

**Research Article**

# The Prevalence of Nomophobia among University Students and Nomophobia's Relationship with Social Phobia: The Case of Bingöl University

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## Abstract

The aim of this study is to determine the relationship between nomophobia and social phobia and the prevalence of nomophobia (NO-MOBile-PHOne-PhoBIA) among university students. Within the scope of the research, 307 students studying at Bingöl University's Department of Social Work were reached. In order to collect data, a demographic information form with questions about age, grade, and gender was applied alongside the Nomophobia Scale and the Liebowitz Social Anxiety Scale. According to the results of the study, 41% of the participants are nomophobic. As a result of the study, a low positive correlation has been found between nomophobia and social phobia. These results show nomophobia to have become a rapidly spreading problem among university students and preventive studies to be required on the factors affecting nomophobia and social phobia.

## Keywords

Mobile phone • Internet • Nomophobia • Social phobia • Prevalence of Nomophobia

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Nomophobia means the fear of being away from one's mobile phone (Dixit et al., 2010). The literature shows nomophobia to have particularly emerged among university students, both in Turkey and the world (Bivin, Mathew, Thulasi, & Philip, 2013; Erdem, Türen, Kalkın, & Deniz, 2016). Studies on nomophobia have investigated the various factors that may be related to nomophobia. In general, these factors are: frequency of mobile phone use (Bivin et al., 2013; Gezgin, Şahin, & Yıldırım, 2017), insufficient knowledge about nomophobia (Abraham, Mathias, & Williams, 2014), gender (Burucuoğlu, 2017; Hoşgör, Tandoğan, & Gündüz-Hoşgör, 2017; Yıldırım, Şumuer, Adnan, & Yıldırım, 2016), duration of smart-phone ownership (Gezgin, Şumuer, Arslan, and Yıldırım, 2017b; Hoşgör et al., 2017; Yıldırım et al., 2016), mobile phone usage hours (Gezgin, Şahin et al., 2017), loneliness (Yıldız Durak, 2018), academic success (Erdem et al., 2016), age (Gezgin, Şumuer et al., 2017), addiction to social media and frequency of social media usage (Yıldız Durak, 2018), and social phobia (King et al., 2013; Uysal, Özen, & Madenoğlu, 2016).

Social phobia is described as the fear of eating/drinking, trembling, flushing, speaking, or vomiting alongside others and being perceived by others as ridiculous has been stated as the basis of this fear (Tükel, 2009). Social phobia, also known as social anxiety disorder, is the state of fear or anxiety a person with a particular anxiety about social conditions has. The person fears being criticized negatively when exposed to such social conditions. Also, the person is concerned about being judged as anxious, weak, crazy, stupid, boring, and so on (American Psychiatric Association, 2013). Social phobia usually begins in adolescence or young adulthood when social interactions become more important (Kring, Johnson, Davison, & Neale, 2012).

Social phobia is the basis for the development of other serious psychiatric disorders and complications (Tükel, 2009). For example, similar to how low self-esteem and extraversion are associated with problematic mobile phone use (Bianchi & Philips, 2005), mental disorders such as social phobia or panic disorder are likely to cause nomophobic symptoms (Uysal, 2016). A socially phobic individual who has to stay in social settings can be stated as being able to pay attention to mobile devices to avoid communication. Similarly, King et al. (2010) reported phone use in social phobia to more closely relate to avoiding direct social relations than to showing pathological dependence and technological tools to be used as a protective shield. Based on these data, one can argue that social phobia, which starts in adolescence and young adulthood, may be related to nomophobia as a way of avoiding social relations among university students. Therefore, the questions for this study have been determined as follows:

1. What is the prevalence of nomophobia among students studying at Bingöl University's Department of Social Work?
2. Do university students' levels of nomophobia differ according to gender, age, or grade?

3. Is there a correlation between the nomophobia levels and social phobia levels for students in Bingöl University's Department of Social Work?

### Method

The population of the study consists of students from Bingöl University's Department of Social Work during the 2017-2018 academic year. Out of 810 students in total, 307 were reached; 17.9% of the participants (55 students) are freshmen, 27.4% (84 students) are sophomores, 35.8% (110 students) are juniors, and 18.9% (58 students) are seniors. Of the participants, 59% (181 students) are female and 41% (126 students) are male. Students who do not use smart phones have not been included in the study's sample.

The Nomophobia Scale, developed by [Yıldırım and Correia \(2015\)](#) and adapted to Turkish by [Yıldırım et al. \(2016\)](#), and the Liebowitz Social Anxiety Scale, developed by [Liebowitz \(1987\)](#) and adapted to Turkish by [Soykan, Özgüven, and Gençöz \(2003\)](#), have been used for data collection..

The program SPSS 22 is used for statistical analyses. The *t*-test is used for gender and the one-way ANOVA test has been used for age and grade analyses. In order to examine the relationship between social phobia and nomophobia levels, Pearson's correlation analysis has been applied. Cluster analysis has been applied to determine participants' nomophobic status. In this context, 2- and 4-cluster *K*-means analyses have been used.

### Findings

The findings will first present students' nomophobia levels and their nomophobia levels related to age, class, and gender. Then the relationship between their nomophobia and social phobia levels will be given.

Firstly, participants' nomophobic statuses have been analyzed using 2-cluster *K*-means analysis. According to the findings, 41% of the participants are nomophobic. In the second stage, 4-cluster *K*-means analysis has been applied in order to examine the participants' nomophobic statuses in detail (none, less, medium, high). Accordingly, 25.7% (79 students) of the participants have been found to be moderately nomophobic and 15.3% (47 students) to be highly nomophobic. In addition, 35.8% of the participants (110 students) have been found to have low-level nomophobia and 23.1% (71 students) to have no nomophobia.

No significant difference exists between male students' mean score ( $= 3.74$ ) and the female students' mean score ( $= 3.71$ ) from the independent samples *t*-test ( $p > .05$ ), which was done to determine whether gender has a significant effect on nomophobia levels. In this case, gender can be said to have no significant effect on nomophobia.

In order to test whether a difference exists between participants' nomophobia levels, mean nomophobia scores have been compared using one-way ANOVA testing. Participants' nomophobia levels have not been found to differ significantly by age ( $p > .05$ ). However, female participants' nomophobia levels have been observed to differ significantly by grade in terms of the gender-based comparison ( $p < .05$ ). The effect size calculated as a result of the test ( $\eta^2 = 0.06$ ) indicates this difference to be moderate.

When examining participants' nomophobia and social phobia levels, a low positive correlation has been observed to exist between nomophobia and social phobia ( $p < .01$ ,  $r < 0.2$ ). When examining the determining coefficient, differences in nomophobia scores can be said to explain 2.9% of the variance in social phobia scores.

### Discussion

According to the results, when examining participants' nomophobia levels, 41% of the students have been concluded to be nomophobic. The results are consistent with the literature. [Dixit et al. \(2010\)](#) found 18.5% of university students to be nomophobic according to the results of their research in India with 200 university students. [Bivin et al. \(2013\)](#) found 23% of participants to be nomophobic, 64% to be in the risk group for nomophobia, and 13% to be non-nomophobic. Again, [Tavolacci et al.'s \(2015\)](#) study with 760 university students in France found about a third of university students to have symptoms of nomophobia. [Pavithra et al.'s \(2015\)](#) study on university students in India found 39.5% of university students to be nomophobic and 27% to be at risk of being nomophobic. In addition, studies in Turkey are consistent with the research. [Yıldırım et al. \(2016\)](#) found 42.6% of the participants to be nomophobic, and [Erdem et al. \(2016\)](#) found 55% of students in the Faculty of Economics and Administrative Sciences in Malatya to be nomophobic. Similarly, [Burucuoğlu's \(2017\)](#) study on students in Samsun's Ondokuz Mayıs University found 73.7% of students to be moderately or highly nomophobic. [Yıldız Durak's \(2018\)](#) study with 7th and 8th grade adolescents found them to have moderate levels of nomophobia. In contrast to these studies, [Erdem et al.'s \(2017\)](#) study, which compared university students and public transport workers in Malatya, found students' daily use of smart phones and nomophobia rates to differ significantly from public employees. These findings parallel the results of the current research. When considering [Erdem et al.'s \(2017\)](#) study, which aimed to compare university students with other age groups, nomophobia can be said to be more prevalent among university students than other age groups; however, similar studies are needed to further reveal this argument. According to [King et al. \(2014\)](#), the data suggest that nomophobia is a rising problem area in the modern age.

According to the results of the study, no significant difference has been observed in participants' nomophobia levels on the basis of gender. While studies exist showing no

significant difference to be found between male and female university students' nomophobia levels are in accordance with the results of the research (Adnan & Gezgin, 2016; Dixit et al., 2010; Pavithra et al., 2015; Uysal et al., 2016), studies also exist that have revealed no significant difference in male and female participants' nomophobia levels in general (Burucoglu, 2017; Erdem et al., 2017; Gezgin, Şumuer et al., 2017; Hoşgör et al., 2017; Yıldırım et al., 2016). With this study, nomophobia can be said to be a problem that should be considered for all university students, not just for one gender.

According to study's findings, no significant relationship exists between age and nomophobia levels. Similar results are observed in the literature. Yıldırım et al. (2016) concluded no significant relationship to exist between age and nomophobia. Similarly, Hoşgör, Tandoğan, and Gündüz-Hoşgör (2017) found age and nomophobia to be unrelated. However, unlike these studies, Erdem et al. (2017) found a significant negative relationship to exist between age and nomophobia. According to Gezgin, Şumuer et al.'s (2017) study, significant difference is found between participants under 20 and over 22 years old. Namely, as age increases, nomophobic behavior decreases. Similarly, Işık and Ergün's (2018) study with adolescents found Internet addiction to differ significantly between age groups. Both the current study and those conducted among university students within a limited age range have made understanding the age-based differentiation of nomophobia difficult. In this case, making comparative studies is necessary in order to understand the prevalence of nomophobia among other age groups.

According to another result of the study, a significant gender-based difference exists in nomophobia scores by grade level. As female participants' grade increases, their rate of nomophobia decreases. Nomophobia scores for female freshmen are significantly higher than those for female sophomores and seniors. This situation can be said to be about female students who have left their family and come to a different city wanting to be in constant contact with their families or relatives. However, male students' nomophobia scores show no significant difference according to grade.

According to another result of the study, the overall scores for nomophobia and social phobia are seen to be lowly and positively correlated. When examining the literature, findings are found to parallel the results of this research. King et al. (2013) reported nomophobia and social phobia to be correlated and claimed social phobia symptoms to serve to intensify nomophobic behaviors and to make individuals dependent on using virtual environments to establish social relationships, feel safe, and avoid anxiety-related symptoms. They also stated that individuals are directed to intense computer use in order to avoid real social and personal relationships and that these behaviors are symptoms of anxiety. According to the results of King et al. (2014), people with panic disorders and agoraphobia also show a significant increase in anxiety, panic, fear, and depression due to not having mobile phones compared

to normal people. According to the results of Uysal, Özen, and Madenoğlu's (2016) study, a low correlation was found to exist between nomophobia and social phobia. Considering this research and the literature, nomophobia and social phobia or similar factors affecting nomophobia and social phobia can be claimed to be related and these factors need to be focused on in order to solve these problems.

This study has been conducted to determine the prevalence of nomophobia among university students and the relationship between nomophobia and social phobia. However, the research has limitations. The fact that the study was conducted only with university students is a limitation in terms of understanding and comparing the prevalence of nomophobia among other age groups. In this respect, conducting studies on other age groups is advisable in order to understand the prevalence of nomophobia among other age groups and to make comparisons. In addition, increasing studies in this direction is suggested in order to clarify the relationship between nomophobia and social phobia or other mental problems.

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