachers per seniority variable, negative attitudes may develop generally when there is an increase in seniority. Those with 0-5 years of seniority had the highest score in the Advantages of Distance Education sub-dimension ( $\bar{x} = 3.13$ ). Teachers with 6-10, 11-15, 16-20, and 20+ years of seniority obtained scores of ( $\bar{x}=2.95$ ), ( $\bar{x}=2.90$ ), ( $\bar{x}=2.75$ ), and ( $\bar{x}=2.47$ ), respectively. As seniority increases, scores obtained from the Limitations of Distance Education sub-dimension decrease. According to the results of the Post Hoc test performed because of significant differences between scores, there was a significant difference between teachers with 20+ years of seniority who had the lowest score regarding the Limitations of Distance Education and other groups. Similarly, in this same sub-dimension, a significant difference was found between teachers with 0-5 and those with 16-20 years of seniority.

		Seniority	Ν	X	df	F	р	Significant Difference
		0-5 years	35	3.71				
		6-10 years	68	3.74	-			
	Expert	11-15 years	85	3.74	_	2.432	.093	
		16-20 years	67	3.78	_			
		20 years or more	54	3.88	_			
		0-5 years	35	3.55	_			
	Formal	6-10 years	68	3.61	_			
	Authority	11-15 years	85	3.59	_	.211	.326	
	Authority	16-20 years	67	3.62	_			
		20 years or more	54	3.61	-			
		0-5 years	35	4.24	_			
Grasha	Personal	6-10 years	68	4.14	_			
Teaching Styles	Model	11-15 years	85	4.17	4-304	1.165	.214	
Scale	WIGUEI	16-20 years	67	4.26	_			
		20 years or more	54	4.25	_			
		0-5 years	35	4.47	_			
		6-10 years		4.42	_			
	Facilitator	11-15 years	85	4.38	_	1.163	.327	
		16-20 years	67	4.42	_			
		20 years or more	54	4.50	-			
		0-5 years	35	3.59	-			
		6-10 years	68	3.58				
	Delegator	11-15 years	85	3.52	_	1.462	.914	
		16-20 years	67	3.51	_			
		20 years or more	54	3.68	-			

**Table 8.** ANOVA Results Regarding the Views of Teachers on Their Teaching Styles According to the

 Seniority Variable

The results also suggest that scores relating to the limitations of distance education increases when there is an increase in seniority. Teachers with 0-5 years of seniority had the lowest score concerning the limitations of distance education ( $\bar{x} = 3.33$ ). However, teachers with 6-10, 11-15, 16-20, and 20+ years of seniority had scores of ( $\bar{x}=3.53$ ), ( $\bar{x}=3.61$ ), ( $\bar{x}=3.79$ ), and ( $\bar{x}=4.02$ ), respectively. According to the Post Hoc test results conducted due to the presence of significant differences between the scores, significant differences were found between teachers with 20+ years of seniority and those with 0-5, 6-10, and 11-15 years of seniority. In addition, significant differences existed between teachers with 16-20 years of seniority and those with 6-11 and 6-11 years of seniority. Accordingly, as the years of seniority increase, scores relating to limitations of distance education also increase.

According to the results of the ANOVA conducted to measure whether the seniority variable made any significant difference in the scores teachers obtained from the sub-dimensions of the Grasha Teacher Style Scale, there were no significant differences in all five sub-dimensions per seniority. Accordingly, seniority made no difference in teaching styles.

Relationships between the sub-dimensions of the Distance Education Attitude Scale and those of the Teaching Styles Scale are shown in Table 9.

	Advantages of Distance Education	Limitations of Distance Education
Expert	007	.052
Formal Authority	026	.066
Personal Model	005	.107
Facilitator	037	.040
Delegator	043	.046

 Table 9. Correlation Between Teachers' Teaching Styles and Their Attitudes towards Distance

 Education

The correlation table examining the relationship between attitudes towards distance education and teaching strategies shows that the sub-dimensions of the two scales are not related to each other.

## DISCUSSION AND CONCLUSION

According to research findings, teachers generally had negative perceptions concerning distance education. They believed less in the advantages but more in the limitations of distance education. Other studies in the literature, especially those conducted during the Covid-19 outbreak, have shown that no matter how distance education is believed to be useful in difficult times, by and large, negative opinions exist concerning distance education (Balaban & Hanbay Tiryaki, 2021; Canpolat & Yıldırım, 2021; Batdal Karaduman, Akşak Ertaş, & Duran Baytar, 2021; Karaca, Karaca, Karamustafaoğlu, & Özcan, 2021; Moçoşoğlu & Kaya, 2020). Here, it is possible to say that distance education cannot replace face-to-face education per teachers' perspectives.

When gender differences in attitudes towards distance education were examined, no significant differences were found concerning the advantages of distance education. However, female teachers believed in the limitations of distance education more than did male teachers. Other relevant studies also found no significant gender differences (Kurnaz, Kaynar, Şentürk Barışık, & Doğrukök, 2021; Ülkü, 2018; Ergin, 2010; Karaca, Karaca, Karamustafaoğlu, & Özcan, 2021; Moçoşoğlu & Kaya, 2020). Thus, more studies are needed in this regard.

According to t-test results on whether the branch variable made a difference in distance education attitudes, classroom teachers had more negative attitudes towards distance education than branch teachers. Contrary to this study, other studies found no significant differences in attitudes towards distance education per branch variable (Ülkü, 2018; Ergin, 2010; Kurnaz, Kaynar, Şentürk Barışık, & Doğrukök, 2021). Classroom teachers' work normally requires them to more closely interact with students and conduct more practical educational activities. That is why the present study may have come up with this conclusion.

According to the results of ANOVA performed to measure whether seniority made a difference in attitudes towards distance education, negative attitudes increase towards distance education when seniority increases. These findings are consistent with those of other studies in the literature. Studies have shown that as years of seniority increase, teachers develop negative attitudes towards distance education (Karaca, Karaca, Karamustafaoğlu, & Özcan, 2021; Moçoşoğlu & Kaya, 2020; Ergin, 2010; Ülkü, 2018). In contrast, Kurnaz, Kaynar, Şentürk Barışık, and Doğrukök (2021) found no significant differences according to the seniority variable. The results also confirm the negative relationship between age and attitudes towards technology. As in the general society, young teachers approach technology and thus distance education more positively. As the age increases, they may demonstrate more negative attitudes.

An examination of the Grasha Teaching Styles Scale showed that the highest scores were obtained from the Facilitator and Personal Model sub-dimensions. However, scores obtained from the Expert, Formal Authority, and Delegator sub-dimensions were at moderate levels. Considering the relevant studies, in a study with primary education teachers, Süral (2013) claims that most teachers had a facilitator teaching style, followed by the Expert, Delegator, Formal Authority, and Personal Model sub-dimensions. In their study, Saracaloğlu, Aldan Kandemir, Dinçer, and Dedebali (2017) concluded that teachers obtained high scores in all teaching styles. According to another study by Evin Gencel (2013) Saracaloğlu, Aldan Kandemir, Dinçer ve Dedebali (2017) with Turk and American teachers, Turk teachers highly preferred the expert, formal authority, and facilitator teaching dimensions but moderately preferred the personal and delegator dimensions. However, American teachers preferred the formal authority dimension less, but preferred other dimensions more. Altay (2009) found that teachers highly prefer the facilitator, expert, and delegator styles but moderately prefer the personal and authoritative teaching styles. Different findings exist in the literature on this issue. Therefore, more studies are needed in this regard.

When gender differences in teachers' teaching styles were examined, female teachers had higher scores in all teaching styles than male teachers and the difference was significant. In parallel to this study, Saracaloğlu, Aldan Kandemir, Dinçer, and Dedebali (2017) concluded that female teachers obtained higher scores in all teaching styles than male teachers. In contrast, studies also report non-significant gender differences. In a study with English teachers, Öner (2019) found no significant gender differences in teaching styles. Similarly, Süral (2013) and Özdemir (2019) also found no significant gender differences. However, Saracaloğlu, Dedebali, Dinçer, and Dursun (2010) found a significant difference in facilitator style favoring female teachers and Maden (2012) found a significant difference in the authoritative style favoring male teachers. In addition, Ünal (2017) reported a significant difference in the expert style favoring male teachers. Generally, different studies have obtained different results per gender variable. Thus, more studies may be required in this regard.

As a result of tests conducted to measure whether the branch variable created significant differences in teaching styles, the study found that classroom teachers had significantly higher scores in all teaching styles than branch teachers. Saracaloğlu, Aldan Kandemir, Dinçer, and Dedebali (2017) found no significant difference in their study according to branch. However, Süral (2013) concluded that mathematic teachers obtained higher scores than teachers from other branches. In this study, the fact that classroom teachers had higher scores in teaching styles than teachers from other branches could

be explained by states like classroom teachers' establishing close relationships with students and being more influential in their lives.

As a result of examining teachers' teaching styles according to the seniority variable, the study found that seniority did not create significant differences in teaching styles. Likewise, Öner (2019), Özdemir (2019), and Ünal (2017) found no significant differences according to seniority. By contrast, Süral (2013) reported significant differences in all styles. Similarly, Saracaloğlu, Aldan Kandemir, Dinçer, and Dedebali (2017) found significant differences in authoritative style in favor of senior teachers. However, Saracaloğlu, Dedebali, Dinçer ve Dursun (2010) found a significant difference in delegator style, favoring teachers with low seniority. More studies are needed in this regard to make a general judgment.

Further, when the relationship between teachers' attitudes towards distance education and their teaching styles were examined, no significant relationship was found between the variables. The teaching styles of teachers were independent of distance education. From this perspective, these two variables did not affect each other.

#### REFERENCES

- Aggarwal, A. (2000). Web-Based learning and teaching technologies: Opportunities and challenges. Hershey-USA: *Idea Group Publishing*
- Ally, M. (2008). Foundations of educational theory for online learning. In T. Anderson (Ed.). The theory and practice of online learning (pp.15-44). *Athabasca, AB: Athabasca University Press*.
- Artvinli, E. (2010). Coğrafya Öğretmenlerinin Öğretme Stilleri. *Elektronik Sosyal Bilimler Dergisi. Cilt:* 9 Sayı: 33.
- Babadoğan, C. (2000) Öğretim Stili Odaklı Ders Tasarımı Gelistirme. Milli Eğitim Dergisi, 147, 61-63.
  25 Haziran 2008, http://yayim.meb.gov.tr/dergiler/147/babadogan.htm
- Bozdağ, B. & Dinç, F. (2020). The Perceptions of Physical Education Teacher Candidates towards the Concept of Distance Education in the Covid-19 Process: A Metaphor Study. *International Journal of Eurasian Education and Culture, Issue: 11, pp. (1954-1980).*
- Demir, F. & Özdaş, F. (2020). Covid-19 Sürecindeki Uzaktan Eğitime İlişkin Öğretmen Görüşlerinin İncelenmesi. *Milli Eğitim, Cilt: 49 Sayı: 1*.
- Ergin, C. (2010). İlköğretim Öğretmenlerinin Uzaktan Eğitime Bakış Açıları. Yayınlanmş Yüksek lisans Tezi, Yüzüncü Yıl Üniversitesi, Sosyal Bilimler Enstitüsü.
- Felder, R. M. (1995). Learning and Teaching Styles in Foreign and Second Language Education. Foreign Language Annuals. Volume: 28, Issue: 1
- Grasha, A. F. (2002). Teaching with Style: A Practical Guide to Enhancing Learning by Understanding Teaching and Learning Styles. *San Bernadino: Alliance Publishers*.

- Kavrat, B. & Türel, Y. K., (2013). Çevrimiçi Uzaktan Eğitimde Öğretmen Rollerini ve Yeterliliklerini Belirleme Ölçeği Geliştirme. *The Journal of Instructional Technologies &Teacher Education Vol.1 No3 (2013), 23-33.*
- Kaynar, H., Kurnaz, A., Doğrukök, B., & Şentürk Barışık, C. (2020). Ortaokul Öğrencilerinin Uzaktan Eğitime İlişkin Görüşleri. *Turkish Studies*, *15*(7), *3269-3292*.
- Kurnaz, A., Kaynar, H., Şentürk Barışık, C., & Doğrukök, B. (2020). Öğretmenlerin Uzaktan Eğitime İlişkin Görüşleri. *Milli Eğitim, Cilt: 49 Sayı: 1 (293-322).*
- Maden, S. (2012). Türkçe Öğretmenlerinin Öğretme Stilleri. Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi Sayı: 1/1 2012
- Özbay, Ö. (2015). Dünyada ve Türkiye'de Uzaktan Eğitimin Güncel Durumu. The Journal of International Educational Sciences · December 2015.
- Saracaloğlu, A. S., Aldan Karademir, Ç., Dinçer, B., & Dedebali, N.C., (2017). Öğretmenlerin Öğretme Stilleri, Özyeterlik ve İş Doyumlarının Belirlenmesi. *Education Sciences (NWSAES)*, *12(1):58-85*.
- Şentürk, C. & Ciğerci, F.M. (2018). Sınıf Öğretmenlerinin E-öğrenme Stillerinin İncelenmesi. KSÜ Sosyal Bilimler Dergisi Cilt: 15 Sayı 1 (2018)
- TUENA, 1998. Dünyadaki Uzaktan Eğitim Uygulamaları ve Yeni İletişim Teknolojilerinin Uzaktan Eğitimde Kullanılması. *Çalışma Belgesi*.
- Uyar, E. (2020). Covid-19 Pandemisi Sürecinde Sosyal Bilgiler Öğretmenlerinin Uzaktan Eğitime Yönelik Görüşleri. *Kapadokya Eğitim Dergisi, 1(2).*
- Ünal, M. (2017). Öğretmenlerin ve Öğretmen Adaylarının Öğretme Stillerinin Farklı Değişkenlere Göre İncelenmesi. Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, 17 (2), 932-947.
- Yeşilyurt, E., Okudan, Ü., & Kızılaslan, B. (2020). Öğretim Stili Modelleri: Teorik Temelleri Bağlamında Kapsayıcı Bir Derleme Çalışması. Uluslararası Sosyal Araştırmalar Dergisi, Cilt: 13 Sayı: 72.