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# Investigation of the Relationship Between the Level of Nomophobia and Perceived Social Support and Personality Traits in Nursing Students

Hemşirelik Öğrencilerinde Nomofobi Düzeyi ile Algılanan Sosyal Destek ve Kişilik Özellikleri Arasındaki İlişkinin İncelenmesi

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#### **Abstract**

**Objectives:** This study was conducted in descriptive-cross-sectional and relational types to examine the relationship between the level of nomophobia, perceived social support, and personality traits in nursing students.

**Methods:** In this study, Descriptive Traits Form, Nomophobia Scale, The Big Five Inventory (BFI), and Multidimensional Scale of Perceived Social Support-Revised (MSPSS-R) were applied to collect data.

**Results:** Results was determined that nursing students were mildly nomophobic and it was concluded that their nomophobic levels of losing connectedness were higher. It has been observed that there is a relationship between neuroticism and nomophobia, one of the personality traits of the students in BFI.

**Conclusion:** While it was determined that students' perceived social support perceptions were high and the perceived social support from the family was higher than other dimensions, it was concluded that there was a relationship between nomophobia and perceived social support from the family.

**Keywords:** Nomophobia, nursing, personality, social support

#### Özet

Amaç: Bu araştırma, hemşirelik öğrencilerinde nomofobi düzeyi, algılanan sosyal destek ve kişilik özellikleri arasındaki ilişkiyi incelemek amacıyla tanımlayıcı-kesitsel ve ilişkisel tiplerde yapılmıştır.

**Yöntemler:** Bu çalışmada, veri toplamak için Tanımlayıcı Özellikler Formu, Nomofobi Ölçeği, Beş Büyük Envanteri (BFI) ve Çok Boyutlu Algılanan Sosyal Destek-Gözden Geçirilmiş Ölçeği (MSPSS-R) uygulanmıştır.

**Bulgular:** Hemşirelik öğrencilerinin hafif derecede nomofobik oldukları belirlendi ve nomofobik bağlılıklarını kaybetme düzeylerinin daha yüksek olduğu sonucuna varıldı. BFI öğrencilerinin kişilik özelliklerinden olan nevrotiklik ile nomofobi arasında bir ilişki olduğu gözlemlenmiştir.

**Sonuç:** Öğrencilerin algıladıkları sosyal destek algılarının yüksek olduğu ve aileden algıladıkları sosyal desteğin diğer boyutlara göre daha yüksek olduğu belirlenirken, nomofobi ile aileden algılanan sosyal destek arasında bir ilişki olduğu sonucuna varılmıştır.

**Anahtar Kelimeler:** Nomofobi, hemşirelik, kişilik, sosyal destek

#### INTRODUCTION

Today, mobile phones are the most practical and preferred among mobile devices. Smart phones, which are produced by adding the features of portable small pocket computers to mobile phones, improve their capacities and therefore the limits of their usage areas with the developments in communication technologies. This causes smartphones to take more place in our daily lives. Apart from talking and messaging, smartphones have many advantages such as accessing information, surfing the internet, shopping, listening to music, spending time on social networks, taking photos / videos, banking transactions, making simple designs, and playing games (Kuyucu, 2017). Besides these gains, smart devices have many negative aspects. Some of these

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negativities are the weakening of face-to-face communication in communication, more individualization, information pollution, applications with the potential of addiction, and the physical and psychological problems that these applications bring along (Sarıkaya, 2018). Smartphones are among the most important non-drug addictions of our time and it is stated that problematic use is associated with many negative situations such as neck pain, depression, lack of tolerance, social isolation, loneliness, low self-esteem, distraction, decreased life expectancy and deterioration of family relationships. In addition, newly defined phobias and psychological disorders are emerging day by day due to the problematic use of these devices. Nomophobia is one of them, and it can be defined as the involuntary fear experienced by the individual about not being able to reach or communicate on their mobile device (Yıldırım & Kişioğlu, 2018).

While many factors affecting nomophobia, personality traits and social support systems may also affect the nomophobia level of individuals. When studies examining the relationship between personality traits and nomophobia were reviewed, it was found that there was a positive relationship between extraversion, impulsivity, and nomophobia (Argumosa-Villar, Boafa-Grau & Vigil-Colet, 2017; Elhai, Levine, Dvorak & Hall, 2016; Siddigui et al., 2015; Yıldız Durak, 2019), while negative relationship was found between responsibility and nomophobia (Argumosa-Villar et al., 2017). In addition, in a study, it was found that the risk of nomophobia is high in type A personality trait (Ezoe & Toda, 2013). Personality structure, which determines the attitudes and behaviors of individuals, determines how people can communicate with their environment and how they will react to events. In this respect, the personality also shows the individual's distinctive traits. The formation of the elements that make up the personality is determined by traits such as physical structure, education received, family structure, social environment, and hereditary characteristics. Personality is a system that reveals the differences, attitudes, behaviors, and feelings of people in their personal lifestyles and social environments (Atkinson et al., 1993).

Perceived social support is, in a way, the general value that individuals assign for themselves. The support perceived by people who think that they are loved, respected by others, that they will find help when necessary, and that their relationships are satisfactory, is high. Perceived support is influenced by relatively permanent traits such as personality traits, as well as more easily changing traits such as attitude and temperament. It is known that social support has effect on the emergence, course, and duration of many physical or mental illnesses. Therefore, social support is a social variable which considered to be related to human health (Ardahan, 2006). Perceived social support and personality traits of the nursing students may affect their nomophobia levels. Based on this assumption, this study aimed to examine the relationship between the level of nomophobia, perceived social support, and personality traits in nursing students.

#### **METHODS**

#### **Design**

This study was conducted in descriptive-cross-sectional and relational types to examine the relationship between the level of nomophobia, perceived social support, and personality traits in nursing students.

## **Population and Sample**

The population of the study consisted of 400 nursing students studying in a state university in the 2020-2021 academic year. Sample selection was not made, students aged 18 and over, using smart phones and agreeing to participate in the study were included in the study (n = 101). The data of the study were collected by the researchers from the students who accepted the study between 01 November and 30 November 2020. 149 students without smartphones and 150 students who did not want to participate in the study were not included in the study.

#### **Data Collection**

Face-to-face surveys could not be conducted due to the rapid spread of COVID-19. However, with the rapid development and spread of mobile internet in our country, online surveys have become safer and more applicable. The cross-sectional study data were collected between 01-30 November 2020. The questionnaire form, consisting of open-ended and multiple-choice questions prepared by the researchers via google-forms, was sent to undergraduate students of the Health Sciences Faculty of a state university as a mobile phone message and they were asked to participate in the study. Students participated voluntarily after clicking the questionnaire request link. Announcements about contributing to the questionnaire were repeated every week for 4 weeks. Approximate questionnaire filling time is 8-10 minutes.

## **Data Collection Instruments**

In this study, Descriptive Traits Form, Nomophobia Scale, The Big Five Inventory (BFI), and Multidimensional Scale of Perceived Social Support-Revised (MSPSS-R) were applied to collect data.

**Descriptive Traits Form:** The descriptive traits form, created by the researchers with a literature review, includes the demographic characteristics of the patients (age, class, gender, economic level, etc.).

Nomophobia Scale: Developed by Yıldırım and Correia (2015) and adapted into Turkish by Yıldırım et al. (2016), the scale consists of 20 items in four sub-dimensions ("not being able to access information", "giving up convenience", "not being able to communicate" and "losing connectedness"). The internal consistency coefficients of the scale sub-scales range between  $\alpha=0.74$  and 0.94, and the total internal consistency coefficient is reported to be 0.92 (Yıldırım et al., 2016; Yıldırım & Correira, 2015). Participants scoring 20 points on the scale indicate no nomophobia, a score between 20 and 60 points has mild nomophobia, a score between 60 and 100 points has moderate nomophobia, and a score between 100 and 140 indicates extreme nomophobia. In this study, it was calculated that the internal consistency coefficients of the measurements obtained from the sample varied between 0.88-0.90 in the sub-scales, and  $\alpha=0.95$  in the total of the scale (Table 1).

The Big Five Inventory (BFI): It was used in the study to measure the personality traits of the participants. This scale was developed by Benet-Martinez and John (1998) under the name "The Big Five Inventory" and adapted into Turkish by Sümer et al. (2005), the scale consists of 44 items in five sub-dimensions (extraversion, agreeableness, conscientiousness, neuroticism, and openness). The internal consistency coefficients of the scale range between  $\alpha = 0.64$  and  $\alpha = 0.77$  (Sümer et al., 2005). In this study, it was calculated that the internal consistency coefficients of the measurements obtained from the sample varied between 0.63-0.80 in the sub-scales, and  $\alpha = 0.90$  in the total of the scale (Table 2).

Multidimensional Scale of Perceived Social Support -Revised (MSPSS-R): The original of the scale (MSPSS) was developed by Zimet, Dahlem, Zimet and Farley (1988). There are 12 items in the original scale. The scale consists of three sub-scales called FA (family), FR (friends), and SO (significant other). The Cronbach Alpha reliability coefficient of the original form is between .84 and .92 (Zimet, Farley, Zimet & Farley, 1988). Eker, Arkar, and Yaldız (2001) re-performed the factor structure, validity, and reliability study of the revised form of the scale. The reliability coefficients of the study were calculated as .85 for the "Family" subscale, .88 for the "Friends" subscale, .92 for the "Significant Other" subscale, and .89 for the total score of the scale. According to the findings of the reliability studies of the scale, the scale has high consistency levels ranging from .80 to .95 with other scales (Eker et al., 2001). The Multidimensional Scale of Perceived Social Support is a 7-point Likert-type scale consisting of 12 items. The lowest total score that can be obtained from the scale is 12 and the highest score is 84. The high score obtained from the scale indicates that the perceived social support is high (Eker et al., 2001). The reliability coefficient for the scale was found to be .92. Reliability coefficients are .92 for "Family" subscale, .95 for "Friends" subscale, and .95 for "Significant Other" subscale.

### **Ethical Aspect of the Study**

To determine the ethical suitability of the research, written permissions were obtained from the Non-Invasive Research Ethics Committee of a University (no: E-2518/2020) and from the dean of the relevant unit of the university where the research was conducted. At the same time, written and verbal permissions were obtained from the students who participated in the study, indicating that they accepted the study.

## Data analysis

The Statistical Package for Social Science (SPSS) 24.0 software was used to evaluate the study data. Variables determined by counting from descriptive statistics are shown as numbers and percentages and mean  $\pm$  standard deviation for variables determined by measurement. Correlation and regression analysis of the relationship between the scales was made. Statistical significance level was set at 0.05.

### **Limitations of the Study**

The limitation of the study is that the sample in the study consists of only students studying at the Health Sciences Faculty of a state university and that the results can only be generalized to the group in which the study was conducted.

### **RESULTS**

**Table 1.** Descriptive Traits of the Students (N=101)

		n	%
Gender	Female	87	86.1
	Male	14	13.9
Marital status	Married	5	5.0
	Single	96	95.0
Graduated high school	Health Vocational	11	10.9
	Normal	4	4.0
	Anatolian	70	69.3
	Other	16	15.8
Academic Year	1st	42	41.6
	2nd	20	19.8
	3rd	29	28.7
	4th	10	9.9
Academic success	Good	49	48.5
	Moderate	50	49.5
	Bad	2	2.0
Do you carry a charger with you?	Yes	27	26.7
	No	74	73.3
Do you spend time with your smartphone before going to sleep?	Yes	85	84.2
	No	16	15.8
Do you turn off your smartphone at night?	Yes	20	19.8
	No	81	80.2
Do you first look at your smartphone when you wake up?	Yes	67	66.3
	No	34	33.7
Do you consider yourself a smartphone addict?	Yes	31	30.7
	No	70	69.3
How often do you check your smartphone during the day?	Rarely (1-2 times a day)	12	11.9
	Sometimes (5-10 times a day)	36	35.6
	Often (once an hour)	23	22.8
	Very often (several times an	30	29.7
	hour)		
Chronic diseases	Yes	6	5.9
	No	95	94.1
Have you ever had a problem requiring psychological support?	Yes	13	12.9
	No	88	87.1
Are you using psychiatric medication?	Yes	2	2.0
	No	99	98.0
Regular physical activity	Yes	27	26.7
	No	74	73.3
Smoking status	Yes	8	7.9
	No	93	92.1
Alcohol status	Yes	1	1.0
	No	100	99.0
Nutritional status	Mainly Vegetable Fruit	64	63.4
	Meat Fastfood Mainly	37	36.6
	X±SS		
Age	20.32±1.53		
How many years have you been using a smartphone? (year)	4.97±2.69		
The average daily duration of using smartphones (hour)	5.14±2.47		
The average daily internet usage (hour)	4.63±2.68		
Approximately how many times do you check your smartphone	6.51±8.59		
per hour? (times)	0.31±0.37		

Descriptive traits of the students who participated in the study are given in Table 1. The average age of the students is  $20.32 \pm 1.53$ , 86.1% of them are female, 95% are single, 69.3% are have graduated from Anatolian High Schools, 41.6% studying at first grade and 49.5% of them have a moderate academic success. It was

found that the students had been using smartphones for an average of  $4.97 \pm 2.69$  years, the average daily duration of using smartphones was  $5.14 \pm 2.47$  hours, the average daily internet usage time was  $4.63 \pm 2.68$ , and they controlled the smartphone an average of  $6.51 \pm 8.59$  times per hour. It was determined that 73.3% of the students did not carry a charging device with them, 84.2% spent time with a smart phone before going to sleep, 80.2% did not turn off their smartphones while sleeping at night, and 66.3% looked at the smartphone first when they woke up. It also has been determined that 35.6% of them control their smartphones 5-10 times a day and 29.7% control their smartphones several times an hour. 94.1% did not have any chronic disease, 87.1% did not have a problem requiring psychological support, 98% did not use psychological medication, 73.3% did not do regular physical activity. It was determined that 92.1% did not smoke, 99.0% did not use alcohol, 63.4% ate mainly vegetables and fruits (Table.1).

**Table 2.** Internal consistency coefficients and averages of measurements obtained from the Nomophobia Scale, BFI and MSPSS-R

	Number	Item Numbers	α*	a**	Mean±SD	
	of Items					
Losing connectedness	5	13, 17, 18, 19, 20	.90	.88	13.74±5.55	
Not being able to	6	6, 9, 12, 14, 15, 16	.74	.86	16.54±6.55	
communicate						
Giving up convenience	5	5, 7, 8, 10, 11	.94	.90	14.38±6.00	
Not being able to access	4	1, 2, 3, 4	.91	.88	$8.82 \pm 4.43$	
information						
Nomophobia Scale	20	1-20	.92	.95	53.49±20.17	
Extraversion	8	1, <b>6</b> , 11,16, <b>21</b> , 26, <b>31</b> , 36	.66	.68	24.03±2.72	
Agreeableness	9	<b>2</b> , 7, <b>12</b> , 17, 22, <b>27</b> , 32, <b>37</b> , 42	.64	.64	27.06±3.38	
Conscientiousness	9	3, <b>8</b> , 13, <b>18</b> , <b>23</b> , 28, 33, 38, <b>43</b>	.75	.68	28.30±3.49	
Neuroticism	8	4, <b>9</b> , 14, 19, <b>24</b> , 29, <b>34</b> , 39	.72	.63	26.05±3.30	
Openness	10	5, 10, 15, 20, 25, 30, <b>35</b> , 40, <b>41</b> ,44	.77	.80	35.24±7.16	
The Big Five Inventory	44	All		.90	140.72±10.83	
Family	4	3,4,8,11	.85	.92	19.20±7.69	
Friends	4	6, 7,9,12	.88	.95	18.75±7.92	
Significant other	4	1,2,5,10	.92	.95	14.37±8.99	
Multidimensional Scale of	12	All	.89	.92	52.30±19.95	
Perceived Social Support -						
Revised						

 $<sup>\</sup>alpha$  \* = Internal consistency coefficient reported in the Turkish adaptation study

Internal consistency coefficients and averages of the measurements obtained from the Nomophobia Scale, BFI and MSPSS-R are given in Table 2. Nomophobia Scale's mean score was  $53.49 \pm 20.17$  and it was found to be mild and the highest average among subscale was "losing connectedness". BFI average score is  $140.72 \pm 10.83$ , and it is seen that the highest average is in "openness". It was found that the mean MSPSS-R score was  $52.30 \pm 19.95$  and the family subscale mean was the highest. It was determined that students' perceived social support was high (Table 2).

 $<sup>\</sup>alpha$  \*\* = Internal consistency coefficient obtained from the research sample

Reverse scored items are shown in bold font.

Table 3. The Relationship between Nomophobia, BFI and MSPSS-R

	Losing connectedness		Not being able to communicate		Giving up convenience		Not being able to access information		Nomophobia Scale	
	r	p	r	p	r	p	r	p	r	p
Extraversion	026	.798	106	.289	136	.177	107	.286	106	.293
Agreeableness	.054	.591	.115	.253	.042	.674	.137	.171	.095	.345
Conscientiousness	044	.660	.009	.927	060	.554	.067	.506	012	.903
Neuroticism	.299**	.002	.309**	.002	.259**	.009	.243*	.014	.313**	.001
Openness	.148	.140	.146	.145	.209*	.036	028	.782	.144	.150
BFI	.185	.064	.203*	.042	.178	.076	.093	.354	.190	.057
Family	.240*	.015	.253*	.011	.355**	.000	.019	.853	.258**	.009
Friends	.126	.209	.140	.162	.229*	.021	017	.870	.145	.149
Significant other	.104	.301	.075	.457	.093	.357	059	.559	.068	.502
MSPSS-R	.190	.057	.187	.061	.270**	.006	026	.797	.188	.060

The relationship between nomophobia and BFI, MSPSS-R is given in Table 3. A positive significant relationship was determined between "not being able to communicate", "losing connectedness", "not being able to access information" and "giving up convenience", nomophobia scale and neuroticism. As nomophobia increased, it was observed that neuroticism increased as personality trait. A positive and significant relationship was found between losing connectedness and BFI. A positive significant relationship was determined between not being able to communicate, losing connectedness, device deprivation, nomophobia scale, and family. It was found that as nomophobia increased, family support in the perceived social support subscale also increased. A positive significant relationship was found between device deprivation, friends, and MSPSS-R (Table 3). The predictors of significant other, conscientiousness, openness, agreeableness, extraversion, Friends, neuroticism, and family were determined to affect nomophobia cumulatively by 18% ( $R^2 = .186$ , F: 2.620 p = .012).

## **DISCUSSION**

In this study, the average score that the nursing students got from the Nomophobia Scale was  $53.49 \pm 20.17$ , and it was determined that the students were mildly nomophobic. In the study conducted by Aguilera-Manrique et al. with nursing students, the mean nomophobia score of the students was found to be  $82.39 \pm 18.63$  (Aguilera-Manrique, 2018). In another study in which nursing students were included in the sample, the average score of students for nomophobia was reported as  $69.50 \pm 21.08$  (Márquez-Hernández, 2019). According to a study conducted with Medical and Nursing students in our country, the average score of students for nomophobia is  $78.7 \pm 24.6$  (Okuyan et al., 2019). According to the comparative study conducted by Gutiérrez-Puertas et al. (2019) with Spanish and Portuguese Nursing students, it was reported that both Spanish and Portuguese nursing students scored above the average according to their nomophobia levels, and the students' levels of nomophobia were evaluated as high (Puertas, 2019). According to the results obtained in this study, the levels of nomophobia of nursing students in our sample group are lower than reported in the literature. Nomophobia is expressed as a phobia of being without a mobile phone. Nomophobia is defined as

a disorder of the 21st century and is expressed as a state of discomfort and anxiety felt when away from contact with mobile phones or computers (King et al., 2010). Studies have been conducted in the literature using different variable names associated with nomophobia. With the names Excessive mobile phone use (Toda et al., 2006), mobile phone addiction (Siddiqui & Ali, 2015; Samaha & Hawi, 2016), smartphone addiction (Elhai et al.2017), problematic mobile phone use (Bianchi & Phillips, 2005), problematic smartphone use (Elhai et al.2016), and nomophobia (King et al., 2010, Bragazzi & Del Puente, 2014; Yıldız Durak, 2019), mobile phone usage behavior and negative consequences are investigated. In this context, the low levels of nomophobia in our student group can be explained by the fact that 69.3% of the students do not see themselves as smartphone addicts.

The average duration of daily smartphone use of the students in our study group was found to be  $5.14 \pm 2.47$ . In the study conducted by Aguilera-Manrique et al. (2018) with 150 nursing students, 48.4% of the students used smartphones for less than 3 hours per day, while 51.6% reported that they had phone usage over 3 hours per day (Aguilera-Manrique, 2018) ). In a study conducted with medical and nursing students, it was found that 68.3% of the students used phones for 3 hours or more per day (Okuyan et al., 2019).

In this study, according to the correlation analysis conducted to test the existence of a relationship between The Big Five Inventory and the Nomophobia Scale, no relationship was found between the sub-dimensions of extraversion, agreeableness, conscientiousness, and openness, and sub-dimensions of nomophobia scale and nomophobia (p> 0.05). Only a weak statistically significant relationship was found between Neuroticism and nomophobia and all subscales (p <0.05). In a study conducted by Öz and Tortop with university students, a significant relationship was found between their students' nomophobia scores and BFI. As a result of that study, a positive weak relationship between the nomophobic status of university students and their extraversion scores (r = .232, p < .001), a positive medium relationship between aggreeableness scores (r = .232, p < .001). .461, p <.001), a weak positive correlation between conscientiousness scores (r = .230, p <.001), a weak positive correlation between openness scores (r = .255, p < .001) and a weak negative relationship between neuroticism scores (r=-.2184, p<.001) (Öz & Tortop, 2018). Dalbudak et al. found a negative weak relationship between university students' BFI total score and nomophobia (Dalbudak et al., 2020). In a study conducted in order to establish the relationship between temperament and personality and to define the development of nomophobia, it was found that cooperation decreased the level of nomophobia at a statistically significant level, whereas reward dependence increased all levels at the level of nomophobia. In addition, in the same study, it was reported that features such as Novelty Seeking, Harm Avoidance and Self-Transcendence had a weakly positive relationship with Nomophobia. According to the major result obtained in the mentioned study, there is a relationship between nomophobia and personality (Olivencia-Carrión, 2018). Karakurt et al. (2020) reported that there is a positive significant relationship between the Nomophobia Scale total score average and the State-Trait Anxiety Inventory total score average (Karakurt et al, 2020). Similarly, Sureka et al. (2020) stated that there is a relationship between nomophobia and stress, anxiety and depression (Sureka et al., 2020). It shows that there is a relationship between nomophobia and personality traits in the literature. However, in this study, no relationship was found in other personality subscales except neuroticism. This situation can be explained by the similar characteristics of our sample group and generally having mild nomophobia.

In this study, the total MSPSS-R score of the students was determined as  $52.30 \pm 19.95$ . In a study conducted by Aydın Kartal with midwifery students, it was stated that the students' total MSPSS-R score average was  $68.0 \pm 12.5$  (Aydın Kartal, 2019). According to another study conducted with university students, the average MSPSS-R score of the students was reported as  $61.9 \pm 14.7$  (Büyükçolpan, 2019). In our study, no relationship was found between nursing students' MSPSS-R and nomophobia (p> 0.05). In this study, a weak positive correlation was found between only the family subscale of the MSPSS-R scale and nomophobia (r = 258; p = .009). According to a study conducted to examine the relationship between midwifery students' nomophobia levels and their perception of social support, it was found that students are moderately nomophobic and that there is a weak and negative significant relationship between nomophobia and perceived social support from the family. In the same study, weak and negative significant relationships were found between MSPSS-R total and subscales and nomophobia, except for the "significant other" subscale (Aydın Kartal, 2019). Büyükçolpan reported that social support received from the family is a predictor of nomophobia (Büyükçolpan, 2019). Gezgin et al. (2018) found a moderate positive relationship between nomophobia and loneliness in their study to evaluate the relationship between nomophobia and loneliness in Turkish adolescents (R = .444, p < .05). In the same study, all subscales of nomophobia were found to be associated with loneliness (Gezgin et al., 2018). In this study, it was determined that significant other, conscientiousness, openness, agreeableness, extraversion, friends, neuroticism, and family predictors have 18% cumulative effect on nomophobia (R2 = .186, F: 2.620 p = .012). According to the literature and our study, it can be said that the social support perceived from the family affects the nomophobia levels of the students and the increase in the perceived support decreases the severity of nomophobia.

## **CONCLUSIONS**

In this study, which was carried out to examine the relationship between the level of nomophobia in nursing students and perceived social support and personality traits, it was determined that nursing students were mildly nomophobic and it was concluded that their nomophobic levels of losing connectedness were higher. It has been observed that there is a relationship between neuroticism and nomophobia, one of the personality traits of the students in BFI. While it was determined that students' perceived social support perceptions were high and the perceived social support from the family was higher than other dimensions, it was concluded that there was a relationship between nomophobia and perceived social support from the family.

#### IMPLICATION FOR NURSING PRACTICE

It was determined that there was a relationship between nomophobia and perceived social support from the family. 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 especially the youth. In our country, 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. Based on these results, it is recommended to conduct studies in mixed groups to determine the effect of perceived social support and personality traits on nomophobia and to consider the family factor in the management of nomophobia.

#### REFERENCES

- Aguilera-Manrique, G., Márquez-Hernández, V. V., Alcaraz-Córdoba, T., Granados-Gámez, G., Gutiérrez Puertas, V., & Gutiérrez-Puertas, L. (2018). The relationship between nomophobia and the distraction associated with smartphone use among nursing students in their clinical practicum. *PloS one*, *13*(8), e0202953.
- Argumosa-Villar, L., Boada-Grau, J., & Vigil-Colet, A. (2017). Exploratory investigation of theoretical predictors of nomophobia using the Mobile Phone Involvement Questionnaire (MPIQ). *Journal of Adolescence*, 56, 127–135. https://doi.org/10.1016/j.adolescence.2017.02.003
- Atkinson, L. R., Atkinson, R. C., Smith, E. E., & Ben, Daryl J. (1993). Introduction to Psychology, 11<sup>th</sup> Ed. Harcourt Brace Comp. Int. Ed., Fort Worth
- Aydın Kartal, Y. (2019). Ebelik öğrencilerinin mobil telefon yoksunluğu korkusu ile sosyal destek algısı arasındaki ilişkinin incelenmesi. *Celal Bayar Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi*, 6 (4), 308-312
- Bianchi, A., & Phillips, J. G. (2005). Psychological predictors of problem mobile phone use. *Cyberpsychology & Behavior: The Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society*, 8(1), 39–51.
- Bragazzi, N. L., & Del Puente, G. (2014). A proposal for including nomophobia in the new DSM V. Psychology research and behavior management, 7, 155–160.
- Büyükçolpan, H. (2019). Nomophobia, attachment styles, depression and perceived social support among university students. Master's thesis, Hacettepe University, Ankara.
- Dalbudak, I., Yilmaz, T., & Yigit, S. (2020). Nomophobia levels and personalities of university students. *Journal of Education and Learning*, 9(2), 166-177.
- Elhai, J. D., Dvorak, R. D., Levine, J. C., & Hall, B. J. (2017). Problematic smartphone use: A conceptual overview and systematic review of relations with anxiety and depression psychopathology. *Journal of Affective Disorders*, 207, 251–259.
- Elhai, J.D., Levine, J.C., Dvorak, R.D., & Hall, B. J. (2016). Fear of missing out, need for touch, anxiety and depression are related to problematic smartphone use. *Comput Human Behav*, 63, 509-516
- Gezgin D.M., Hamutoglu, N.B., Sezen-Gultekin, G., & Ayas, T. (2018). The relationship between nomophobia and loneliness among Turkish adolescents. *International Journal of Research in Education and Science (IJRES)*, 4(2), 358-374.
- Gutiérrez-Puertas, L., Márquez-Hernández, V. V., São-Romão-Preto, L., Granados-Gámez, G., Gutiérrez Puertas, V., & Aguilera-Manrique, G. (2019). Comparative study of nomophobia among Spanish and Portuguese nursing students. *Nurse Education in Practice*, 34, 79–84.

- Karakurt, N., Durmaz, H., & Oral, M. (2020). Investigation of the relationship between nomophobia and anxiety among undergraduate health sciences students. *Samsun Sağlık Bilimleri Dergisi*, 5 (2), 157-165.
- King, A. L., Valença, A. M., & Nardi, A. E. (2010). Nomophobia: the mobile phone in panic disorder with agoraphobia: reducing phobias or worsening of dependence? *Cognitive and Behavioral Neurology: Official Journal of the Society for Behavioral and Cognitive Neurology*, 23(1), 52–54.
- Kuyucu, M. (2017). Use of smart phone and problematic of smart phone addiction in young people: "smart phone (colic)" university youth. *Global Media Journal TR Edition*,7(14), 328-359
- Márquez-Hernández, V. V., Gutiérrez-Puertas, L., Granados-Gámez, G., Gutiérrez-Puertas, V., & Aguilera-Manrique, G. (2020). Problematic mobile phone use, nomophobia and decision-making in nursing students mobile and decision-making in nursing students. *Nurse Education in Practice*, 49, 102910.
- Okuyan C. B., Güner P. D., & Güneş S. U. (2019). Determination of Nomophobia Levels of Nursing and Medical Students. Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi, 8(4), 372-382.
- Olivencia-Carrión, M. A., Ferri-García, R., Rueda, M. d. M., Jiménez-Torres, M. G., & López Torrecillas, F. (2018). Temperament and characteristics related to nomophobia. *Psychiatry Research*, 266, 5–10.
- Öz H, Tortop HS. Investigation of university students' nomophobia levelsbetween personality types. *E Journal of New Media / Yeni Medya Elektronik Dergi eJNM*, 2018,2(3), 146-159
- Samaha, M, & Hawi, N.S. (2016). Relationships among smartphone addiction, stress, academic performance, and satisfaction with life. *Comput Human Behav*, 57, 321-325.
- Sırakaya, M. (2018). Examination of associate students' nomophobia levels according to smart phone use. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 14(2), 714-727
- Siddiqui, M., Ali, A.Z. (2015). Addictive cell phone usage: The relationship between impulsiveness and behavioral addiction. *Pak J Psychol*, 46, 53-67.
- Sureka, V., Abeetha, S., Suma, S., Sadhana, S., Brinda, S., Bhagyashree, N., Ramya, K., & Ganesh, M. (2021). Prevalence of nomophobia and its association with stress, anxiety and depression among students. *Biomedicine*, 40(4), 522-525.
- Toda, M., Monden, K., Kubo, K., & Morimoto, K. (2006). Mobile phone dependence and health related lifestyle of university students. *Soc Behav Pers*, 34, 1277–1284.
- Yıldırım, S., & Kişioğlu, A.N. (2018). New diseases due to technology: nomophobia, netlessphobia, FoMO. *Med J SDU / SDÜ Tıp Fak Derg*, 25(4), 473-480.
- Yıldız Durak, H. (2019). Investigation of nomophobia and smartphone addiction predictors among adolescents in Turkey: Demographic variables and academic performance. *Social Science Journal*, 56, 492-517.