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INVESTIGATION OF NOMOPHOBIA LEVELS OF UNIVERSITY STUDENTS ACCORDING TO INTELLIGENT PHONE USE: A CASE OF THE COMU FACULTY OF EDUCATION

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Abstract

The purpose of this research is to determine the nomophobia level of education faculty students according to their personal characteristics and intelligent phone usage status. The sample group of the study consisted of 429 students of the Canakkale Onsekiz Mart University Education Faculty Department. Nomophobia scale and demographics data questionnaire form were used in the data collection process. It was concluded that the smartphone addiction points of the students differed according to gender, education department, general arithmetic grade point average, daily and instant use time, pre-sleep use, and the availability of a bedside telephone during the sleep process. Accordingly; women and the participants having education at the pre-school education department, having low academic achievement scores, checking frequently smartphones, carrying their charge device/power bank besides, having the habit of using smartphones before sleep and leaving smartphones at the bedside during sleep process had higher addictive scores.

Keywords: Nomophobia, Intelligent Phone, Phone Addiction

ÜNİVERSİTE ÖĞRENCİLERİNİN NOMOFOBİ DÜZEYLERİNİN AKILLI TELEFON KULLANIM DURUMUNA GÖRE İNCELENMESİ: ÇOMÜ EĞİTİM FAKÜLTESİ ÖRNEĞİ

Özet

Bu araştırmanın amacı, kişisel özelliklerine ve akıllı telefon kullanım durumlarına göre eğitim fakültesi öğrencilerinin nomofobi seviyelerini belirlemektir. Araştırmanın örneklem grubu, Çanakkale Onsekiz Mart Üniversitesi Eğitim Fakültesi Bölümü'ndeki 429 öğrenciden oluşmaktadır. Veri toplama sürecinde nomofobi ölçeği ve demografik veri anket formu kullanılmıştır. Öğrencilerin akıllı telefon bağımlılık puanlarının cinsiyet, öğrenim görülen bölüm, genel aritmetik not ortalaması, günlük ve anlık kullanım süresi, uyku öncesi kullanım, uyku sürecinde başucunda telefon bulundurma durumuna göre farklılaştığı sonucuna ulaşılmıştır. Buna göre kadınların, okul öncesi öğretmenliği öğrencilerinin, akademik başarı puanı düşük olan öğrencilerin, sık kontrol edenlerin, yanında şarj aleti/güç birimi bulunduranların, uyku öncesi akıllı telefon kullanma alışkanlığı olanların ve uyku sürecinde başucunda akıllı telefon bulunduranların bağımlılık puanları daha yüksektir.

Anahtar sözcükler: Nomofobi, Akıllı Telefon, Telefon Bağımlılığı

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1. INTRODUCTION

A new era has begun with the presence of mobile phones, especially smartphones. Previously, computers were at the center of our lives, and later, with the widespread use of the internet, smartphones have settled at the center of our lives (Adnan & Gezgin, 2016; Brown & Duguid 2017). As functionality and capabilities continuously increase, so do the problems associated with smartphones and their negative impact on individuals (Gokcearslan, Mumcu, Haslaman & Cevik, 2016; Hong et al., 2012 Yildirim, Sumuer, Adnan & Yildirim, 2016). Researchers have examined various problems emanating from mobile phone use, including excessive use of smartphones (Lin et al., 2015; Pourrazavi et al., 2014; Tamura, Nishida, Tsuji & Sakakibara 2017), smartphone dependency (Lee et al., 2016; Li & Lin, 2019), smartphone addiction (Chou & Chou, 2019; Hong et al., 2012; Samaha & Hawi, 2016) and so on. Recently, another problem, nomophobia, has attracted the attention of researchers. (Arpaci 2019; Gezgin, 2017; Jena, 2015; Pavithra, Madhukumar & Mahadeva, 2015; Yildirim and Correia, 2015; Yildirim, Sumuer, Adnan & Yildirim, 2016).

Nomophobia is an acronym for no mobile phone phobia. It is the fear of being unable to use one's mobile phone or being unreachable through one's mobile phone and refers to the feelings of discomfort or anxiety experienced by individuals when they are unable to use/disconnect to their mobile phones or utilize the affordances these devices provide (Argumosa-Villar, Boada-Grau & Vigil-Colet, 2017; Datta, Nelson & Simon, 2016; King et al., 2013; Yildirim, Sumuer, Adnan & Yildirim, 2016;). The case report by King, Valença & Nardi (2010), considered one of the first research studies on nomophobia, describes nomophobia as a 21st-century disorder connected with new technologies. King et al. (2013) define nomophobia as a condition denoting "discomfort or anxiety when out of the mobile phone (MP) or computer contact. It is the fear of becoming technologically incommunicable, distant from the MP or not connected to the Web".

Nomophobia can affect individuals' daily lives in a negative way both physically and psychologically (Gezgin, Çakır; 2016; Gokcearslan, Mumcu, Haslaman & Cevik, 2016) In nomophobia, individuals start to feel anxious in a variety of situations: forgetting it anywhere, running out of the battery, or when the mobile phone loses connection signal (Gligor & Mozoş, 2019; Pinheiro, 2016). These anxiety situations can reduce individuals' motivation to focus on their daily routines. (Dixit et al., 2010).

Nomophobia causes some problems and symptoms of these problems are as following:
• Feeling insufficient or emptiness without a mobile phone
• Checking his/her mobile phone like an obsessive even having it with themselves
• Feeling desperate when the battery ran out of
• Fear of forgetting the mobile phone somewhere, breaking down it or not to able to use it (Choi, 2019; Yang, Ryu & Choi, 2019). There are also some anxiety symptoms as dizziness, heartthrob, lack of breathability, stomach cramps (Gezgin et al, 2017).

In an attempt to investigate the prevalence of nomophobia in the UK, 53% of mobile phone users in the UK suffered from nomophobia with the feeling anxious and fear due to mobile phone loss, running out of the battery, and credit, and signal loss (Mail Online, 2008). In another study conducted with 1.000 participants, it is reported that the percentage of individuals with nomophobia behaviors increased to 66%. Young adults aged 18 to 24 were most prone to nomophobia (SecurEnvoy, 2012). Previous studies have shown that problems mobile phone/smartphone usage problems are particularly common in young adults (Cheever et al., 2014; Han, Geng, Jou, Gao & Yang, 2017; McDAniel & Coyne, 2016).

While investigating studies carried out in Turkey, in a study conducted by Yildirim et al. (2015) with the participants of 537 higher education students, they found that 42,6% of the participants perform nomophobia behaviors. Adnan and Gezgin (2016), researched the prevalence of nomophobia among 433 higher education students and they found that these students' nomophobia levels are higher than average. In these studies, generally, nomophobia levels are investigated.

In the studies in the literature; while some studies have been conducted on the effect of telephone use on nomophobia, some studies have been conducted on the effects of nomophobia such as sleep and academic achievement. In this study, the sub-dimensions given in different studies were tried to be brought together. It is hoped that this aspect will contribute to the literature.

Within the scope of this research, it is aimed to determine the nomophobia levels of education faculty students according to their intelligent phone usage status. In this framework, answers to the following research questions are sought.

• What are the university students' smartphone usage and nomophobia levels?

• Do the nomophobia levels differ according to personal characteristics and smartphone usage status of university students?

2. METHODOLOGY

2.1. Research Design

As a descriptive research design, "the process of correlating model" was used in this study. Nomophobia Questionnaire (NMP-Q) developed by Yildirim and Correia (2015) was used in this study. he scales consist of 20 items of 7-point Likert type. The reliability coefficient of the instrument (Cronbach's alpha) was found .95. According to Field (2005), if the reliability coefficient is greater than .80 then the reliability is very high and stated as excellent. In addition to this, this scale consisted of 4 sub-scales namely; 'Not being able to access information' (4 items), 'Losing connectedness' (5 items), 'Not being able to communicate' (6 items), and 'Giving up convenience' (5 items). Reliability coefficients of the sub-scales are .94, .87, .83, and .81 respectively. To gather data, the Turkish version of NMP-Q, adapted by Yildirim et al. (2016), was used. Reliability of Turkish version is reported as .92; and sub-scales' are .90, .74, .94, and .91 respectively. In this study, this coefficient found. In addition to these, demographic information form contains gender, overall arithmetic grade point average and smartphone and equipment usage status (smartphone daily control frequency, daily and instant smartphone usage time, charge device carrying, smartphone checking as soon as waking up, using smartphones before sleeping, leaving smartphones at the bedside during sleeping, shutting smartphones during sleeping, the mode of smartphones during sleeping). The effect size was examined using r, the range of $r \geq 0.10$ to <0.24 was evaluated as a small effect, $r \geq 0.24$ to <0.37 as a moderate effect and $r \geq 0.5$ as a large effect.

2.2. Sample

The sample of the study consists of 818 pre-service teachers who are students in the Faculty of Education in a public university in Turkey. The findings concerning the descriptive information about the gender information of the students are presented in Table 1. Table 1 demonstrates that while 63.4% of the participants were females, 36.6% of the participants were males.

Table 1. Demographic Information of the Participants

Gender	f	%
Female	272	63,4
Male	157	36,6
Total	429	100,0

The findings concerning the descriptive information about the overall arithmetic grade point average (OGPA) scores information of the students are presented in Table 2. Table 2 demonstrates that most of the participants (29.8%) OGPA scores were between 2.5 and 3.0. Following this students' group, 28% of the students' OGPA scores were between 2.0 and 2.5.

Table 2. Education Faculty Students' Overall Arithmetic Grade Point Average (Ogpa) Scores Frequency and Percentage Values

OGPAS	f	%
1.5 and Below	21	4,9
Between 1.5 and 2.0	55	12,8
Between 2.0 and 2.5	120	28,0
Between 2.5 and 3.0	128	29,8
Between 3.0 and 3.5	80	18,6
Between 3.5 and 4.0	25	5,8
Total	429	100,0

3. FINDINGS

The smartphone usage level of the participants and their differentiation status according to their nomophobia scores are examined in this section.

3.1. Smart Phone Usage Level of University Students

The findings concerning the descriptive information about the smartphone and equipment (power bank, charge device) usage status are presented in Table 3. Table 3 demonstrates that most of the participants (38.7%) control their smartphones 49 and above times in a day. Most of the participants (70.4%) do not carry a charge device/power bank beside themselves. most of the participants (38.4%) use their smartphones between 3 and 5 hours. Following this student group, 31% of the students use their smartphones for 5 hours and above. most of the participants (32.2%) use their smartphones between 5 and 10 minutes on average. Following this student group, 24.7% of the students use their smartphones between 10 and 20 minutes on average. Most of the participants (84.1%) check their smartphones as soon as they wake up. Most of the participants (92.8%) use their smartphones before sleeping. Most of the participants (77.9%) leave their smartphones at the bedside during the sleeping process. Most of the participants (93.7%) shut their smartphones during sleep process. Most of the participants (41.3%) keep their smartphones at voice mode during sleep process. Following this student group, 26.6% of the students keep their smartphones at vibration mode during sleep process.

Table 3. Descriptive of Education Faculty Students' Smart Phone and Equipment Usage

Smart Phone Daily Control Frequency	**f**	**%**
Between 1and 16	42	9,8
Between 17 and 32	108	25,2
Between 33 and 48	113	26,3
49 and Above	166	38,7
Status of Carrying Charge Device/Power Bank beside	**f**	**%**
Yes	126	29,4
No	303	70,6
Daily Smart Phone Usage Time	**f**	**%**
1 hour and below	14	3,3
Between 1 and 3 hours	116	27,0
Between 3 and 5 hours	166	38,7
5 hours and Above	133	31,0
Instant Smart Phone Usage Average Time	**f**	**%**
5 minutes and below	80	18,6
Between 5 and 10 minutes	138	32,2
Between 10 and 20 minutes	106	24,7
Between 20 and 30 minutes	58	13,5
30 minutes and above	47	11,0
The status of checking smartphone as soon as waking up	**f**	**%**
Yes	361	84,1
No	68	15,9
The status of using smartphones before sleeping	**f**	**%**
Yes	398	92,8
No	31	7,2
The status of leaving smartphones at the bedside during sleeping	**f**	**%**
Yes	334	77,9
No	95	22,1
The status of shutting smartphones during sleeping	**f**	**%**
Yes	27	6,3
No	402	93,7
The mode of smartphones during sleeping	**f**	**%**
Voice Mode	177	41,3
Vibration Mode	114	26,6
Silent Mode	111	25,9
Off Mode	27	6,3
Total	429	100,0

3.2. Differentiation status of nomophobia levels according to personal characteristics and smartphone usage status of university students

The findings concerning the difference in nomophobia scores according to gender are presented in Table 4. Table 4 demonstrates that there is a significant difference in nomophobia scores

of students according to gender. Effect size (r) is between 0.24 and 0.37, because of that gender has a moderate effect on nomophobia levels. While the mean rank of the females was 242.10, the mean rank of the males was 168.04. It shows that females' nomophobia scores are much higher than males' scores.

The findings concerning the difference at nomophobia scores according to carrying charge device/power bank besides are presented in Table 4. Table 4 demonstrates that there is a significant difference in nomophobia scores of students according to carrying charge device/power bank besides. Effect size (r) is between 0.24 and 0.37, because of that carrying charge device/power bank besides has a moderate effect on nomophobia levels. While the mean rank of the participants carrying charge device/power bank besides was 264.70, the mean rank of the participants not carrying charge device/power bank besides was 194.33. It shows that nomophobia scores of the participants that are carrying charge device/power bank besides are much higher than the participants that are not carrying.

The findings concerning the difference in nomophobia scores according to using smartphones as soon as waking up are presented in Table 4. Table 4 demonstrates that there is a significant difference in nomophobia scores of students according to using smartphones as soon as waking up. Effect size (r) is between 0.24 and 0.37, because of that using a smartphone as soon as waking up has a moderate effect on nomophobia levels. While the mean rank of the participants using smartphones as soon as waking up was 224.10, the mean rank of the participants not carrying charge device/power bank besides was 133.66. It shows that nomophobia scores of the participants that are using smartphones as soon as waking up are much higher than the participants that are not using.

The findings concerning the difference in nomophobia scores according to using a smartphone before sleeping are presented in Table 4. Table 4 demonstrates that there is a significant difference in nomophobia scores of students according to using the smartphone before sleeping. Effect size (r) is between 0.1 and 0.24, because of that using a smartphone before sleeping has a small effect on nomophobia. While the mean rank of the participants using a smartphone before sleeping was 219.96, the mean rank of the participants not using a smartphone before sleeping was 151.35. It shows that nomophobia scores of the participants that are using a smartphone before sleeping are much higher than the participants that are not using.

The findings concerning the difference in nomophobia scores according to leaving smartphones at the bedside during the sleep process are presented in Table 4. Table 4 demonstrates that there is a significant difference in nomophobia scores of students according to leaving smartphones at the bedside during the sleep process. Effect size (r) is between 0.1 and 0.24 because that leaving smartphones at the bedside during the sleep process has a small effect on nomophobia. While the mean rank of the participants leaving smartphones at the bedside during sleeping was 227.10, the mean rank of the participants not leaving smartphones at the bedside during sleeping was 171.49. It shows that nomophobia scores of the participants that are leaving smartphones at the bedside during sleeping are much higher than the participants that are not leaving.

The findings concerning the difference in nomophobia scores according to shutting smartphones during sleeping are presented in Table 4. Table 4 demonstrates that there isn't any significant difference in nomophobia scores of students according to shutting smartphones during sleeping.

The findings concerning the difference in nomophobia scores according to the status of smartphones during sleeping are presented in Table 4. Table 4 demonstrates that there isn't any

significant difference in nomophobia scores of students according to the status of smartphones during sleeping.

Table 4. Mann Whitney U-Test Results of the Nomophobia Level of the Participants Regarding Personal Characteristics (N=429)

Variable	Group	N	Mean Rank	Sum of Ranks	U	Z	r	p
Gender	Female	272	242,10	65852,50	13979.5	-5,962	-0,288	,000*
	Male	157	168,04	26382,50				
Carrying Charge Device/Power Bank Besides	True	126	264,70	33352,50	12826.5	-5,356	-0,259	,000*
	False	303	194,33	58882,50				
Checking/using smartphone as soon waking up	True	360	224,10	80677,50	7532.0	-5,058	-0,244	,000*
	False	61	133,66	8153,50				
Using smartphone before sleeping	True	398	219,96	87543,00	4196.0	-2,968	-0,143	,003*
	False	31	151,35	4692,00				
Leaving smartphones at the bedside during sleeping	True	334	227,37	75943,00	11732.0	-3,877	-0,187	,000*
	False	95	171,49	16292,00				
Shutting smartphones during sleep	True	27	206,15	5566,00	5188.0	-,383	-0,018	,701
	False	402	215,59	86669,00				

*p<0,05

The findings concerning the difference in nomophobia scores according to OGPA scores are presented in Table 5. Table 5 demonstrates that there is a significant difference in nomophobia scores of students according to OGPA scores. Effect size (r) is between 0.24 and 0.37, because of that OGPA has a moderate effect on nomophobia levels. While the OGPA scores are increasing, the mean rank of the nomophobia scores is decreasing. It shows that nomophobia affects negatively academic achievement (OGPA) scores.

The findings concerning the difference in nomophobia scores according to daily smartphone usage levels are presented in table 5. Table 5 demonstrates that there is a significant difference in nomophobia scores of students according to daily smartphone usage levels. Effect size (r) is between 0.1 and 0.24, because of that daily smartphone usage has a small effect on nomophobia. When the daily usage times are increasing, nomophobia scores are also increasing. It shows that daily usage time affects positively nomophobia scores.

The findings concerning the difference in nomophobia scores according to instant smartphone usage times are presented in table 5. Table 5 demonstrates that there is a significant difference in nomophobia scores of students according to instant smartphone usage times. Effect size (r) is under 0.1, because of that instant smartphone usage time has a small effect on nomophobia. When instant usage times are increasing, nomophobia scores are also increasing. It shows that instant usage time has a positive but insufficient effect on nomophobia scores.

The findings concerning the difference in nomophobia scores according to smartphone control frequency are presented in table 5. Table 5 demonstrates that there is a significant difference in nomophobia scores of students according to smartphone control frequency. Effect size (r) is between 0.1 and 0.24, because of that smartphone control frequency has a small effect on nomophobia. When

smartphone control frequency is increasing, nomophobia scores are also increasing. It shows that the smartphone control frequency affects positively nomophobia scores.

Table 5: Kruskal Wallis Test Results of the Nomophobia Level of the Participants Regarding Personal Characteristics (N=429)

Variable	Group	N	Mean Rank	sd	X^2	r	p
Overall Arithmetic Grade Point Average	1.5 and below	21	402,12	5	112,085	0,263	,000*
	Between 1.5 and 2.0	55	318,18				
	Between 2.0 and 2.5	120	212,60				
	Between 2.5 and 3.0	128	183,76				
	Between 3.0 and 3.5	80	160,08				
	Between 3.5 and 4.0	25	178,04				
Daily Usage Time	1 hour and below	14	80,82	3	61,788	0,144	,000*
	Between 1 and 3 hours	116	168,31				
	Between 3 and 5 hours	166	212,68				
	5 hours and above	133	272,74				
Instant Smart Phone Usage Time	5 minutes and below	80	181,14	4	11,331	0,026	,023*
	Between 5 and 10 minutes	138	210,18				
	Between 10 and 20 minutes	106	220,42				
	Between 20 and 30 minutes	58	238,43				
	30 minutes and above	47	245,66				
Smart Phone Control Frequency	Between 1and 16	42	146,54	5	50,515	0,118	,000*
	Between 17 and 32	108	165,99				
	Between 33 and 48	113	223,69				
	49 and Above	166	258,30				
Smartphone Status	Voice Mode	177	216,45	3	1,115	0,003	,773
	Vibration Mode	114	222,89				
	Silent Mode	111	206,75				
	Off Mode	27	206,15				

*p<0,05

4. CONCLUSION and IMPLICATIONS

This study shed light on the prevalence of nomophobia among university students according to personal characteristic in Turkey. As a result, students' average of nomophobia level is 3,00 (over 5). In nomophobia dimensions; 'Not being able to communicate' (3,39 over 5) and 'Not being able to access information' (3,38 over 5) sub-dimensions' scores were higher than the other sub-dimensions of nomophobia. 76% (n=328) of 429 students' nomophobia scores were over 2,5 (over 5). Yildirim et al. (2016); in their research conducted with 537 higher education students, they found out that 42.6% of the students "not being able to access information", and "losing Connectedness" factors of nomophobia were more of an issue among young population. Adnan and Gezgin (2016) also found the prevalence of nomophobia among 433 higher education students over the average. While sub-dimensions were compared, points of "not being able to access information", and "losing Connectedness" factors were higher than the other sub among students similarly. in the study carried out by Secur Envoy (2012) in England, 77% of the 18-24-year-old students feel anxiety about losing their mobile phones and thus they have fear of this situation. Sharma et al. (2015) found that 73% of the 130 medical students display nomophobia behaviors in India; differently, Pavithra and Madhukumar (2015) found this rate as 39.5% and stated that 27% of the 200 medical students are in the risk nomophobia. In another study conducted by Tavolacci et al. (2015) with 760 higher education students in France, one of third of the participants were nomophobia

Terms of gender effect, a significant difference was found between males and females. Female students' nomophobia scores were higher than males' scores. There are studies that support this result and stating that females tend to be more homophobic than males (Gezgin & Cakir, 2016; Gezgin et al., 2017; Kanmani, Bhavani & Maragatham, 2017; SecurEnvoy, 2012; Tavolacci & et al., 2015; Yildirim & et al., 2016). On the other hand, there are also studies that report that there is no significant difference in terms of gender (Adnan & Gezgin, 2016; Dixit & et al., 2010; Uysal, Ozen, & Madenoglu, 2016) or stating that males are more affected by nomophobia than females (Mail Online, 2008).

A significant difference was found at university students nomophobia scores according to OGPA (academic achievement) scores. While the OGPA scores were increasing, the mean rank of the nomophobia scores was decreasing. This result is consistent with the study of Erdem, Kalkin, Turen, & Deniz (2016), Gupta et al. (2016), Hosgor, Tandogan & Hosgor (2017), Matoza-Báez and Carballo-Ramírez (2016), Tavolacci (2015). Erdem et al. (2016) found out that nomophobia is an enormous problem for the academic accomplishments of undergraduate students. Gupta et al. (2016) found out that spending too much time with smartphones had negative effects on psychological health, sleep quality and academic performance of students. Hosgor et al. (2017) found out that the "cannot be online" factor which one of subdimensions of nomophobia scale has positive significant effect on success of school, but it has negative effect on duration of daily smartphone usage. In the research with the attendance of 234 medical faculty students, Matoza-Báez and Carballo-Ramírez (2016) determined that the academic performance of students decreased as nomophobia levels increased. Tavolacci et al. Found out that nomophobia negatively impacted the academic performance of university students. In contrast to this research, Jena (2015) found out that there was no significant relationship between active learning and nomophobia.

30% of the participants carry their charge devices/power banks beside. Nomophobia scores of the participants that are carrying charge device/power bank besides are much higher than the participants that are not carrying. This result is consistent with the study of Akilli and Gezgin (2016) and Hosgor et al. (2017). Akilli and Gezgin (2016) found that the nomophobia levels of university students carrying a charger (n = 404) showed a significant difference compared to those who did not carry a charger (n = 279). Hosgor et al. (2017) observed that the students who were inclined to have nomophobia carried a charger with them all the time.

%84 of the students check their smartphones as soon as they wake up. 93% of participants use their smartphones before sleeping. These participants' nomophobia scores were higher than the other participants. In the research conducted by Levitas (2013), it was found out that 74% of teenagers aged between 18 and 24, the first thing they did when they woke up was checking their smartphones. Kanmani, Bhavani & Maragatham (2017) in their research, they found out that 69% of the 1500 university students stated that they start to use their smartphones immediately after waking up. Checking smartphones as soon as waking up and using smartphones before sleeping may be used as a symptom in the detection of nomophobia.

31% of the participants use their smartphones for 5 hours and above. Only 3% of the participants use their smartphones for 1 hour and below. 24.5% of the participants' instant usage time was 20 minutes and above. 18.6% of the participant's smartphone instant usage time was 5 minutes and below. 38.7% of the participant's smartphone daily control frequency was 49 and above in a day. Only 9.8% of the participant's smartphone daily control frequency was 16 and below in a day. The participant's smartphone usage percentages are very high. Slaih, Sharma, Sharma, and Wavare found put similarly that 59.6% of 1005 students reported spending less than five hours on the smartphone daily, 40.4% reported spending more than

five hours, 70.7% reported checking their smartphone every 30 minutes or more. Gezgin (2017) found out that 35.7% of 645 university students check their smartphones more than 49 times. %15,3 of the students check their smartphones less than 16 times. 37.5% of the students use the mobile internet for more than 4 hours. Gezgin (2017) also found out that the duration of daily mobile Internet use is predictive of nomophobia prevalence in university students.

93.7% of the participants don't turn off their smartphones during sleeping. King et al. (2014) found out that 74% of the 50 patients and 70 controls sleep with their smartphones switched on. In another research conducted in the US, only 5% of 700 participants stated that they turn off their phones off during sleeping (Rosen, Carrier, Miller, Rokkum & Ruiz, 2016). In that research, it was found out that only 5% of the participants turned their phones off. 33% of the participants silenced their phone and 61% of the participants left the vibrate function active. Never turn off the phone is identified as a typical characteristic of nomophobia (Kanmani, Bhavani & Maragatham, 2017). %77.9 of the participants leave their smartphones at the bedside during sleeping. 41.3% of the participants leave their smartphone on voice mod during sleeping. Nomophobia scores differed according to leaving smartphones at the bedside during sleeping status. Nomophobia scores of participants leaving smartphones at the bedside during the sleeping were higher than the participants not leaving smartphones.

It has been known that mobile devices especially smartphones provide benefits to individuals in daily life. However, people can become addicted to such technologies when they use these devices in every part of their lives (Uysal, Özen & Madenoglu, 2016). Our daily routines may change due to nomophobia This changing may make students faced with some obstacles in their school life and academic achievement (Adnan & Gezgin, 2016). Gupta, Garg, and Arora (2016) stated overuse of smartphones has negative effects on our sleeping pattern and psychological health. Nomophobia may prevent students from focusing on homework or listening to the lecture (Adnan & Gezgin, 2016). Therefore, teachers, parents, and school administrators have very important responsibilities. Thus, students' social environment also should be aware of nomophobia. In school education, teachers are also under pressure while planning and conducting their lessons with nomophobia students (Okaz, 2015). Teachers should know the negative sides of technology usage as mobile learning that may cause nomophobia. In this perspective, Spitzer (2015) discussed the role of smartphones in a mobile learning context and claimed that smartphone is an often-ignored risk in teaching and learning environment. Smartphones may cause some negative effects such as addiction, attention deficit disorder, empathy disorder, hypertension, obesity, anxiety, depression, personality disorder, aggression, dissatisfaction, and loneliness. Therefore, technology-free activities may be increased.

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