



Do Teachers Experience Social Anxiety When Using Social Media?


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Abstract

This study aims to investigate teachers' social media usage purposes and the association between these purposes and the social anxiety they experience while visiting social media platforms. In the study, a correlational research design and causal-comparative research design were employed. The participants of the study consisted of 322 teachers. Data were collected online during the 2021- 2022 academic year due to the Covid-19 pandemic. Two data collection tools were administered; the usage purposes scale of social networks and the social anxiety scale for social media users. The results reveal that teachers visited social media sites in order to mainly conduct research, partly to cooperate, to communicate, and to maintain communication, and to a lesser extent to share content and to entertain. In addition, teachers reported that they had mostly privacy anxiety and less anxiety caused by the shared content and self-evaluation while using social media. In addition, as teachers' use of social media purposes increased, their social anxiety increased. Another critical finding of the study is that teachers' education level is a significant predictor of their social anxiety.

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INTRODUCTION

The use of social media has increased significantly in recent years and has become an important part of individuals' social lives. Previously, people engaged in one-way communication technologies such as radio, television, and newspapers. With the emergence of the social media concept, they shifted to two-way communication technologies. This shift is considered to be a revolution in communication processes (Kross et al., 2013). Boyd and Ellison (2007) define social media as web-based services where individuals can create profiles within a system, access user lists in the system, and share their connections. Social media is defined as the whole of internet services that allow individuals to create a public or semi-public profile to build a network with other users with whom they share a common link, to give a list of interacted people, to see other users' listed links and to navigate between these links (Büyükşener, 2010). Individuals use social media to introduce themselves to others (Vural & Bat, 2010), to communicate with other users and to maintain this communication (Ellison, Steinfield & Lampe, 2007), to share various content (for example, photos, videos) (Kim, Jeong & Lee, 2010), to contact old friends or to make new friendships (Wang, Moon, Kwon, Evans, & Stefanone, 2010), and/or to gather around certain ideas or passions (Richardson, 2009).

Shirky (2011) claims that social media has become a part of our lives because it attracts many people, non-governmental organizations, state institutions, and communication institutions. More specifically, the fact that mobile technologies have a large user base from all age groups also increases the use of social media platforms (Aslan, Turgut, Göksu, & Aktı Aslan, 2019). Through social media, which is a new type of online media, people share texts, images, and voice recordings without time or location limitations. Due to this sharing feature, social media environments are defined as multimedia environments (Vural & Bat, 2010). Various types of social networking sites exist; Facebook, Flickr, YouTube, LinkedIn, Twitter, and so on. In the era of Web 1.0, individuals were not able to express and share their opinions on the internet as they do today (Horzum, 2010). However, individuals have not only become consumers, but also active producers through the widespread use of Web 2.0 technologies (Yeşim, 2017). Therefore, the Web 2.0 technology has started to be used in many platforms by prioritizing social interaction, sharing and cooperation and social networking sites have begun to be seen as important components of this technology (Karal & Kokoç, 2010). With the spread of the Web 2.0 technology, social networks defined as new media such as facebook, twitter, and Instagram create an internet-based global interaction environment around the world (Kaplan & Haenlein, 2009; Konuk, 2019). Additionally, one of the different definitions of social media in the literature is that social media is expressed as "an internet-based group of applications that are built on ideological and technical foundations of Web 2.0 and allow the creation and exchange of user-generated content" (Kaplan & Haenlein, 2009). Billions of people around the world interact with each other through social networks (Whiting & Williams, 2013). According to the November 2020 report published by We are Social (2020), the top three social network sites were YouTube (36.4B), Facebook (25.3B), and Instagram (5.2B).

Widespread use of social media also resulted in innovations in educational environments (Baloğlu, 2015). Students' attempts to learn via social media platforms (SMP) encouraged educators to benefit from those sites. The dynamic structure of social networks, which allows communication, sharing, and cooperation, indicates that they can be used as an educational tool (Yamamoto, Demiray & Kesim, 2010), which encouraged educators to create learning opportunities in online environments (Vu, Cao, Vu, & Cepero, 2014). Studies reveal that educators create their own learning communities via social networking sites including Twitter, Facebook, and blogs (Huei-Tse Hou, Kuo-En Chang & Yao-Ting Sung, 2009; Prestige, 2009; Ranieri, Manca, & Fini, 2012). Specifically, Baran and Correia (2014) state that educators frequently use SMP in order to communicate with their colleagues, share their ideas with them, and reach out to more followers. In addition, educators use social media in order to continue their professional development, to reach various educational content, to share their

classroom activities with their students and other people, and to work with their colleagues in projects (Hanraets, Hulsebosch & Laat, 2011; Kim, Miller, Herbert, Pedersen & Loving, 2012; Prestige, 2019; Twinning, Raffaghelli, Albion and Knezek., 2013; Veletsianos, 2012).

People have the opportunity to meet new people, exchange ideas, and ask questions to experts through social media platforms (SMP) (Seren, Çelik, Özgeldi, & Dumankaya, 2018). In addition to these things, they may access unlimited information, spend their free time, play games, develop content, share their ideas, conduct activities with groups, and improve their professional skills while visiting SMP (Binark, Bayraktutan-Sütçü & Buçakçı, 2009). More specifically, Magsamen-Conrad and Greene (2014) state that SMP encourage users who cannot communicate with people, avoid face-to-face communication, or are shy to make friends and share. Certain studies even reveal that people feel relief with the use of social media and consider it as an escape from their real lives (Cengizhan, 2005; Turel & Serenko, 2010). All of these are among the advantages of social media. However, people may be unintentionally exposed to various forms of information while billions of data are stored in social media accounts every day (Seren et al., 2018). Along with spending excessive time on social networks and being exposed to various forms of inaccurate information, physical and health problems may also arise (Eijnden, Lemmens, & Valkenburg, 2016; Fu, Xu, Zhao, & Yu, 2017; Zaharmand, 2010; Zenelaj, 2014). Those who spend excessive time in SMP may escape from real life (Argın, 2013). In addition to these things, there are other possible disadvantages due to using social media, including privacy violation, various addictions, anxiety disorder, emergence of illegal behavior, and an occurrence of gambling habits (Aslan & Karakuş Yılmaz, 2021; Binark et al., 2009; Turgut & Kurşun, 2020).

Despite the fact that social media and the internet ease people's lives, they bring out certain problems as well (Aslan et al., 2021; Turgut & Kurşun, 2020). One of the disadvantages of social media usage is the anxiety people experience as they visit these sites. The reason is that people who tend to avoid social interaction in face-to-face environments or who are shy have the opportunity to communicate with other people via social media and the Internet (Magsamen- Conrad & Greene, 2014). With technological developments, this situation, which is considered to be social anxiety, was transferred from physical environments to online environments and social networks (Aktan, 2018). Social anxiety, which is a critical problem for people (Alimoradi et al., 2019), is defined as an individual's fear of being criticized, teased, and humiliated by others (Nepon, Flett, Hewitt & Molnar, 2011). In other words, it is as a state of anxiety arising from the possibility of individuals being criticized by different people in a real or virtual social environment (Leary, 1983). When the symptoms of social anxiety are examined, it is primarily seen that there are three basic fears. Firstly, it is the fear of being exposed to the gaze of other people; that is, it is the fear of being the center of attention and being scrutinized. Secondly, it is the fear of situations in which they may be judged or criticized negatively. Thirdly, it is the fear of embarrassment and being considered worthless in society (Beck, 2005). These fears are manifested in individuals as a behavioral avoidance of one or more social situations (Leary, 1983). According to Aktan (2018), communication in social media environments may lead to an increase in people's anxiety levels compared to communication in real environments. The reason is that people take risks in order to get social acceptance and continue their existence in social media environments (Erol, 2019). These and similar situations may cause social anxiety (Wakefield & Wakefield, 2018). Lanier and Saini (2008) found that people have concerns regarding personal privacy, which triggers social anxiety. On the other hand, the Internet environments sometimes cause less anxiety for people with social anxiety and those people tend to spend more time in social media environments (Zorbaz, 2013). It is attractive to interact in social media environments, especially for a number of people who have social anxiety and problems in their interactions (Weidman & Levinson, 2015).

The literature has shown that the great influence of social media should not be ignored while arranging education and training environments (Sarsar, Başbay & Başbay, 2015). The unique features and possibilities of social media help students find active and cooperative learning opportunities in the

education process (Gülbahar, Kalelioğlu & Madran, 2010) and to develop projects by interacting with each other (Poore, 2013). Social media environments are ideal for students to create personal learning environments that support their own learning (Laird, 2014). Furthermore, it can be seen that social media which makes students active, is effective in increasing student motivation (Öztürk & Talas, 2015). The fact that students communicate with their teachers outside of school via social media and that they can easily access course materials whenever they want affects their educational activities positively. In addition, besides student success, teachers get pleasure from social media environments and they get positive results in the professional and personal development (Sarsar et al., 2015). That is, teachers also use social media for various purposes such as rapid communication, disseminating good practices, following new approaches, informing parents, exchanging ideas with colleagues, and assigning and following students' homework (Arkan & Yünter, 2018). Therefore, under today's conditions, it is not possible to separate social media from education despite certain risks. Teachers have a great role in helping students remove the negative effects of social media. If teachers include students' use of social media in educational activities, they can spend more quality time in these environments and protect them from its risks. Therefore, it is important for teachers to be aware of what happens in the digital world and to consider the competencies and behavior patterns of the new generation (Arslan, 2015). Despite these features, teachers may experience various concerns in the use of social media. In this direction, teachers' anxieties on social media may also affect their reasons for using social media. Therefore, it is thought that the reasons teachers use social media, and the revealing of their concerns in these environments will contribute to educational environments.

Studies have examined a number of different areas: The factors affecting social anxiety (Lanier & Saini, 2008); the association between personality types and social anxiety (Magsamen- Conrad & Greene, 2014); the association between social anxiety in online environments and real life (Yen et al., 2012); the association among loneliness, social anxiety, and problematic internet usage (Bonetti, Campbell & Gilmore, 2010; Caplan, 2006); and the effects of depression on social anxiety (Selfhout et al., 2009). However, the relationship between social media usage purposes and social anxiety of teachers, who are an important role model for students, was not investigated. Considering that the use of social media in educational environments has many positive contributions, it can be said that teachers' staying away from these environments will create disadvantages for students. This is because in today's education system, the way to provide twenty-first century skills for students is to be able to use digital technologies interactively. In this century, which is called the age of information and technology, digital technologies and social media have reshaped the learning-teaching process as well as interpersonal interaction. At the same time, the majority of social media users are young people and students. Therefore, it is important to use these environments for educational purposes. The importance of social media environments in the lives of students of all age groups has aroused great interest among educators (Selwyn, 2009). Teachers' anxiety while using social media environments may lead to a decrease in the bond between them and their students and communication problems may arise. In some studies, it has been observed that anxiety, restlessness and worry have become common among social media users (Lin et al., 2017; Wakefield & Wakefield, 2018).

It is seen that teachers who use social media experience anxiety in social media in terms of some situations such as privacy of private life and loss of classroom authority (Demir, 2018). It is thought that this social anxiety experienced in social media will also affect teachers' purposes of using social media. However, when the literature is examined, it is seen that there is no research on the purposes of teachers' use of social media and the social anxiety they experience in social media. This study fills the gap in the literature. Therefore, this study aims to investigate teachers' social media usage purposes and their association with teachers' social anxiety. The following research questions are addressed:

1. What is the distribution of teachers' social media usage purposes?

2. What is the distribution of teachers' perceptions regarding their social anxiety experiences in SMP?

3. Do teachers' perceptions about social anxiety experiences on social media differ significantly in terms of the following variables?

- a. gender,
- b. type of institution they work for,
- c. teaching experience,
- d. education level,
- e. grade level, and
- f. daily social media usage duration

4. Is there any significant relationship between teachers' social media usage purposes and their social anxiety?

5. Do the following variables significantly predict teachers' perceptions about social anxiety experiences in SMP?

- a. gender,
- b. daily social media usage duration
- c. social media usage purposes

METHOD

A correlational research design and causal-comparative design were employed in order to examine the association between teachers' social anxiety levels in SMP and their social media usage purposes. In the correlational research design, the relationship between two or more variables is examined without intervention. To examine the correlations among variables (Punch, 2011), a correlational research design was also employed. In the causal-comparative research design, the factors that may cause the observed differences in the dependent variable are examined comparatively. (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2014); therefore, in order to determine teachers' social anxiety levels in SMP and their social media usage purposes and to examine these in terms of various variables, a causal-comparative research design was chosen for this particular part of the study.

UNIVERSE AND SAMPLE

The universe of this research was determined to be all teachers who worked in different education levels and who were social media users in Turkey, during the 2021-2022 academic year. To examine the relationship between teachers' use of social media and their social anxiety, the teachers were contacted by way of teacher platforms from Turkey where teachers interact in social media. For this reason, the platforms created by the teachers were determined as the universe and the sample was chosen from there. The sample of the study consisted of 322 teachers who were recruited using the convenience sampling method by way of popular SMP, since schools were closed and there was no opportunity to reach teachers in person due to the pandemic and governmental decisions taken to prevent the spread of the epidemic. The sample of the study was voluntary based. The teachers who agreed to participate were sent two forms through the Internet in January of 2021. The first form related to obtained permission, the purpose of the study, and confidentiality and privacy issues. The second form included the data collection tools. Demographic information about the participants is provided in Table 1.

Table 1. Demographic information about the sample

Variable	Group	f	%	Variable	Group	f	%
Gender	Female	164	50.9	Faculty graduated from	Faculty of Education	243	75.5
	Male	158	49.1		Others	79	24.5
	Total	322	100		Total	322	100
Education level	Undergraduate	259	80.4	Social media usage duration	1-60 minutes	73	22.7
	Master's degree	56	17.4		61-120 minutes	94	29.2
	Doctorate degree	7	2.2		121-180 minutes	77	23.9
	Total	322	100		181 < minutes	78	24.2
Grade level	Elementary school	81	25.2	Teaching experience	Total	322	100
	Middle school	184	57.1		<1 year	14	4.3
	High school	57	17.7		2-5 years	35	10.9
	Total	322	100		6-10 years	76	23.6
School type	State	292	90.7	11-20 years	150	46.6	
	Private	30	9.3	21< years	47	14.6	
	Total	322	100	Total	322	100	

DATA COLLECTION TOOLS

The first data collection tool was the usage purposes scale of social networks (UPS-SN) developed by Koçak Usluel, Demir and Çınar (2014). The seven-point Likert type scale consists of 26 items with seven factors: conducting research, collaboration, initiating communication, communicating, maintaining communication, sharing content, and entertainment. The score that participants may get varies between 26 and 182. The Cronbach's alpha reliability coefficient value was calculated to be .92. A number of the items in the scale are given below.

"I use social networks to find solutions to any problem."

"I use social networks to communicate with my friends with whom I am not intimate."

"When I am unhappy, I use social networks to get away from the factors that make me unhappy."

The second data collection tool was the social anxiety scale for social media users (SAS-SMU) developed by Alkış, Kadirhan and Sat (2017). The five-point Likert type scale consisted of 21 items with four factors including shared content anxiety, privacy anxiety, interaction anxiety, and self-evaluation anxiety. The Cronbach's alpha reliability coefficient value in terms of factors ranged between .80 and .92 and its structure was confirmed through confirmatory factor analysis (NFI = .93; CFI = .95; TLI = .95; RMSEA = .05). A number of the items in the scale are given below.

"On social media I feel anxious about the fact that others might find my actions awkward."

"On social media I am concerned about being ridiculed by others for the content I have shared"

"On social media I feel anxious about making a negative impression on people"

DATA ANALYSIS

Before the analysis, the data were reviewed to ensure that it was normally distributed. To this end, a normality test was run for variables. The kurtosis and skewness values were calculated. Since these values were between -1 and +1, and the mean, mode, and median values of the scores obtained from the female and male participants were close to each other, the data were considered as normally distributed (Seçer, 2013; Tabachnick & Fidell, 2013). Similar steps were followed for the other variables. It was also found that the data were normally distributed. A one-way analysis of variance (ANOVA) was used to determine whether the scales significantly differed in terms of factors. In addition, in order to determine whether there is an association between teachers' social anxiety levels

and their social media usage purposes, Pearson's product– moment correlations were calculated. According to Büyüköztürk (2011), the coefficient value refers to low correlation if the value is between 0 and .30, moderate correlation if between .30 and .70, and high correlation if higher than .70. Moreover, a multiple regression analysis was conducted. In multiple regression, the multi-collinearity problem was examined and it was determined that the VIF, CI and tolerance values were within acceptable limits. In this direction, it was seen that there was no multi-collinearity problem among the variables and the analysis was started. In a multiple regression analysis, the standardized regression coefficient value β (Beta) or β^2 is examined regardless of the sign of it rather than the regression coefficient values in order to determine the importance of independent variables for the dependent variable. The value of β^2 shows the contribution of each independent variable in predicting the dependent variable (Büyüköztürk, 2011). Therefore, the multiple regression analysis was used in order to determine whether gender, daily social media usage duration, conducting research, collaboration, initiating communication, communicating, maintaining communication, sharing content and entertainment predict teachers' social anxiety.

ETHICS

Necessary permission (29.12.2020 / Number: 2020/183) was obtained from the Social and Human Sciences Ethics Committee of Recep Tayyip Erdogan University before creating the necessary working group to collect data in the study.

FINDINGS

FINDINGS RELATED TO THE FIRST RESEARCH QUESTION

The first research question was related to teachers' social media usage purposes. The mean scores and standard deviation values are provided in Table 2.

Table 2. Descriptive Results for UPS-SN (n=322)

<i>Factors</i>	\bar{X}	<i>Ss</i>	<i>Agreement level</i>
Conducting research	5.45	1.43	Agree
Collaboration	4.93	1.33	Somewhat agree
Initiating communication	2.43	1.41	Disagree
Communicating	5.01	1.66	Somewhat agree
Maintaining communication	4.48	1.66	Somewhat agree
Sharing content	3.65	1.49	Neutral
Entertainment	3.95	1.59	Neutral

According to the findings provided in Table 2, teachers reported that they chose “agree” for conducting research (\bar{X} = 5.45), “somewhat agree” for collaboration (\bar{X} = 4,93), communication (\bar{X} = 5.01), and maintaining communication (\bar{X} = 4.48), “neutral” for sharing content (\bar{X} = 3.65) and entertainment (\bar{X} = 3.95), and “disagree” for initiating communication (\bar{X} = 2.43). According to the results, it can be seen that the teachers mostly used SMS for research, collaboration, communication, and maintaining relationships purposes.

FINDINGS RELATED TO THE SECOND RESEARCH QUESTION

The second research question was about teachers' perceptions about their social anxiety experiences in SMP. The descriptive results are provided in Table 3.

Table 3. Descriptive Results for SAS-SMU

<i>Factors</i>	\bar{X}	<i>Ss</i>	<i>Agreement Level</i>
Shared content anxiety	2.31	1.04	Rarely
Privacy anxiety	3.79	1.15	Often
Interaction anxiety	3.17	1.19	Sometimes
Self-evaluation anxiety	2.45	1.09	Rarely

The results reveal that teachers reported that they chose “rarely” for the shared content anxiety factor (\bar{X} = 2.31) and the self-evaluation anxiety factor (\bar{X} = 2.45), “often” for the privacy anxiety factor (\bar{X} = 3.79), and “sometimes” for the interaction anxiety factor (\bar{X} = 3.17). The results reveal that the teachers mostly experienced privacy and interaction anxiety when they visited SMP.

FINDINGS RELATED TO THE THIRD RESEARCH QUESTION

The third research question was about whether teachers' perceptions regarding social anxiety experiences on social media differ significantly in terms gender, type of institution they work for, teaching experience, education level, grade level they teach, and daily social media usage duration. For data analysis, an independent samples t-test (see Table 4 and 5) and a one-way variance analysis (ANOVA) (see Table 6, 7, 8, and 9) were conducted.

FINDINGS RELATED TO GENDER

Whether teachers' perceptions regarding social anxiety experiences on social media differ significantly in terms gender was investigated. An independent samples t-test was employed and the results are shown in Table 4.

Table 4. Results of the independent samples T-test Based on Gender

<i>Scale</i>	<i>Gender</i>	<i>N</i>	\bar{X}	<i>Sd</i>	<i>df</i>	<i>t</i>	<i>p</i>
SAS-SMU	Male	158	2.85	.76	320	1.622	.106
	Female	164	3.00	.87			

No significant difference was found between the female and male teachers’ social anxiety levels when they visited SMS ($p>.05$, $t = 1.622$). This reveals that the male and female teachers experienced social anxiety at a similar level.

FINDINGS RELATED TO TYPE OF INSTUTION

Whether teachers' perceptions about social anxiety experiences on social media differ significantly in terms of type of institution teachers work for was investigated. There were two types of schools; state schools and private schools. Since there were two categories, an independent samples t-test was run. The results are shown in Table 5.

Table 5. Results of the Independent samples T-test Based on Type of Institution

<i>Scale</i>	<i>Type of institution</i>	<i>N</i>	\bar{X}	<i>Sd</i>	<i>df</i>	<i>t</i>	<i>p</i>
SAS-SMU	State school	292	2.90	.828	320	-1.84	.069
	Private school	30	3.18	.682			

According to the results, the difference between teachers who work for state schools and private schools was not significant ($p>.05$, $t = -1.84$). This reveals that teachers who work for state schools and teachers who work for private schools had similar social anxiety when they visited SMP.

FINDINGS RELATED TO TEACHING EXPERIENCE

In order to determine whether the teachers' perceptions regarding social anxiety experiences on social media differ significantly in terms their teaching experience, a one-way variance analysis (ANOVA) was conducted. The results are shown in Table 6.

Table 6. Results of the ANOVA Based on Teaching Experience

Scale	Teaching experience	N	\bar{X}	Sd	Source of variance	Sum of squares	df	Mean square	F	p	Difference
SAS-SMU	<1 year	14	3.16	.674	Between groups	2.944	4	.736	1.098	.357	-
	2-5 years	35	2.84	.665	Within groups	212.395	317	.670			
	6-10 years	76	2.85	.770	Total	215.339	321				
	11-20 years	150	3.00	.887							
	21< years	47	2.80	.801							
	Total	322	2.92	.819							

According to the results, although teachers with less than one-year teaching experience had a higher mean score (\bar{X} =3.16), the mean scores for the other groups were close to each other. The ANOVA results revealed that no significant difference was observed in the teachers' social anxiety levels in terms of teaching experience [$F(4-317) = 1.098$; $p = .357 > .05$]. In other words, teaching experience did not cause any significant effect on teachers' social anxiety levels.

FINDINGS RELATED TO EDUCATION LEVEL

In order to determine whether teachers' perceptions regarding social anxiety experiences on social media differ significantly in terms their education level, one-way variance analysis (ANOVA) was conducted. The test results are shown in Table 7.

Table 7. Results of the ANOVA Based on Education Level

Scale	Education level	N	\bar{X}	Sd	Source of variance	Sum of squares	df	Mean square	F	p	Difference
SAS-SMU	Bachelor's degree	259	2.87	.800	Between groups	4.794	2	2.397	3.632	.028*	2-1
	Master's degree	56	3.19	.881	Within groups	210.545	319	.660			
	Doctorate degree	7	2.91	.626	Total	215.339	321				
	Total	322	2.92	.819							

* $p < .05$

According to the findings, teachers with Master's degrees had the highest mean score (\bar{X} = 3.19) compared with the other teachers. In addition, a significant difference in teachers' social anxiety levels was observed among groups in terms of their education level [$F(2-319) = 3.632$; $p = .028 < .05$]. In order to determine which group the significant difference favored, the Scheffe test was performed based on the equality of variances. The significant difference was between teachers with Bachelor's degrees (\bar{X} = 2.87) and teachers with Master's degrees (\bar{X} = 3.19) was in favor of teachers with Master's degrees. It can be said that the reason why the social anxiety of Master's degree graduates is higher than that of Bachelor's degree graduate results from their high level of awareness concerning the dangers that may be experienced in social media. In Anova, the most frequently used statistic is the eta-square (η^2) coefficient to make the results of the statistics and analyzes more understandable. In this respect, in this study, the eta-square (η^2) coefficient was calculated in order to determine how significant the difference was that emerged after the group averages were compared in practice. Based on the calculated effect size value ($\eta^2 = 0.02$), 2% of the variance observed was based on education level. Based on these effect size values, it can be said that the effect of the education level for the anxiety experienced by the teachers when using social media is within the medium level limits.

FINDINGS RELATED TO GRADE LEVEL

There were three school types the teachers served: elementary school, middle school, and high school. In order to determine whether the teachers' social anxiety mean scores differed in terms of

their grade level, a one-way variance analysis (ANOVA) was performed. The results are shown in Table 8.

Table 8. Results of the ANOVA Based on Grade Level

Scale	Grade level	N	\bar{X}	sd.	Source of variance	Sum of squares	df	Mean square	F	p	Difference
SAS-SMU	Elementary school	81	3.00	.760	Between groups	.957	2	.478	.712	.492	-
	Middle school	184	2.92	.829	Within groups	214.382	319	.672			
	High school	57	2.83	.868	Total	215.339	321				
	Total	322	2.92	.819							

According to the results, teachers teaching at different grade levels had a similar mean score in terms of their social anxiety levels. Among them, teachers who taught at elementary level had the highest mean score (\bar{X} =3.00). However, there was no significant difference among teachers in terms of their grade level [F (2-319) =.712; p=.492>.05]. In other words, the teachers teaching at different grade levels had a similar social anxiety level.

FINDINGS RELATED TO DAILY SOCIAL MEDIA USAGE DURATION

In order to determine whether teachers' perceptions regarding social anxiety experiences on social media differed significantly in terms their daily social media usage duration, a one-way variance analysis (ANOVA) was conducted. The results are shown in Table 9.

Table 9. Results of the ANOVA Based on Daily Social Media Usage Duration

Scale	Duration (min.)	N	\bar{X}	Ss	Source of variance	Sum of squares	sd	Mean square	F	p	Difference
SAS-SMU	<60 min.	73	2.88	.896	Between groups	4.196	3	1.399	2.107	.099	-
	61-120 min.	94	2.81	.849	Within groups	211.142	318	.664			
	121-180	77	2.91	.769	Total	215.339	321				
	181< min.	78	3.11	.730							
	Total	322	2.92	.819							

According to the findings, teachers who spent more than 181 minutes daily on SMS had the highest mean score (\bar{X} =3.11). No significant difference was observed among the teachers in terms of their daily social media usage durations [F (3-318) =2.107; p=.099>.05]. This reveals that the teachers had a similar social anxiety level regardless of the time they spent on social media.

FINDINGS RELATED TO THE FOURTH RESEARCH PROBLEM

The fourth research question was about whether there is an association between teachers' social anxiety levels and their social media usage purposes. In order to answer this research question, Pearson's product-moment correlations were calculated (p<.01). The findings are presented in Table 10.

Table 10. Correlation Results (n = 322)

	1	2	3	4	5	6	7	8
Social anxiety (1)	1							
Conducting research (2)	.167*	1						
Collaboration (3)	.198*	.530*	1					
Initiating communication	.275*	.025	.229*	1				
Communication (5)	.332*	.293*	.412*	.231*	1			
Maintaining	.320*	.186*	.343*	.398*	.630*	1		
Sharing content (7)	.257*	.371*	.547*	.431*	.400*	.461*	1	
Entertainment (8)	.239*	.211*	.243*	.409*	.399*	.460*	.525*	1

According to the results, there was a positive and low correlation between the teachers' social anxiety levels and five of the social media usage purposes including conducting research ($r=0.167$), collaboration ($r=0.198$), initiating communication ($r=0.275$), sharing content ($r=0.257$), and entertainment ($r=0.239$). A positive and moderate correlation was found between the teachers' social anxiety level and communication ($r=0.332$) and maintaining communication ($r=0.320$). These results reveal that as the scores of the teachers' purpose of using social media increase, their level of anxiety in social media also increases or vice versa.

FINDINGS RELATED TO THE FIFTH RESEARCH PROBLEM

The last research question was regarding whether gender, social media usage duration and social media usage purposes predict the teachers' social anxiety as they visit SMP. Therefore, a multiple regression analysis was performed (see Table 11).

Table 11. The Results of a Multiple Regression Analysis

Variable	B	Standard error _B	β	t	p	Bilateral r	Partial r
Constant	1.870	.275	-	6.792			
Gender	-.104	.092	-.063	-1.124	.262	-.090	-.064
Daily Usage Duration	.026	.064	.023	.409	.683	.130	.023
Conducting research	.036	.037	.064	.979	.328	.167	.055
Collaboration	-.007	.043	-.012	-.168	.866	.198	-.010
Initiating	.106	.036	.183	2.901	.004	.275	.162
Communication	.089	.035	.182	2.557	.011	.332	.143
Maintaining	.052	.036	.105	1.435	.152	.320	.081
Sharing content	.005	.042	.010	.125	.900	.257	.007
Entertainment	.012	.034	.023	.348	.000	.239	.020

R= 0.411, R²= 0.169, F_(6,315)= 7.57, p= 0.000

According to an examination of the bilateral and partial correlations between the predictor variables and the dependent variable, it was found that there was a low negative ($r = -.90$) relationship between the gender of the teacher and the SMA score, and when the other independent variables were checked, the relationship between the two variables was calculated to be $r = -.064$. Moreover, there was a low level ($r = .130$) relationship between a teacher's social media usage duration and the SMP score, and when the other independent variables were checked, the relationship between the two variables was calculated to be $r = .023$. It was found that there was a low level ($r = .167$) relationship between conducting research and the SMA score, and when other independent variables were checked, the relationship between the two variables was calculated to be $r = .055$. It was obtained that there was a low level ($r = .198$) relationship between collaboration and the SMA score, and when other independent variables were checked, the relationship between the two variables was calculated to be $r = -.010$. It was found that there was a low level ($r = .275$) relationship between initiating

communication and the SMA score, and when other independent variables were checked, the relationship between the two variables was calculated to be $r = .162$. It was found that there was a low level ($r = .332$) relationship between communicating and the SMA score, and when other independent variables were checked, the relationship between the two variables was calculated to be $r = .143$. It was found that there was a low level ($r = .320$) relationship between maintaining communication and the SMA score, and when other independent variables were checked, the relationship between the two variables was calculated to be $r = .081$. It was found that there was a low level ($r = .257$) relationship between sharing content and the SMA score, and when other independent variables were checked, the relationship between the two variables was calculated to be $r = .007$. It was found that there was a low level ($r = .239$) relationship between entertainment and the SMA score, and when other independent variables were checked, the relationship between the two variables was calculated to be $r = .020$.

It was observed that there was a small and significant association between the teachers' SAS scores and the variables including gender, daily social media usage duration, conducting research, collaboration, initiating communication, communicating, maintaining communication, sharing content and entertainment ($R = 0.411$, $R^2 = 0.169$, $p < 0.05$). All of these variables explained 16.9% of the variance in the SAS scores. According to the standardized regression coefficient (β), among the variables, initiating communication, communicating and maintaining communication were found to be more important than the others. When the t-test results regarding the significance of the regression coefficients were analyzed, initiating communication, communicating and entertainment were found to be a significant predictor of the SAS scores. The regression equation for the prediction of the SAS scores is given below:

$$\text{Social Anxiety in SMP} = 1.870 - 0.063. (\text{Gender}) + 0.023. (\text{Daily SMP usage duration}) + 0.064. (\text{conducting research}) - 0.012. (\text{collaboration}) + 0.183. (\text{initiating communication}) + 0.182. (\text{communicating}) + 0.105. (\text{maintaining communication}) + 0.010. (\text{sharing content}) + 0.023. (\text{entertainment})$$

DISCUSSION, CONCLUSION AND IMPLICATIONS

The rapid changes in technology have created an environment for people to interact with each other even they are not together. In these virtual environments people are able to share different kinds of information about themselves as well as other information or to exchange information. One of these environments is social media sites. Through SMS, people can reach other people, interact with them, and share information regardless of their cultures, locations, and ages. With the development of technology, the use of SMS has increased. Specifically, the widespread use of smartphones prompted this increase. It is almost impossible to find a person who does not have a social media account. Srivastava (2012) claims that a number of users cannot imagine a life without the Internet and social media.

The widespread use of social media among people makes social media and social networking an indispensable part of our education system. It can be seen that almost all educational institutions integrated social media through different applications. With the interaction of learners outside of school and the widespread use of the internet, the learning process can continue to exist independently of places such as the classroom (Erdoğan, 2008). In this regard, teachers' use of social media enables the education process to be carried out of classrooms and contributes to the improvement and development of students' learning by giving students the opportunity to reflect on their learning (Zgheib & Dabbagh, 2013). This situation has made it necessary for teachers to use social media. In this respect, teachers also took steps to create their own learning opportunities in online environments (Vu, Cao, Vu & Cepero, 2014) and created their own learning and collaboration communities through various social networks (Hou, Chang & Sung, 2009; Prestridge, 2019). Teachers

also benefit from social media by collaborating with their colleagues, sharing their practices (Prestige, 2019; Veletsianos, 2012), and enhancing their own professional development (Huei-Tse et al., 2009). In this study, teachers' social media usage purposes and their social anxiety while using SMS are investigated. The results reveal that teachers visited SMS in order to mainly conduct research, partly to cooperate, to communicate, and to maintain communication, and to a lesser extent to share content and to entertain. There are studies in the literature reporting that teachers use social media for communicating, spreading effective practices, collaborating with colleagues (Uslu & Hamarat, 2016) and conducting research on new approaches (Gülbahar et al., 2013; Menteşe, 2013; Tiryakioğlu & Erzurum, 2011), which are parallel to the findings of this particular study. Teachers' use of social media in order to advance their professional skills and collaborate with colleagues may reflect positively on the quality of classroom practices (Akbay & Kanadlı, 2019). Therefore, their social anxiety should not prevent them from visiting SMP. It is suggested that teachers should advance their knowledge regarding how to use social media effectively in terms of educational purposes.

However, despite its advantages technology has disadvantages as well. The frequent use of social media and the resulting information pollution and excessive loss of time in social networks bring about various physical and psychological health problems (Zenelaj, 2014). In addition, it is possible to list disadvantages such as violation of privacy, the formation of various addictions, anxiety disorders, the fear of being harmed by interaction, the emergence of illegal behavior, and the prevalence of gambling and betting games (Binark et al., 2009). Therefore, it is an expected outcome that teachers avoid use of social media due to the disadvantages, which result in anxiety. According to the findings of this study, the teachers involved report that they often experience privacy anxiety and sometimes communication anxiety. They also state that they experience anxiety caused by shared content and self-evaluation less than others. The fact that communication anxiety is high in individuals also negatively affects their harmony with their environment. Individuals should first reduce the level of communication anxiety by interacting safely with their environment in the family, school and work environment. Responsible legal institutions, on the other hand, need to ensure greater internet security. In addition, it is very important for individuals to pay attention to the privacy and security settings in their digital accounts on social media. Alrashedi (2020) focusing on the concerns and difficulties experienced by teachers working in Saudi Arabia determines that teachers experience various difficulties and concerns in social networks, especially in education, technical issues, security, and official laws, and accordingly suggests more technical and hardware support to educational institutions and the development of legal protocols. Manprasert (2018) examining teachers' perceptions of social media, reveals that teachers especially have security concerns and that it is beneficial to supervise children's use of social media by teachers and parents, especially those who have not reached the age of maturity. In addition, Fox and Bird (2017) examining teachers' use of social media in England, show that teachers cannot remain unconcerned to social media, and that teachers have anxiety regarding professionalism and safety in their use of social media. Studies focusing on social media and anxiety reveal that teachers have anxiety due to the possibility of privacy violation, emergence of the internet and social media addiction, harm due to interaction and posts/sharing via social media (Aslan & Karakuş Yılmaz, 2021; Binark et al., 2009; Demir, 2018; Turgut & Kurşun, 2020). In this respect, the findings of this study also support the findings of studies in the literature. The study also reveals that the teachers involved generally had more concerns about privacy when they visit SMP. In order to reduce such concerns, SMP provide privacy settings for their users. Therefore, teachers must review and make necessary changes to protect their privacy.

Another important finding of this study is that no significant difference was observed in teachers' social anxiety levels as they visit SMS in terms of gender, type of institution, teaching experience, grade level, and daily social media usage duration. In other words, teachers' anxiety levels were at a similar level in terms of these variables. Although Aktan (2018) found no gender effect on social anxiety level, Doğan and İlçin Tosun (2016) reveal that female high school students had a higher

level of social anxiety than male high school students. In this study, only the education level variable was found to have an effect on teachers' social anxiety. According to the results, teachers with Master's degree had significantly higher social anxiety levels compared to teachers with an undergraduate degree. One possible explanation is that those teachers are expected to be more sensitive than other teachers certain on issues such as research and ethics due to their graduate education. Ramazanoglu and Toytok (2018), on the other hand, in their study in which they examined the anxiety levels of teacher candidates on Facebook, found that the anxiety levels of teacher candidates were high while using Facebook, and that Facebook usage anxiety did not differ significantly according to the independent variables of class and age. However, they determined that there was a significant difference in favor of women according to gender. At this point, it could be thought that similar studies should be conducted on different samples.

A positive association between teachers' social anxiety and their social media usage purposes was another finding of the study. This result implies that as teachers' use of social media increases, their social anxiety levels also increase or vice versa. The common view is that the use of social media by individuals increases anxiety, but unlike this view, people may prefer to use social media to cope with their problems or to ignore their problems. More studies should be done to determine this in particular for teachers. However, in both cases, it seems possible to talk about the existence of a strong relationship between these variables. Therefore, it will be useful to examine both the direction of the relationship and the interaction of other possible variables with new studies. Similar results were found by other studies in the literature (Doğan & İlçin Tosun, 2016; Ko, Yen, Yen, Chen & Chen, 2012; Weinstein & Lejoyeux, 2010). However, it is suggested that teachers should avoid excessive use of social media in order to benefit from them. Additionally, Ramazanoglu and Toytok (2018) investigating the anxiety levels of pre-service teachers on Facebook, show that the anxiety levels of pre-service teachers are high while using Facebook, and that the anxiety of Facebook usage does not differ significantly according to the independent variables as class and age. However, they determine that there is a significant difference in favor of women according to gender, so it can be thought that similar studies should be conducted on different samples.

According to the standardized regression coefficient (β), the relative importance order of predictor variables on social anxiety experienced by teachers on social media is as follows: gender; daily social media usage duration; conducting research; collaboration; initiating communication; communicating; maintaining communication; sharing content and entertainment. However, among these variables, initiating communication, communicating and entertainment were the significant predictors of teachers' social anxiety. The other variables did not have a significant effect on it. Communicating with individuals on social media, maintaining this communication in a healthy way and choosing entertainment may not always be easy. It is expected that this situation will cause anxiety in individuals and therefore in teachers. Since it can be seen that teachers have more concerns about privacy in general with the use of social media, social media accounts offer their users options regarding privacy settings in order to overcome this concern. Therefore, teachers should consider these settings. The efficient and effective use of social media should be encouraged in order to enable teachers to develop professionally and to cooperate with their colleagues. In this respect, the anxieties experienced by teachers in social media should not be perceived as an obstacle for teachers, considering the advantages of using social media. In this direction, training on the use of social media could be organized at regular intervals in order to eliminate the anxieties of teachers in the use of social media.

LIMITATIONS

There are two limitations of the current study. The first limitation is about the sample and the sample size. This study was conducted with the participation of 322 teachers. Future research must consider conducting the study with a larger sample size in order to learn more about teachers' social media usage purposes and their association with teachers' social anxiety. The second limitation is

related to the number of variables used in the research. In this study, only two variables were considered; teachers' social media usage purposes, and their social anxiety. Therefore, more research is needed by including different variables in order to obtain more detailed information regarding teachers' and students' social anxiety in SMP, and their social media usage purposes.

AUTHOR CONTRIBUTION

All authors contributed equally to the manuscript development and preparation.

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