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The Relationship Between High School Students' Fear of Mobile Telephone Deprivation and Life Satisfaction Levels

Murat ÖZARSLAN, muratozarslan14@gmail.com, Turkey, https://orcid.org/0000-0003-2139-4347

SUMMARY

This study aims to find out the relationship between high school students' fear of mobile phone deprivation and their levels of life satisfaction. The study was carried out with 417 students (186 male and 231 female) studying at an Anatolian High School belonging to the Ministry of National Education in Turkey in the Spring Term of the academic year of 2016-2017. In the study, the relational survey model was used as a descriptive research method. "The Scale of Fear of Mobile Deprivation" and "Life Satisfaction Scale" were applied to the students as data collection instruments. Descriptive statistics, independent groups t-test, one-way variance of analysis and correlation analysis were used for the analysis of the data obtained from the scales. As a result of the study, it was found that there was no statistically significant difference between the gender of the students, their class levels and levels of fear of mobile phone deprivation in terms of their socioeconomic levels. It was also found that there was a statistically significant difference in their life satisfaction levels with respect to their class levels and socioeconomic levels; however, no statistically significant difference was found between their life satisfaction levels when gender was considered. As a result of the Pearson correlation analysis, there was no statistically significant relationship between the students' fear of mobile phone deprivation and their life satisfaction levels. This result indicates that the students were not affected by the fear of mobile phone deprivation.

Keywords: Nomophobia, correlation, life satisfaction, high school, mobile phone

INTRODUCTION

Information and communication technologies are an indispensable part of our lives today, and they facilitate human life in all areas. One of the technology-based platforms is smartphones (Erdem, Kalkin, Turen and Deniz, 2016). Smartphones offer opportunities for individuals to search for the desired places and times, to connect to social networks, to send messages, to use their time efficiently, to gain access to information, to have freedom of expression and to work in different environments. However, the excessive use of smartphones and such technologies can negatively affect individuals' development. Especially for young users, excessive use of smartphones and smartphone-based applications may cause some negative consequences such as smartphone dependency (Erdem et al., 2016; Minaz and Çetinkaya Bozkurt, 2017; Soni, Ruchi-Upadhyay, Ritesh-Jain and Mahendra, 2017). One of these adverse effects is fear of smartphone deprivation or lack of mobile internet (Nomofobi; no mobile phobia) (King, Valença, Silva, Sancassiani, Machado and Nardi, 2014; Öztürk, 2015).

Nomophobia is a concept that indicates excessive and problematic usage of mobile technologies such as smartphones (Gezgin, Şumuer, Arslan and Yıldırım, 2017). Lacking smartphone causes anxiety and fear in individuals. Nomophobic individuals exhibit some behaviours such as frequently checking their phones to see whether there is a message or a call if they are out of coverage area, being anxious and tense when phone usage is too limited, or keeping the phone constantly on, and so on (Bragazzi and Puente, 2014; Erdem et al., 2016; Öztürk, 2015).

Studies conducted in the field suggest that especially female students have the fear of losing smartphone connection and exhibit nomophobic behaviours, which causes problems in mental and general health and daily life for female students (Burucuoğlu, 2017; Erdem, Türen and Kalkın, 2017; Gezgin, 2017; Öztürk, 2015; Tavolacci, Meyrignac, Richard, Dechelotte and Ladner, 2015). Kahyaoglu-Milk, Kurt, Uzal and Özdilek (2016) found that the addiction levels of young people were higher than the other age groups and that nomophobia affected communication and social life negatively. Nomophobia also negatively affects students' academic achievement (Erdem et al., 2016; Samaha and Hawi, 2016). Minaz and Çetinkaya Bozkurt (2017), in their study, found that there was no significant difference between the students' levels of smartphone addiction in terms of the variables of gender, education and age. In other studies conducted in the field, it was found that all individuals, especially young people, exhibit Nomophobic behavior when they cannot use their smartphones (Bahi and Deluliis, 2015; Burduroğlu, 2017; Yıldırım et al., 2016). In addition, it was also found in the studies conducted on young people that about one-third, or 41%, of the individuals exhibit nomophobic characteristics (Adnan and Gezgin, 2016; Apak and Yaman, 2019; Tavolacci et al., 2015).

Gezgin et al. (2017) and Erdem et al. (2017) found in their studies that the nomophobic level decreases as the age level increases. Gezgin and Cakir (2016), Gezgin, Şahin and Yıldırım (2017) and Dixit et al. (2010) stated that the nomophobia is getting more widespread among young people and that the nomophobia level is getting higher as the time spent on the smart mobile phone and mobile internet increases. In addition, Gezgin (2017) found that the students' overuse of phone negatively affected their life satisfaction. Moreover, it was also found that nomophobic individuals were more likely to lose motivation to learn and they also had sleep disorders (Erdem et al., 2016)

Concepts such as happiness, psychological well-being and life satisfaction constitute the research topic of many studies today (Recepoğlu, 2013). Satisfaction with life is related to individuals' expectations and their levels of fulfilment (Özer and Karabulut, 2003). Individuals' life satisfaction varies from one person to another and refers to the satisfaction felt about life. This is a positive emotional response to life, defined as work leisure and other non-work time (Hong and Giannakopoulos, 1994). The higher the life satisfaction of individuals is, the more resistant they are to the negative situations they frequently face in their daily lives. The high level of life satisfaction of individuals has positive influence on individuals' psychology (Fredrickson and Joiner, 2002).

It was found in the studies in related literature that the life satisfaction of female students was significantly higher than that of male students (Recepoğlu, 2013; Şahin, Zade and Direk, 2009). Balcı and Koçak (2107) found that the level of life satisfaction of male students was higher than that of females. However, there are also other studies which reported no difference in life satisfaction when gender was considered (Chow, 2005; Çivitci, 2009). It was also found in some other studies that life satisfaction did not differ depending on age and class level (Civitçi, 2009; Recepoğlu, 2013; Şahin and Karabeyoğlu, 2010). In addition, Eryılmaz (2011) found that the life satisfaction of students during adolescence was also high. It was seen that there was a positive relationship between socioeconomic level and life satisfaction (Hefferon and Boniwell, 2011; Sule, 2016; Tuzgöl-Dost, 2011; Tümkaya, 2011). However, in some studies, it was reported that there was no relationship between socioeconomic level and life satisfaction (Sahin and Karabeyoğlu, 2010; Topuz, 2013).

The effects of social networks and mobile internet use on happiness, life satisfaction and psychological well-being, which are all part of our life, have not drawn researchers' attention at all until recently (Doğan, 2016). When the related literature is reviewed, it is seen that there has been a recent increase in the number of studies on the relationship between human psychology and the use of smartphones, mobile internet and social media sites (Lepp, Barkley and Karpinski, 2014; Salehan and Negahban, 2013; Tandoc, Ferrucci and Duffy, 2015). The results of these studies in literature revealed that social networks make people happy and positively affect their life satisfaction (Doğan, 2016; Eren, Çelik and Aktürk, 2014; Şener, 2009). In some studies, it was pointed out that the use of social networks made high school students happy (Brandtzæg and Heim, 2009; Dogan, 2016). Brooks (2015) and Doğan (2016) stated that the individuals who used social networks at work were happy and had a good psychological well-being and life satisfaction. However, there are studies in literature suggesting that the use of social networks such as Facebook and Twitter negatively affects individuals' happiness (Hayes, Van Stolk-Cooke and Muench, 2015). Some studies report a negative relationship between life satisfaction and electronic media usage, internet addiction and social media use (Balcı and Koçak, 2107; Batıgün and Kılıç, 2011; Demir, Peker Özköklü and Aygün Turgut, 2015; Kabasakal, 2015; Mathers, et al., 2009; Morschner, 2014). Dixit et al. (2010) found that nomophobia influenced the quality of life negatively because of its effects on daily work and individuals' life. Samaha and Hawi (2016) found that smartphone addiction was not related to life satisfaction in their study conducted with university students.

Nomophobia is a relatively new phenomenon. For this reason, there are not many studies in the field of education examining the effects of nomophobia (Öztürk, 2015). The current studies in the field have mostly been conducted on university students (Burucuoğlu, 2017; Gezgin, 2017; Karaca, 2017). Therefore, there is no research in literature revealing the relationship between nomophobia and life satisfaction at secondary education level. Therefore, it was thought that the studies investigating the relationship between nomophobia and life satisfaction were not sufficient. The aim of this study is to investigate whether there was a relationship between students' nomophobia and life satisfaction levels and to give an idea to educators and parents about the arrangement of social media, smartphone and mobile internet usage for higher life satisfaction. For this reason, the present study is considered to be important in terms of revealing the relationship between the nomophobia and life satisfaction levels of the students, and it is expected to contribute to the related field.

Purpose of the Study

The purpose of this study was to find out whether there was a relationship between high school students' fear of mobile phone deprivation and their levels of life satisfaction. For this purpose, the study tried to find answers to the following sub-problems;

Is there a significant difference

1. between the students' scores regarding their fear of mobile phone deprivation in terms of their gender?

2. between the students' scores regarding their life satisfaction levels in terms of their gender?

3. between students' scores regarding their fear of mobile phone deprivation in terms of their class level?

4. between the students' scores regarding their life satisfaction levels in terms of their classes?

5. between the students' scores regarding their fear of mobile phone deprivation in terms of their socioeconomic levels?

6. between the students' scores regarding their life satisfaction levels in terms of their socioeconomic levels?

7. between the students' scores regarding their fear of mobile phone deprivation and their scores regarding their life satisfaction levels?

METHOD

Research Model

The study was carried out using the descriptive research approach (Büyüköztürk, Çakmak, Akgün, Karadeniz and Demirel, 2011). In the study, the relational survey model, which is one of survey models, was used. The relational survey method is a research method that aims to determine the presence and/or degree of a change between two or more variables (Karasar, 2007).

Participants of the Study

A total of 417 9th to 12th grade students (186 males, 231 females) from an Anatolian high school in the Marmara Region of Turkey participated in the study. The study group was determined with the convenience sampling method. Due to the limitations of time, money and labor in the convenience sampling method, the participants were selected from the easily accessible and easily applicable groups (Büyüköztürk et al., 2011).

The instrument for Data Collection

In the study, fear of mobile phone deprivation (nomophobia) and life satisfaction scales were used together.

Fear of Mobile Phone Deprivation

In order to find out the nomophobia levels of the individuals, the Nomophobia Scale developed by Yıldırım and Correira (2015) and adapted into Turkish by Yıldırım et al. (2016) was used. The scale consists of 20 items and four sub-dimensions. The subscales include (i) being unable to be online, (ii) losing communication, (iii) lacking a device, and (iv) failing to reach information. The scale is a 5-point Likert type (I definitely disagree, 5. I absolutely agree). In this study, the Cronbach alpha reliability coefficient of the scale was found to be .90.

Life Satisfaction Scale

The Life Satisfaction Scale was developed by Diener, Emmons, Laresen and Griffin (1985), and it was adapted into Turkish by Köker (1991). The scale consists of five items related to life satisfaction. Each item is responded to based on 7-point grading (I completely disagree – I completely agree). The scale, which aims to measure general life satisfaction, is suitable for all ages from adolescents to adults. The Cronbach alpha reliability coefficient of the questionnaire in this study was found to be .81.

Data Analysis

For the analysis of the research data, the package software of SPSS.20 was used. The research data were analyzed using descriptive statistics, independent groups t-test, one-way analysis of variance (ANOVA) and Pearson correlation analysis method.

FINDINGS

This section presents the results of the analyses of the data obtained from the scale of students' fear of mobile phone deprivation and life satisfaction.

Sub-problems 1-2: "is there a significant difference between the students' scores regarding their fear of mobile phone deprivation and life satisfaction levels in terms of their gender?"

Table 1. T-test results of the students with respect to gender

Scale	Gender	N	$\bar{X}$	Sd	t	p
Fear of Mobile Phone Deprivation	Male	186	2.67	.75	-1.307	.192
	Female	231	2.77	.78		
Life Satisfaction Level	Male	186	4.73	1.26	-.277	.782
	Female	231	4.76	1.25		

As shown in Table 1, it was found that there was no significant difference in the students' fear of mobile phone deprivation and life satisfaction levels when their gender was considered (t = -1.307; t = -. 277; p> 0,05). Based on this result, it could be stated that gender did not have any significant influence on the students' fear of mobile phone deprivation and their life satisfaction levels.

Sub-problems 3-4: "Is there a significant difference between the students' scores regarding their fear of mobile phone deprivation and life satisfaction levels in terms of their class level?"

Table 2. Descriptive Statistics Values depending on students' classes

Scale	Class	N	$\bar{X}$	Sd
Fear of Mobile Phone Deprivation	9	124	2.62	.79
	10	110	2.84	.81
	11	124	2.71	.75
	12	59	2.74	.67
	Total	417	2.72	.77
Life Satisfaction Level	9	124	4.93	1.20
	10	110	4.48	1.35
	11	124	4.74	1.18
	12	59	4.90	1.27
	Total	417	4.75	1.25

As shown in Table 2, it was seen that students had the highest level of fear of mobile phone deprivation in the 10th grade ($\bar{X}$ = 2.84) and the lowest in the 9th grade ($\bar{X}$ = 2.62). When the classes of the students were considered, the life satisfaction level scores were found to be highest in the 9th grade ($\bar{X}$ = 4.93) and the lowest in the 10th grade level ($\bar{X}$ = 4.48).

Table 3. One Way ANOVA Results According to the Classes of Students

Scale	Source of the Variance	Sum of Squares	Sd	Mean of Squares	F	p	Difference
Fear of Mobile Phone Deprivation	Between Groups	2.821	3	.940	1.587	.192	-
	Within Groups	244.664	413	.592			
	Total	247.485	416				
Life Satisfaction Level	Between Groups	13.209	3	4.403	2.817	.039*	9-10
	Within groups	645.633	413	1.563			
	Total	658.842	416				

*p <.05

As can be seen in Table 3, it was found that there was no statistically significant difference between the levels of fear of mobile telephone deprivation when classes were considered (F = 1.587, p> .05). Depending on this result, it could be stated that the class level had no effect on the students' levels of fear of mobile phone deprivation.

Another result was that there was a statistically significant difference between the life satisfaction levels of the students (F = 2.817, p <.05). In addition, the effect size was calculated as η2= 0.17. According to this result, the class level could be said to have significant influence on the students' levels of life satisfaction. In addition, the post-hoc Tukey analysis of the differences between the groups revealed that this situation resulted from the difference between the 9th and 10th grade students. Accordingly, it could be stated that the life satisfaction scores of the 9th grade students were higher than those of the 10th grade students.

Sub-problems 5-6: "Is there a significant difference between the students' fear of mobile phone deprivation and their life satisfaction levels in terms of their socioeconomic levels?"

Table 4. Descriptive statistical values according to the students' socioeconomic levels

Scale	Monthly Income Level	N	$\bar{X}$	Sd

Fear of Mobile Phone Deprivation	Low	4	2.18	.66
	Average	205	2.71	.79
	Good	192	2.76	.75
	Very good	16	2.66	.77
	Total	417	2.72	.77
Life Satisfaction Level	Low	4	3.20	1.33
	Average	205	4.40	1.27
	Good	192	5.12	1.11
	Very Good	16	5.11	1.20
	Total	417	4.75	1.25

The group which had the highest score regarding the fear of mobile phone deprivation was found to be the one with a "good" level of income (**$\bar{X}$**=2.76), and the group with the lowest score of fear of mobile phone deprivation was found to be the one with a "low" level of income (**$\bar{X}$**=2.18). In relation to the life satisfaction level, the highest score was found to belong to the group with a "good" level of monthly income ($\bar{X}$= 5.12), and the lowest score of life satisfaction was found to belong to the group with a "low" level of income ($\bar{X}$=3.20).

Table 5. One-way ANOVA results according to the students' socio-economic levels

Scale	Source of Variance	Sum of Squares	Sd	Mean of Squares	F	p	Difference
Fear of Mobile Phone Deprivation	Between Groups	1.546	3	.515	.865	.459	-
	Within groups	245.939	413	.595			
	Total	247.485	416				
Life satisfaction Level	Between Groups	63.675	3	21.225	14.728	.000*	Good-Low Good-Average Very good Good-low
	Within Groups	595.167	413	1.441			
	Total	658.842	416				

*p<0.01

As shown in Table 5, there was no statistically significant difference between the students' fear of mobile phone deprivation when their socioeconomic levels were considered (F = .865; p> .05). According to this result, it can be suggested that the level of monthly income does not affect the fear of mobile phone deprivation levels of students.

Another result was that there was a statistically significant difference between the life satisfaction level scores of the students when their socioeconomic levels were considered (F = 14.728, p <.05). According to this result, it could be stated that the students' socioeconomic levels affected their levels of life satisfaction. Moreover, the Post-Hoc Tukey analysis of the differences between the groups suggested that this result was due to the difference between the "good" monthly income and the "low" monthly income (Effect size; η2= 0.61), the "good" monthly income and the "average" monthly income (Effect size; η2= 0.60), the "very good" monthly income and the "low" monthly income (Effect size; η2= 0.60). It was seen that the difference was in favor of the "good" and "very good" levels of monthly income.

Sub-problem 7: "Is there a significant relationship between the students' fear of mobile phone deprivation and their life satisfaction levels?"

Table 6. The Results of Correlation Analysis

	Life Satisfaction Level		
Fear of Mobile Phone Deprivation	R	P	N
	-.040	.409	417

As shown in Table 6, there was no statistically significant relationship between the students' fear of mobile phone deprivation and their life satisfaction levels (r = -. 04; p> .05) as suggested by Pearson correlation analysis. Based on this result, it could be stated that the fear of mobile phone deprivation did not have an effect on life satisfaction.

DISCUSSION AND SUGGESTIONS

In this section, the results of the analyses of students' fear of mobile phone deprivation and life satisfaction are evaluated in terms of the sub-problems identified.

When the students' fear of mobile phone deprivation was taken into consideration, it was seen that there was no statistically significant difference between the male and female students. Depending on this result, gender could be said to have no effect on the nomophobia levels of the students. In related literature, Adnan and Gezgin (2016), Apak and Yaman (2019), Dixit et. al (2010) and Minaz and Çetinkaya Bozkurt (2017) reported that there was no significant difference between the students' levels of smartphone dependency when gender was considered. However, Akkuş (2019), Öztürk (2015), Büyükçolpan (2019) and Tavolacci et al. (2015) concluded in their studies that the female students had higher levels of nomophobia when compared to the male students. Moreover, it was reported in another study that especially the female students had fear of losing their smartphone connection, which caused problems in mental and general health and daily life (Öztürk (2015). In line with all these results, there are different research results with respect to the influence of gender on nomophobia. For this reason, there is a need for further research to be conducted to reveal the influence of gender on nomophobia.

When the level of life satisfaction according to gender was considered in the study, it was found that there was no statistically significant difference between the male and female students. Depending on this result, it could be stated that gender had no influence on the students' levels of life satisfaction. In their studies, Chow (2005) and Çivitci (2009) reported that no significant difference between the students' levels of life satisfaction in terms of gender. On the other hand, Balcı and Koçak (2107) found that the life satisfaction levels of the male students were higher than those of the females. In some other studies, Recepoğlu (2013), Gülaçtı and Çiftci (2018) and Şahin et al. (2009) reported that the life satisfaction levels of the female students were significantly higher than those of the male students. In this respect, the finding obtained in the present study regarding the influence of gender on life satisfaction was consistent with the related findings obtained in the studies conducted by Chow (2005) and Çivitci (2009), while the finding differed from those reported by Balcı and Koçak (2107), Recepoğlu, (2013) and Şahin et al. (2009).

In this study, it was found that there was no statistically significant difference between the students' levels of fear of mobile phone deprivation when their class levels were considered. Based on this result, it could be stated that the students' class levels and ages did not have any influence on nomophobia. This result is thought to be due to the fact that the individuals participating in the study were young. It can be stated that most young people have smartphones and mobile internet access and that they can easily adapt to these situations regardless of their gender or class levels. In related literature, there was no significant difference between the students' smartphone addiction levels in terms of the variables of class level and age (Adnan and Gezgin, 2016; Apak and Yaman, 2019; Dixit et al., 2010; Minaz and Çetinkaya Bozkurt, 2017; Yıldırım et al., 2016). However, Gezgin et al. (2017) and Erdem et al. (2017) found that the nomophobic level decreases as class level and age increase. In this respect, the findings obtained in relation to the influence of class level and age on nomophobia were similar to those reported by Adnan and Gezgin (2016), Dixit et al. (2010), Minaz and Çetinkaya Bozkurt (2017) and Yıldırım et al. (2016), while the findings differed from those reported by Gezgin et al. (2017) and Erdem, Türen and Kalkın (2017). These results are thought to be caused by the participant group. This may be because the studies reporting no significant difference between nomophobia levels and age levels were all conducted with university students, and the studies suggesting that there was a significant difference between ages and nomophobia levels were carried out with young people and adult participants. In this respect, more studies could be conducted with the participation of individuals from secondary, high school, university and adulthood levels in order to demonstrate the effects of gender and age on nomophobia.

It was found out in the study that there was a statistically significant difference between the students' levels of life satisfaction when class levels were considered. With respect to the class levels of the students, the life satisfaction scores were found to be the highest in the 9th grade ($\bar{X}$ = 4.93) and lowest in the 10th grade ($\bar{X}$ = 4.48). When the source of the differences between the groups was examined, it was seen that this situation resulted from the difference between the 9th and 10th grade levels. Accordingly, it can be stated that the life satisfaction level scores of the 9th grade students were higher than those of the 10^{th} grade students. Based on this result, it could be stated that the class level and age had an effect on the life satisfaction levels of the students. In addition, it could be stated that these results were the consequences of the general exams executed in our country, the effects of the 10th grade course choices and the parents' expectations. The reason is that the school which the participant group in the present study attended was one which accepts students who have achieved an important success in the student-placement exams executed in the whole country. For this reason, it was thought that the 9th grade students' levels of life satisfaction were higher than those of the 10th grade students because the 9th grade students were happier with a positive psychological mood. In addition, the 10th grade is also an important class level in terms of occupational preferences of students because they are select courses at this class level considering their future professional preferences. When parents' expectations are added to this situation, it could be an important source of stress for students and may decrease their life satisfaction. In literature, Civitçi (2009), Ekici and Balcı (2018), Recepoğlu, (2013) and Şahin and Karabeyoğlu (2010) reported that the level of life satisfaction did not differ depending on the students' ages. Besides, Eryılmaz (2011) found that the students had higher levels of life satisfaction during their adolescence. In this respect, the results obtained in the present

study regarding the effects of the class level and age on life satisfaction were not consistent with those reported by Civitçi (2009), Recepoğlu, (2013), Şahin and Karabeyoğlu, (2010) and Eryılmaz (2011). For this reason, it is appropriate to conduct similar studies with larger groups of participants.

In this study, no statistically significant difference was found between the students' levels of nomophobia with respect to their socioeconomic levels. Depending on this result, it could be stated that the socioeconomic levels of the students had no influence on nomophobia. This result may be due to the fact that the study group included only young people.

In addition, it was found that there was a statistically significant difference between the students' levels of life satisfaction and their socioeconomic levels. In terms of the socioeconomic levels of the students, the highest mean score for life satisfaction was found to belong to the "good" level of monthly income ($\bar{X}$ = 5.12) and the lowest mean to the "low" level of monthly income ($\bar{X}$ = 3.20). As for the source of the differences between the groups, it was seen that this situation resulted from the difference between the "good" monthly income and the "low" monthly income, the "good" monthly income and the "average" monthly income and the "very good" monthly income and the "low" monthly income. It was seen that the difference was in favor of the "good" and "very good" levels of monthly income. Based on this result, the socioeconomic levels of the students could be said to have influence on their life satisfaction levels. This result suggests that the high socioeconomic levels of families increase the life satisfaction levels of their children because young people can meet their basic needs and expectations in line with their interests. In literature, Chow (2005), Hefferon and Boniwell (2011), Sule (2016), Tuzgöl-Dost (2011) and Tümkaya (2011) found that there was a positive relationship between socioeconomic levels and life satisfaction levels. On the other hand, Sahin and Karabeyoğlu (2010) reported that there was no relationship between socioeconomic levels and life satisfaction levels. In this respect, the finding obtained in the present study in relation to the influence of socioeconomic level on life satisfaction was parallel to those reported by Chow (2005), Hefferon and Boniwell, (2011), Sule, (2016), Tuzgöl-Dost, (2011) and Tümkaya (2011) but differed from those obtained by Şahin and Karabeyoğlu, (2010) and Topuz (2013). Therefore, there is a need for further research to be conducted with larger groups of participants.

It was found in the study that there was no statistically significant relationship between the fear of mobile phone deprivation and life satisfaction levels. Based on this result, it could be stated that the students' levels of life satisfaction had no effect on nomophobia. In related literature, Samaha and Hawi (2016) conducted a study on university students and found that smartphone addiction did not have a relationship with life satisfaction. Accordingly, the finding obtained in the present study regarding the relationship between nomophobia and life satisfaction level was supported with the finding reported by Samaha and Hawi (2016). Eren et al., (2014) and Şener (2009), in their study, found that social networks made individuals happy and had positive effects on their life satisfaction levels. Brooks (2015) and Doğan (2016) stated that the individuals who used social networks at work were happy with good levels of psychological well-being and life satisfaction. Kahyaoglu-Süt et al. (2016) suggested that nomophobia negatively affected communication and social life, while Traveler (2017) showed that the students' excessive use of mobile phone had negative influence on their life satisfaction. Several other studies reported that a negative relationship between life satisfaction and electronic media usage, internet addiction and social media usage (Balcı and Koçak, 2107; Batıgün and Kılıç 2011; Demir et al., 2015; Kabasakal, 2015; Mathers et al. 2009; Morsünbül, 2014). Dixit et al. (2010) revealed that nomophobia affected the quality of life negatively because of too much focus on daily chores in daily life. In this respect, the results obtained in the present study in relation to the relationship between nomophobia and life satisfaction level were not consistent with those obtained in studies which reported a positive relationship (Brooks, 2015; Doğan, 2016; Eren et.al., 2014; Şener, 2009) or with those in other studies reporting a negative relationship **(**Balci and Koçak, 2107; Batıgün and Kılıç 2011; Demir et al, 2015; Dixit et al, 2010; Gezgin, 2017; Kabasakal, 2015; Kahyaoglu-Sut et al., 2016; Mathers et al., 2009). For this reason, more studies could be conducted to reveal the effects nomophobia on life satisfaction.

Lastly, further research could be carried out with larger and different study groups by researchers to reveal the relationship between the factors affecting students' nomophobia and life satisfaction and the relationship between nomophobia and life satisfaction. These studies could also be enriched with the use of qualitative research data. In addition, the effects of students' levels of nomophobia on their emotions, behaviours, habits, academic achievement and life satisfaction at school could be investigated. Moreover, students, parents and trainers should be informed about nomophobia, and their awareness of this concept should be raised.

REFERENCE

Adnan, M., & Gezgin, D. M. (2016). Modern Çağın Yeni Fobisi: Üniversite Öğrencileri Arasında Nomofobi Prevalansı. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, *49*(1), 141-158.

Akkuş, E. (2019). Investigation of nomophobia levels of university students in the context of family relations. *Debates on Media & Communication Studies*, 47.

Apak, E. ve Yaman, Ö. M. (2019). Üniversite öğrencilerinde nomofobi yaygınlığı ve nomofobi ile sosyal fobi arasındaki ilişki: Bingöl Üniversitesi örneklemi. *The Turkish Journal on Addictions*, 6, 609–627. http://dx.doi.org/10.15805/addicta.2019.6.3.0078.

Bahi, R.R., & Deluliis, D. (2015). "*Nomophobia*", (Ed.) Yan, Z., *Encyclopedia of Mobile Phone Behavior* (Volumes 1,2&3), IGI Global, Hershey, PA.

Balcı, Ş., & Koçak, M. C. (2017). Sosyal medya kullanımı ile yaşam doyumu arasındaki ilişki: üniversite öğrencileri üzerinde bir araştırma. *İstanbul Ticaret Üniversitesi 1. Uluslar arası İletişimde Yeni Yönelimler Konferansı*, *1*, 34-45.

Batıgün, A. D., & Kılıç, N. (2011). İnternet bağımlılığı ile kişilik özellikleri, sosyal destek, psikolojik belirtiler ve bazı sosyo-demografik değişkenler arasındaki ilişkiler. *Türk Psikoloji Dergisi*, *26*,1-10.

Bragazzi, N. L., & Puente, D. G. (2014). A proposal for including nomophobia in the new DsMV. *Psychology Research and Behavior Management*, *7*, 155-160.

Brandtzæg, P., & Heim, J. (2009). Why people use social networking sites. In A. A. Ozok, & P. Zaphiris (Eds.), *Online communities and social computing* (Vol. 5621, pp. 143-152). Springer Berlin Heidelberg.

Brooks, S. (2015). Does personal social media usage affect efficiency and well-being? *Computers in Human Behavior*, *46*, 26-37.

Burucuoğlu, M. (2017). Meslek Yüksekokulu Öğrencilerinin Nomofobi Düzeyleri Üzerinde Bir Araştırma. *Karabük Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *7*(2), 482-489.

Büyükçolpan, H. (2019). *Üniversite öğrencilerinde nomofobi, bağlanma biçimleri, depresyon ve algılanan sosyal destek.* Yüksek Lisans Tezi, Hacettepe Üniversitesi Eğitim bilimleri Enstitüsü, Ankara.

Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2011). *Bilimsel araştırma yöntemleri*. Ankara: Pegem Yayınları.

Chow, H. P. H. (2005). Life satisfaction among university students in a Canadian Prairie city: A multivariate analysis. *Social Indicators Research*, 70, 139-150.

Çivitci, A. (2009). İlköğretim öğrencilerinde yaşam doyumu: Bazı kişisel ve ailesel özelliklerin rolü. *Uludağ Üniversitesi Eğitim Fakültesi Dergisi*, *22*(1),29-52.

Demir,İ., Peker Özköklü, D., & Aygün Turğut, B. (2015). Ergenlerin Problemli İnternet Kullanımının Yordanmasında Denetim Odağı ve Yaşam Doyumunun Rolü. *Mersin University Journal of the Faculty of Education, 11*(3), 720-731.

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, *49*(1), 71-75.

Dixit, S., Shukla, H., Bhagwat, A., Bindal, A., Goyal, A., Zaidi, A., & Shrivastava, A. (2010). A study to evaluate mobile phone dependence among students of a medical college and associated hospital of central India. *Indian Journal of Community Medicine*, *35*(2), 339.

Doğan, U. (2016). Lise öğrencilerinin sosyal ağ siteleri kullanımının mutluluk, psikolojik iyi-oluş ve yaşam doyumlarına etkisi: Facebook ve Twitter Örneği. *Eğitim ve Bilim*, *41*(183),217-233.

Ekici, F. Y., & Balcı, S. (2018). Okul öncesi öğretmenliği ve çocuk gelişimi öğrencilerinin üstbiliş düzeylerinin ve yaşam doyumlarının incelenmesi. *Yaşam Becerileri Psikoloji Dergisi*, *2*(4), 345-359.

Erdem, H., Türen, U., & Kalkın, G. (2017). Mobil Telefon Yoksunluğu Korkusu (Nomofobi) Yayılımı: Türkiye'den Üniversite Öğrencileri ve Kamu Çalışanları Örneklemi. *Bilişim Teknolojileri Dergisi*, *10*(1), 1-12.

Erdem, H., Kalkın, G., Turen, U., & Deniz, M. (2016). The effects of no mobile phone phobia (nomophobia) on academic performance among undergraduate students. *Suleyman Demirel University. The Journal of Faculty of Economics and Administrative Sciences*, *21*(3), 923-936.

Eren, F., Çelik, İ., & Aktürk, A. O. (2014). Ortaokul Öğrencilerinin Facebook Algısı: Bir Metafor Analizi. *Kastamonu Eğitim Dergisi*, *22*(2), 635-648.

Eryılmaz, A. (2011). Ergen Öznel İyi Oluşu ile Olumlu Gelecek Beklentisi Arasındaki İlişkinin İncelenmesi. *Düşünen Adam Psikiyatri ve Nörolojik Bilimler Dergisi*. *24*, 209-215

Fredrickson, B. L., & Joiner, T. (2002). Positivee motion strigger upward spirals toward emotional well-being. *Psychological Science*, *13,* 172-175.

Gezgin, D. M. (2017). Exploring the influence of the patterns of mobile internet use on university students' nomophobia levels. *European Journal of Education Studies, 3(6), 29-53.*

Gezgin, D. M., & Çakır, Ö. (2016). Analysis of nomophobic behaviours of adolescents regarding various factors. *Journal of Human Science, 13*(2), 2504-2519.

Gezgin, D. M., Şahin, Y. L., & Yıldırım, S. (2017). Sosyal Ağ Kullanıcıları Arasında Nomofobi Yaygınlığının Çeşitli Faktörler Açısından İncelenmesi. *Eğitim Teknolojisi Kuram ve Uygulama*, *7*(1), 1-15.

Gezgin, D. M., Şumuer, E., Arslan, O., & Yıldırım, S. (2017). Nomophobia prevalence among pre-service teachers: A case of Trakya university. *Trakya Üniversitesi Eğitim Fakültesi Dergisi*, *7*(1), 86-95.

Gülaçtı, F., & Çiftci, Z. (2018). Öğrencilerin yaşam doyumu, memnuniyet ve merhamet düzeylerinin incelenmesi. *Pegem Atıf İndeksi*, 499-506.

Hayes, M., Van Stolk-Cooke, K., & Muench, F. (2015). Understanding Facebook use and the psychological effects of use across generations. *Computers in Human Behavior*, *49*, 507-511.

Hefferon, K., & Boniwell, I. (2011). *Positive psychology: Theory, research and applications*. England: McGrawHill

Hong, S. M., & Giannakopoulos, E. (1994). The relationship of satisfaction with life to personality characteristics. *The Journal of Psychology*, *128*(5), 547-558.

Kabasakal, Z. (2015). Life satisfaction and family functions as-predictors of problematic Internet use in university students. *Computers in Human Behavior*, *53*, 294-304.

Kahyaoğlu-Süt, H., Kurt, S., Uzal, Ö., & Özdilek, S. (2016). Effects of smartphone addiction level on social and educational life ın health sciences students. *Euras Journal Fam Med*, *5*(1), 13-19.

Karaca, F. (2017). Üniversite Öğrencilerinin İnternet Bağımlılığı Düzeyleri ile Akıllı Telefon Kullanma Alışkanlıkları Arasındaki İlişkilerin İncelenmesi. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, (44), 581-597.

Karasar, N. (2007). *Bilimsel Araştırma Yöntemleri* (17. baskı). Ankara: Nobel Yayıncılık.

King A. L. S., Valença A. M., Silva A.C., Sancassiani, F., Machado, S., & Nardi, A.E. (2014). "Nomophobia": Impact of cell phone use interfering with symptoms and emotions of individuals with panic disorder compared with a control group. *Clinical Practice and Epidemiology in Mental Health, 10*, 28–35.

Köker, S. (1991). *Normal ve sorunlu ergenlerin yaşam doyumu düzeyinin karşılaştırılması.* Yayımlanmamış Yüksek Lisans Tezi, Ankara Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara.

Lepp, A., Barkley, J. E., & Karpinski, A. C. (2014). The relationship between cell phone use, academic performance, anxiety, and satisfaction with life in college students. *Computers in Human Behaviour*, *31*, 343-350.

Mathers, M., Canterford, L., Olds, T., Hesketh, K., Ridley, K., & Wake, M. (2009). Electronic media use and adolescent health and well-being: a Cross-sectional community study. *Academic Pediatrics, 9*(5), 307-314.

Minaz, A., & Çetinkaya Bozkurt, Ö. (2017). Investigation of university student's smartphone addiction levels and usage purposes in terms of different variables**.** Mehmet Akif Ersoy Üniversitesi sosyal bilimler enstitüsü dergisi, *9*(21), 268-286.

Morsünbül, Ü. (2014). The association of internet addiction with attachment styles, personality traits, loneliness and life satisfaction. *Journal of Human Sciences*, *11*(1), 357-372.

Özer, M., & Karabulut, Ö. Ö. (2003). Yaşlılarda yaşam doyumu. *Geriatri*, *6*(2), 72-74.

Öztürk, U. C. (2015). Bağlantıda Kalmak Ya Da Kalmamak İşte Tüm Korku Bu: İnternetsiz Kalma Korkusu ve Örgütsel Yansımaları. *Journal of International Social Research*, *8*(37).

Recepoğlu, E. (2013). Öğretmen adaylarının yaşam doyumları ile öğretmenlik mesleğine ilişkin tutumları arasındaki ilişkinin incelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, Özel*, (1), 311-326.

Salehan, M., & Negahban, A. (2013). Social networking on smartphones: When mobile phones become addictive. *Computers in Human Behaviour*, *29*(6), 2632-2639.

Samaha, M., & Hawi, N. S. (2016). Relationships among smartphone addiction, stress, academic performance, and satisfaction with life. *Computers in Human Behaviour*, *57*, 321-325.

Satıcı, S. A., & Uysal, R. (2015). Well-being and problematic Facebook use. *Computers in Human Behaviour*, *49*, 185-190.

Soni, Ruchi-Upadhyay., & Ritesh-Jain, Mahendra. (2017). Prevalence of smartphone addiction, sleep quality and associated behaviour problems in adolescents. *International Journal of Research in Medical Sciences*, no:5, (515-519).

Süler, M. (2016). *Akıllı telefon bağımlılığının öznel mutluluk düzeyine etkisinin çeşitli değişkenler açısından incelenmesi*. Sakarya üniversitesi eğitim bilimleri enstitüsü, Yüksek Lisans Tezi, Sakarya.

Şahin, H., & Karabeyoğlu Akman, Y. (2010). The well-being of university students who have lived abroad: The case of Hacettepe University. *Eurasian Journal of Educational Research*, *40*, 171-187.

Şahin, F. S., Zade, B. M., & Direk, H. (2009). Öğretmen adaylarının öğretmenlik mesleğine yönelik tutum ve yaşam doyum düzeyleri. *Ulusal Eğitim Bilimleri Kurultay'ında sunulan bildiri (01-03. Ekim),* Ege Üniversitesi, İzmir.

Şener, G. (2009). Türkiye'de Facebook kullanımı araştırması. *XIV. Türkiye'de İnternet Konferansı*, 12-13.

Tandoc, E. C., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is facebooking depressing? *Computers in Human Behavior*, *43*, 139-146.

Tavolacci, M. P., Meyrignac, G., Richard, L., Dechelotte, P., & Ladner, J. (2015). Problematic use of mobile phone and nomophobia among French college students. *The European Journal of Public Health*, *25*(3), 206.

Tuzgöl-Dost, M., (2006). Subjective well-being among university students. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, *31*, 188.

Tümkaya, S. (2011). Türk üniversite öğrencilerinde öznel iyi oluşu yordayan sosyodemografik değişkenler ve mizah tarzları. *Eğitim ve Bilim, 36*(160), 158-170.

Yıldırım, C., Sumuer, E., Adnan, M., & Yıldırım, S. (2016). A growing fear: Prevalence of nomophobia among Turkish college students. *Information Development*, 32(5), 1322-1331.

Yıldırım, C., & Correia, A. P. (2015). Exploring the dimensions of nomophobia: Development and validation of a self-reported questionnaire. *Computers in Human Behaviour*, *49*, 130-137.