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INVESTIGATION OF THE RELATIONSHIP BETWEEN NOMOPHOBIA AND ANXIETY AMONG UNDERGRADUATE HEALTH SCIENCES STUDENTS

Nurgül KARAKURT[1], Hatice DURMAZ[2], Meltem ORAL[3]

ABSTRACT

Objective: *The aim of the study was to investigate the relationship between nomophobia and the level of anxiety of undergraduate health sciences students.*

Method: *Descriptive and correlational research design was used in the study. A Convenience sampling method was used for selection. Student volunteers (n = 1299) who met the study criteria were included in the study.*

Results: *Of the students, 45.3% reported using smartphones for more than 5 hours a day. 32.2% reported checking their phones for more than 40 times a day. 54.3% indicated checking their phones first thing in the morning and 56.4% right before going to bed. The most common reason for using the phone was to access social media and the least common reason was shopping. 41.3% of the students thought that they had smartphone dependency. 63% of them said they have forgotten their phones somewhere at some point. 69.3% of the students reported feeling anxious due to forgetting their phones at some place. The mean score of the students for the Nomophobia Scale was 84.31±29.01, the mean score of the State Anxiety Scale was 44.22±11.37 and the mean score of the Trait Anxiety Scale was 46.39±9.58. The results of the study indicated that there was a significant relationship between nomophobia and anxiety (p <0.01). Further analysis revealed that the mean state and trait anxiety scores of the students with absence of nomophobia and mild level of nomophobia were significantly lower than those with moderate level and severe nomophobia. Therefore, there was a positive correlation between the average mean score of the Nomophobia Scale and the mean score of the State-Trait Anxiety Scale (p <0.01).*

Conclusion: *Smartphone dependency appears to be associated with increased anxiety among undergraduate health sciences students.*

Keywords: *Mental health; Anxiety; Phobic disorders; Dependency*

Sağlık Hizmetleri Meslek Yüksekokulu Öğrencilerinde Nomofobi ile Kaygı Düzeyi Arasındaki İlişkinin İncelenmesi

ÖZET

Amaç: *Araştırma, Sağlık Hizmetleri Meslek Yüksekokulu'nda eğitim gören öğrencilerin nomofobi ile kaygı düzeyleri arasındaki ilişkiyi incelemektir.*

Yöntem: *Çalışma tanımlayıcı niteliktedir. Araştırma evrenini Sağlık Meslek Yüksekokulu'nda (SHMYO) eğitim gören öğrenciler oluşturmaktadır. Örneklem seçimine gidilmemiş olup, araştırmaya alınma kriterlerini taşıyan öğrenciler (n=1299) oluşturmaktadır.*

Bulgular: *Akıllı telefon kullanımı ile ilgili sorulan sorulardan günde 5 saatten fazla telefonunu kullananların %45,3, gün içinde 40'tan fazla ekrana bakanların %32,2, sabah uyanır uyanmaz telefonunu kontrol edenlerin %54,3, yatmadan hemen önce bakanların ise %56,4 oranında olduğu saptanmıştır. Telefon kullanma nedeni olarak en fazla sosyal medya, en az ise alışveriş yapma tercih edilmiştir. Öğrencilerin %41,3'ü bağımlı olduğunu düşünürken, %63'ü telefonunu herhangi bir yerde unuttuğunu, %69,3'ü ise telefonu unuttuğunda kaygı yaşadığını belirtmiştir. Öğrencilerin Nomofobi Ölçeği toplam puan ortalaması 84,31±29,01, Durumluk Kaygı Ölçeği toplam puan ortalaması 44,22±11,37 ve Süreklilik Kaygı Ölçeği toplam puan ortalaması 46,39±9,58'dir. Nomofobinin kesme noktalarına göre değerlendirildiğinde Durumluk-Süreklilik Kaygı Ölçeği arasında anlamlı fark olduğu saptandı (p<0,01). Yapılan ileri analizde durumluk ve süreklilik kaygıda farkın nomofobisi olmayan ve hafif düzeyde olanlardan kaynaklandığı belirlendi. Nomofobi Ölçeği toplam puan ortalaması ile Durumluk-Süreklilik Kaygı Ölçeği toplam puan ortalaması arasında pozitif yönde anlamlı ilişki bulunmuştur (p<0,01).*

Sonuç: *Öğrencilerin akıllı telefon bağımlılık düzeyleri arttıkça hem durumluk hem de süreklilik kaygı puanları da artmaktadır.*

Anahtar Kelimeler: *Akıl sağlığı; Anksiyete; Fobik Bozukluklar; Bağımlılık*

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[1]Erzurum Teknik Üniversitesi, Sağlık Bilimleri Fakültesi, Erzurum, Türkiye

[2] Atatürk Üniversitesi, Hemşirelik Fakültesi, Erzurum, Türkiye

[3]Atatürk Üniversitesi, Sağlık Hizmetleri Meslek Yüksekokulu, Erzurum, Türkiye

Sorumlu yazar: Meltem Oral, e-mail: meltem_oral@yahoo.com

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INTRODUCTION

Since the concept of the Internet entered individuals' lives, many products, services, and concepts have been introduced and this has made tremendous changes in both people's work and private lives. The latest versions of mobile phones which have combined the features of phones and computer systems in one device have entered into the lives of users around the same period and since then the number of users has been increasing day by day (Erdem et al., 2017).

The underlying reason for the popularity of smartphones in human life can be explained by the opportunity they provide for being able to do most of the daily activities on a single device. These devices offer a mobile and integrated platform for numerous activities such as voice call, texting, sending/receiving electronic mails, planning appointments, surfing and online shopping over the Internet, spending time on social media, searching information, playing games, watching videos, listening to music, reading the news, taking pictures/videos, editing/uploading pictures and videos, GPS, navigation/directing finding and video conference (Takao et al., 2014).

Smartphones bring countless conveniences to the lives of individuals. Nevertheless, problems such as spending too much time on these devices, attaching too much value and importance to them, and addiction have emerged along with smartphones. Many studies, have revealed that smartphone addiction creates various physical and mental problems (Pavithra et al., 2015; Gezgin et al., 2017; Kaur and Sharma, 2015; Broughton, 2015; Tamura et al., 2017). Also, newly defined phobias and psychological problems appear because of the problematic use of smart devices (King et al., 2013). Nomophobia is one of these problems.

Background

Nomophobia is known as a disorder of modern times that has been attempted to be defined as nervousness and anxiety stemming from the deprivation of virtual communication tools such as mobile phones, tablets and personal computers (King et al., 2013). "Nomophobia", which is derived from the expression "no mobile phone phobia" in English (King et al., 2013), is named as "the fear of being without one's smartphone" in Turkish in its most comprehensive sense. Nowadays, smartphones have replaced mobile phones and they provide numerous remarkable possibilities and being hooked on them is said to be the reason for this fear.

A research on mail management which was conducted in England in 2008 introduced the idea of nomophobia to the literature. (SecurEnvoy, 2012). The findings of the study indicated that more than half of the 2100 smartphone users who participated in the study suffer from the phobia. More than half of the participants reported that they never turned off their smartphones and checked whether their smartphones were in good working order. The participants of the study also reported checking their smartphones every five minutes to see if they had any missed calls or messages. Another study conducted on 1000 individuals in England reported that 66% of the sample suffered from nomophobia. The majority of the participants expressed that they took their smartphones with them wherever they went and that they kept them somewhere near their beds while they were sleeping (SecurEnvoy, 2012).

The findings of a research conducted in France on 1500 mobile phone users in 2012 by Mingle Company, demonstrated that 22% of the participants reported not being able to spend a single day without their mobile phones and that this rate went up to 34% in the 15-19 age group (Betoncu, 2019). Only 29% of the participants said that they could be without their mobile phones for more than 24 hours, but this would be a very difficult situation, while 49% expressed this would not create a problem for them. Research shows that smartphones waste people's time away, but nomophobia carries greater risks for individuals. A meta-analysis on the subject demonstrated that that nomophobia has negative effects on stress, anxiety, personality, self-esteem, academic performance and mental health (Rodríguez-García et al., 2020).

The research conducted on this topic indicates that nomophobia has been spreading at an alarming rate all over the world as an important psychological problem. It is common to see an increase in the number of university students who are unaware of their surroundings due to spending too much time on their smartphones. In addition to affecting academic life negatively, nomophobia prepares the ground for the development of certain psychiatric problems such as addiction and anxiety. Leung (2008) suggests that personal characteristics such as leisure boredom, sensation seeking, and self-esteem as well as technological devices can create a catalyzing effect in individuals' development of obsessive and addictive behavior. King and colleagues (2014) conducted a study in Brazil on the routine use of mobile phones. The researchers compared patients with panic disorder and agoraphobia receiving treatment to a control group of healthy volunteers. The results of the study indicated that the participants with panic disorder who were separated from their smartphones displayed a significantly higher degree of anxiety, tachycardia, irregular breathing, trembling, panic, fear, and depression in comparison to the control group. Rodríguez-García and colleagues (2020) recently conducted a systematic literature review on nomophobia. The findings suggested that nomophobia negatively affects anxiety, stress, personality, self-esteem, academic performance, and other physical and mental health problems. Some mental disorders can precipitate nomophobia also and vice versa. These emerging conditions are sometimes caused by anxiety, and sometimes the anxiety occurs as a result.

Anxiety, which is defined as a situation in which distress, worry, and depression emotions emerge in various situations where the individual feels under threat accompanied by certain physical reactions, also prepares the ground for many psychiatric problems (Rodríguez-García et al., 2020; Öztürk, 2016). Özgüven et al. (2001) in a study examined the psychological problems of university students, it was found that 68% of the students had extreme anxiety.

Based on the above research findings, the current study aimed at investigating the relationship between nomophobia and anxiety among undergraduate health sciences students in Turkey.

METHODS

Design, Participants and Procedures

A descriptive correlational research design was used in the study. The data for the current study were collected from the

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students between May-October 2019 through self-report questionnaires. The participants were first and second-year students aged 20-26 years. The study was conducted with 1299 of the 2620 requested students who met the inclusion criteria of using smartphones and not having been diagnosed with a mental illness. The current study tested the following research questions:

RQ1.What is the nomophobia level of undergraduate health sciences students?

RQ2.What is the anxiety level of undergraduate health sciences students?

RQ3. Is there a significant relationship between undergraduate health sciences students' nomophobia and anxiety levels?

Instruments

All the students were asked to complete a socio-demographic information form, the Nomophobia Questionnaire and the State-Trait Anxiety Inventory.

Sociodemographic Information Form

The socio-demographic information form was prepared as a result of a literature review on the topic and it consisted of 14 questions that inquired about the students' age, gender, department, year of study and smartphone usage characteristics (Kang, 2014; King, 2013; Yıldırım, 2015).

Nomophobia Questionnaire (NMP-Q)

The Nomophobia Questionnaire (NMP-Q) was developed by Yıldırım and Correira in 2015 to measure individuals' smartphone addiction. A 7-point Likert Scale was used for rating the items in the questionnaire. The NMP-Q has 20 items with 4 dimensions of nomophobia. These dimensions are 'not being able to communicate', 'losing connectedness', 'not being able to access information' and 'giving up convenience'. The validity and reliability of the Turkish version of the questionnaire were established by Yıldırım et al. (2016). The Cronbach's alpha coefficient for the Turkish version of the NMP-Q used in this study was .94.

State-Trait Anxiety Inventory

State-Trait Anxiety Inventory, which was developed by Spielberger et al. (1983) to identify state and trait anxiety levels. The inventory consists of 20 items evaluating trait anxiety and 20 items evaluating state anxiety. The State Anxiety Inventory is designed to determine how the individual feels at a given moment and under certain conditions, while the Trait Anxiety Inventory is designed to determine how the individual feels in general, regardless of the circumstances and conditions of the individual. A 4-point Likert Scale was used for rating the items in the inventory. The reliability and validity of the Turkish version of the inventory were established by Öner and LeCompte (1982). The Cronbach's alpha coefficient for the Turkish version of the State-Trait Anxiety Inventory used in this study was .89.

Data Analysis

All analyses were carried out by using the IBM SPSS 20.0 package software. For statistical analysis, number, mean, percentage distributions, standard deviation, Pearson Correlation, and One-Way ANOVA analysis were used to evaluate the data. LSD analysis was performed for further within-group analyses.

RESULTS

The average age of the participants was 20.41 ± 1.91 (min: 18, max: 41). 73.7% of the students were female, and 96.1% were single. Univariate statistics describing the socio-demographic characteristics of the sample are provided in Table 1.

Table 1. Sociodemographic Characteristics of Participants

Baseline characteristic	Frequency (n)	Percentage (%)
Gender		
Female	957	73.7
Male	342	26.4
Marital Status		
Single	1248	96.1
Married	35	2.7
Divorced	16	1.2
Class		
First year	732	56.4
Second year	567	43.6
Living Arrangement		
Dormitory	799	61.5
Student flat	120	9.2
Living with family	335	25.8
Other	45	3.4

In terms of students' habits of smartphone usage the rate of those who used their phones for more than 5 hours per day was 45.3%, the rate of those who checked their phones for more than 40 times during the day was 32.2%. Approximately 54% of the participants reported checking their phones as soon as they woke up, and 56.4% of them indicated checking their phones just before going to bed. Most students reported using their phones for social networking. Using the phone for shopping was less popular among the students. 41.3% of the students thought that they were addicted to their phones, while 63% expressed that they left their phone somewhere at some point, and 69.3% reported experiencing anxiety when they left their phone somewhere. The smartphone habits of the students are presented in Table 2.

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Table 2. Smartphone habits of the participants

Variable		Frequency (n)	Percentage (%)
Smartphone usage time each day	Less than 1 hour	36	2.8
	1-3 hours	234	18
	3-5 hours	441	33.9
	More than 5 hours	588	45.3
Number of times the smartphones checked each day	1-10 times	103	7.9
	11-20 times	247	19
	21-30 times	293	22.6
	31-40 times	238	18.3
	41 times and over	418	32.2
Checking the smartphone first thing in the morning	As soon as waking up	705	54.3
	Within half an hour	280	21.6
	Within 1 hour	125	9.6
	Before leaving home	90	6.9
	While going to school	84	6.5
	Other	15	1.2
Checking the smartphone before going to bed	Right before going to bed	733	56.4
	Half an hour before going to bed	244	18.8
	An hour before going to bed	172	13.2
	All night long	132	10.1
	Other	18	1.4
Reasons for smartphone usage	Make a call	279	21.5
	Send a message	67	5.2
	For using social media	599	46.1
	To communicate with family	123	9.5
	To communicate with friends	82	6.3
	Research on the internet	22	1.7
	Play games	30	2.3
	Listen to music	79	6.1
	Shopping	5	0.4
	Reading News	6	0.5
	Other	7	0.5
Do you think you're addicted to your smartphone	Yes	537	41.3
	No	341	26.3
	Partially	421	32.4
Have you forgotten your phone at some place?	Yes	818	63
	No	481	38
Do you get anxious when you forget your phone at some place?	Yes	900	69.3
	No	399	30.7

The total mean score of the students obtained from the Nomophobia Scale was 84.311±29.01, the total mean score obtained from State Anxiety Scale was 44.22±11.37 and the total mean score from the Trait Anxiety Scale was 46.39±9.58. Descriptive statistics of the Nomophobia Scale and its dimensions and the State-Trait Anxiety Scale are provided in Table 3.

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Table 3. The average mean scores of students for Nomophobia Questionnaire and State-Trait Inventory

	Mean	SD	Minimum	Maximum
State Anxiety Inventory	44.22	11.37	20	85
Trait Anxiety Inventory	46.39	9.58	20	110
Nomophobia Questionnaire	84.31	29.01	20	140
Not being able to access information	18.37	6.89	4	28
Giving up convenience	20.22	8.38	5	35
Not being able to communicate	27.83	10.31	6	42
Losing connectedness	17.87	9.43	5	35

A positive and significant relationship was found between all the dimensions and total mean score of the Nomophobia Questionnaire and the State-Trait Anxiety Inventory total mean score ($p<0.01$). When the data were evaluated according to the cut points of Nomophobia, a significant difference was identified with the State-Trait Anxiety Inventory ($p<0.01$). Table 4 demonstrates the descriptive statistics and the correlations between the study variables.

Table 4. Descriptive Statistics and Correlations between the Study Variables

Variable		State Anxiety Inventory	Trait Anxiety Inventory
Nomophobia Questionnaire Total	r	.211**	.281**
	p	.000	.001
Not being able to access information	r	.084**	.158**
	p	.002	.001
Giving up convenience	r	.222**	.291**
	p	.000	.001
Not being able to communicate	r	.149**	.190**
	p	.000	.001
Losing connectedness	r	.228**	.281**
	p	.000	.001

** Correlation is significant at the 0.01 level

Further analysis revealed that the mean state and trait anxiety scores of the students with the absence of nomophobia and a mild level of nomophobia were significantly lower than those with moderate level and severe nomophobia. Therefore, there was a positive correlation between the average mean score of the Nomophobia Scale and the mean score of the State-Trait Anxiety Scale ($p <0.01$).

DISCUSSION

Smartphone addiction named as nomophobia poses great risks, especially for young individuals. The findings of several studies demonstrate that nomophobia leads to some psychological problems such as fatigue, stress, attention deficit, personality disorder, anxiety and depression in addition to physiological problems such as headache, vision problems, deformation in finger structure, body posture problems and sleep disorder (Pavithra et al., 2015; Lee et al., 2018; Gezgin et al., 2017; Kaur & Sharma, 2015; Broughton, 2015; Tamura et al., 2017). The results of this study were discussed below in line with the relevant literature.

The findings of the current study conducted on university students indicate that the students had a moderate level of nomophobia. Prior research has also demonstrated that smartphones were largely used by university students and that the prevalence of nomophobia was higher in young individuals (Lee, 2014; Öz & Tortop, 2018; Yıldırım, 2015). In the current study, 45.3% of the students declared that they used their smartphones for more than 5 hours and 32.2% of them claimed to check their smartphones more than 40 times a day. Among the participants, 54.3% reported checking their phones as soon as they woke up, and that 56.4% claimed to check their phones just before they went to bed. In their study, Kanmani et al. (2017) found that the rate of individuals who used their phones for more than 5 hours was 43%. In the same study, it was reported that 30% of the individuals checked their phones more than 50 times a day. Different results have been obtained from the studies conducted on the subject in Turkey. The results of a study conducted on midwifery students by Kartal (2019), indicated that the rate of those who used their phones for 4 to 6 hours per day was 44.2% and that the rate of those who checked their phones more than 50 times a day was 13.3%. Akıllı and Gezgin (2016) in a study looked at the relationship between nomophobia levels and different behavior patterns of university students. They found that 92.4% of the students checked their phones before going to bed and that 83.6% checked their phones as soon as they woke up. Hoşgör and colleagues (2017) in a study conducted with

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the university students found that the rate of the students who checked their phones as soon as they woke up was 81.9% and 94.3% of the students indicated spending time on their phones before going to bed. The findings of the current study appear to be consistent with the findings of other international studies while some differences have been observed in regards to the findings of other studies conducted in Turkey on this subject. It is noteworthy that the findings of the studies conducted with students studying in various programs other than health sciences have higher scores. This difference is believed to have stemmed from the fact that students studying health sciences have high levels of awareness about general health issues. Although the findings from the international studies indicate lower scores than the programs providing education other than health sciences in Turkey, their results are consistent with the results of the current study. This may be because the concept of nomophobia has been introduced earlier in other countries than in Turkey as well as due to some educational differences.

Another result of this study was that most students reported using their phones for social networking. Approximately 41% of the students thought that they were addicted to their smartphones, while almost 70% claimed that they experienced anxiety when they forgot their phone at someplace. A published report on the use of social media by Clement (2019) pointed out that; approximately 2.65 billion people were using social media worldwide in 2018. Kemp (2020) stated that As of January 2020, there are 54 million social media users in Turkey and between April 2019 and January 2020 the number of social media users in Turkey increased by 2.2 million (+4.2%). Although globalization and developments in technology have made our lives easier, it also has negative effects on face-to-face interaction. Time limitations, distances and the effect of new trends among youth such as being liked and being informed about everything may have increased the use of smartphones and therefore may have prepared the ground for the development of nomophobia. The current study appears to have similar results with the findings of studies carried out in other countries. Salehan & Negahban (2013) in a study found out that social media usage is a factor that increased the use of smartphones. Sha et al. (2018) claimed that social media platforms such as Facebook and WhatsApp are basic drivers of smartphone utilization. Social media have become the easiest way of communication among youth. Therefore, being away from their smartphones can cause young individuals to experience anxiety. In fact, in some studies, it was reported that individuals who do not have access to their phones experience psychological problems such as anxiety and nervousness (Bragazzi & Del Puente, 2014; Cheever et al., 2014). The results of a study conducted by Emanuel et al. (2015) with university students demonstrated that almost half of the students described themselves as extremely addicted to their phones.

The findings of studies conducted on this topic in Turkey indicated that students used smartphones for social media, assignments, research and following the news (Demirci et al., 2014; Kartal, 2019). The results of this study are similar to those of international and national studies. With the presence of the Internet in our lives, the world has become smaller. The increase in the level of education of citizens in Turkey and providing the students with tablets starting from elementary school have increased the educational level while opening the gates to social media. Thus, the similarity between the results is an expected situation. However, not all smartphone users are nomophobic.

According to the findings of this study, the total means score obtained from the Nomophobia Questionnaire was 84.31±29.01, which indicates a moderate degree of nomophobia. The total means score for the State Anxiety Scale was 44.22±11.37, and the total means score for the Trait Anxiety Scale was 46.39±9.58. These values indicate that both state and trait anxiety levels of the students related to nomophobia were close to a moderate level.

Although studies conducted in the international arena show different findings, it was found that nomophobia is high in medical and nursing students in general (Farooqui et al., 2018; Bartwal & Nath, 2019; Aguilera-Manrique et al., 2018, Gutiérrez-Puertas, 2019). The results of a study conducted by Gutiérrez-Puertas et al. (2019) indicated that the level of nomophobia was found to be high in nursing students. Bartwal & Nath (2019) conducted a study with with medical students and found that the 67.2% of the students had moderate nomophobia. In a study conducted with a large sample group in India, it was found that nomophobia was prevalent in the Indian society but not that alarming to recommend a digital detox (Kanmani et al. 2017). The results of another study conducted by Dixit et al. (2010) in India revealed that 39.5% of the students were diagnosed with nomophobia. The reason why there is a difference between the results of international studies and this study may be due to the cultural factors, sample differences and the level of use of technology in medical and nursing education of different countries.

Different results have been obtained in the studies conducted on the subject in Turkey. In general, the results of the studies which had sample groups other than health-related fields, the level of nomophobia was found to be higher than average or high (Burucuoğlu, 2017; Hakkari, 2018; Kocabaş & Korucu, 2018). On the other hand, in a study conducted on midwifery students by Kartal (2019), the total means score of NMP-Q was 74.22±22.21. The results of this study coincide with our findings. The different results obtained in the studies conducted across Turkey are believed to result from sampling differences. Students who study in health sciences programs can have more knowledge about the negative impact of smartphones on health. Besides, courses on smartphone and internet addiction are available in the curriculum of some health sciences programs. The difference in the level of nomophobia among the studies may be due to these factors.

Another finding of this study was that a positive and significant relationship was found between all sub-dimensions and total means score of the Nomophobia Questionnaire and the State-Trait Anxiety Inventory. This is to say that as the level of nomophobia increases so does the level of anxiety. Nomophobia can lead to many problems in the young population since the use of smartphones is widespread among them. Sleep disorders, deformation in finger structure, fatigue, attention deficit, indifference to the environment, stress and anxiety are some of these problems (Pavithra et al., 2015; Gezgin et al., 2017; Kaur & Sharma, 2015; Broughton, 2015). Nomophobic individuals are described as individuals whose anxiety and worry levels increase when they cannot have access to their phones (Bragazzi & Del Puente, 2014). Augner and Hacker (2012) and Hong, Chiu & Huang (2012) in their

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study found that problematic phone use was associated with some psychiatric problems such as anxiety, introversion, and depression. Kanmani et al. (2017) in a study found that 20% of the population felt nervous when they were not online and that inability to access their phones created anxiety in the physical and psychological problems in individuals. Globalization has turned the world into a small village. Therefore, it is an expected consequence that smartphones, which enable common applications to be used in different languages all over the world, lead to similar reactions in the youth.

Nomophobia, which has recently begun to be studied in Turkey, has largely been examined at a conceptual level, and its impact on people's lives has not been studied yet. Yıldırım & Correra (2015) are the first researchers to study the prevalence of nomophobia in Turkey. Öz & Tortop (2018), in a study, investigated the relationship between personality types and nomophobia among university students. The results of the study demonstrated that there was a negative significant correlation between the students' nomophobic status and their emotional balance personality characteristics. The impact of nomophobia on anxiety is understandable considering that the youth continuously want to stay informed about their environment and the world, and would like to be validated with 'likes' in social media. Considering that approximately 97.6% of the students in Turkey use smartphones (Yusufoğlu, 2017), it is believed that nomophobia will pose a threat to the physical and mental health soon.

CONCLUSION

The findings of this study demonstrated that the undergraduate students studying in the field of health sciences has moderate level of nomophobia and that there was a positive and significant relationship between nomophobia and anxiety. As addiction to smartphones intensifies, the youth experience a higher level of anxiety. It is a fact that smartphones, which are used extensively both in business life and almost in all parts of the social life, pose great risks for the individuals and especially the youth. In Turkey, it is still unknown as to what degree nomophobia affects young people psychologically or what other problems it creates in the lives of individuals. The use of smartphones, which are an integral part of our lives, is an indispensable choice. Therefore, we suggest that this topic is studied with different sample groups and different variables.

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individuals. Similarly, Lepp, Barkley &Karpinski (2014) found that cell phone use was positively related to anxiety. The findings of this study appear to be consistent with the international literature. Studies that have been conducted in different cultures indicate that nomophobia creates similar

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