

# WHEN PHONES HURT: EXAMINING THE LINK BETWEEN NOMOPHOBIA AND SOMATIC COMPLAINTS IN YOUNG ADULTS

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Abstract

This study aims to investigate the role of nomophobia, or 'the fear of being without a mobile phone' in predicting the somatic complaints of young adults. The sample consisted of 219 young adult participants. The research design used was correlational, where the nomophobia and its dimensions were measured and correlated with the participants' somatic complaints. The findings showed that nomophobia was a good predictor of somatic complaints in young people, with a greater degree of nomophobia related to poorer somatic health. Specifically, individuals who reported higher levels of nomophobia also reported more physical consequences such as headaches, back pain, fatigue, and a higher prevalence of sleep disturbances. However, further investigation is needed to identify the possible differences in nomophobia and its impact on somatic health across age groups and cultures. This study highlights the importance of addressing nomophobia in young adults, as it may have significant implications for their somatic health. Healthcare professionals and parents may consider incorporating interventions aimed at reducing nomophobia in young adults to improve their overall health and well-being.

Keywords: Nomophobia, Somatic complaints, Young Adults.

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Nomophobia, or the anxiety resulting from being without a cell phone or access to mobile communication technology, has gained increasing attention from researchers in recent years, particularly concerning its potential impact on mental health. However, less attention has been paid to nomophobia's potential physical health consequences. In this study, we will look at the association between nomophobia and somatic health complaints among young adults.

Despite limited research on the physical health consequences of nomophobia, some research revealed that excessive mobile phone use is frequently associated with nomophobia, and may have detrimental physical health repercussions. For instance, Choliz (2010) found that excessive mobile phone use was associated with a range of physical symptoms, such as headaches, neck and back pain, and fatigue. Similarly, Salehan and Negahban (2013) reported that nomophobia was positively correlated with self-reported physical symptoms, such as neck and back pain, headaches, and eye strain. Moreover, the negative relationship between nomophobia and physical health was mediated by anxiety and stress, indicating that these psychological variables may have an impact on physical health consequences of nomophobia.

Other research focuses on the impact of nomophobia on sleep, which is a key factor in overall physical health. Demirci, Akgonul, and Akpinar (2015) found that nomophobia was negatively correlated with sleep quality and that this relationship was mediated by anxiety and stress. Thus, nomophobia may be related to poor sleep quality, which in turn may have negative physical health consequences. The potential physical health consequences of nomophobia are also related to the specific behaviours associated with excessive mobile phone use. For instance, Thomee, Harenstam, and Hagberg (2011) found that excessive mobile phone use was associated with musculoskeletal symptoms, such as pain in the neck, shoulders, and hands, and furthermore vision problems. The usage of cell phones for work-related purposes was also connected with increased levels of symptoms in the body, suggesting that the nature of mobile phone use may have a significant role in the physical health effects of nomophobia. While available evidence indicates that nomophobia may be related to somatic health complaints among young adults, the relationship is complex and multifaceted. Some significant studies have suggested that the relationship between nomophobia and physical symptoms may be moderated by factors such as gender, age, and type of mobile phone use (Demirci et al., 2015; Salehan & Negahban, 2013). Similarly, other studies have found that the relationship between nomophobia and physical symptoms may be mediated by psychological factors such as anxiety and stress (Salehan & Negahban, 2013; Demirci et al., 2015). These findings suggest that a range of factors influences the link or association between nomophobia and physical health symptoms and that further research is required to fully comprehend this relationship.

#### **Rationale of study**

In an era where mobile phones have become ubiquitous, the fear of being without them has taken on a new dimension. Nomophobia, the apprehension of being separated from one's phone, is a relatively new term that has gained prominence in recent years. With mobile phone use increasing exponentially, young adults are among the most ardent users. However, excessive mobile phone use can lead to various physical and mental health issues, raising concerns about the potential negative health consequences of nomophobia. Although previous research has delved into the social and psychological effects of mobile phone use, there remains a dearth of literature exploring the physical health effects of nomophobia. To address this gap, this study seeks to investigate the link between nomophobia and somatic health complaints among young adults, hoping to shed light on the risks associated with excessive mobile phone use.

# Objectives

Objectives of this study were:

- i) To study the relationship of nomophobia with somatic complaints in young adults.
- ii) To find out the predictive role of nomophobia in somatic complaints of young adults.

# Hypotheses

The hypotheses of the study were:

- i) There would be a positive relationship between nomophobia with somatic complaints.
- ii) Nomophobia would be a significant factor in predicting the somatic complaints of young adults.

# METHOD

# Design

This study looked at how variables were interrelated, so the researchers used a correlational design.

# Sample

A total of 219 young individuals aged 19 to 35 were chosen to take part in this study. Certain conditions must be met by the participants, including owning a smartphone with internet access and using it for at least six months.

# Tools

The data was collected using two standardized tools: the 'Nomophobia Questionnaire' developed by Yildirim and Correia in 2015; and the Somatic Complaints subscale of the Personality Assessment Inventory (PAI) developed by Leslie Morey in 1991. The Nomophobia Questionnaire was used to measure the participants' level of nomophobia, while the Somatic Complaints subscale of the PAI was used to assess the status of their somatic complaints.

*a. Nomophobia Questionnaire:* The Nomophobia Questionnaire is a standardized tool used to measure an individual's level of nomophobia or the "fear of being without a mobile phone". It comprises of 20 items, each of which is assessed on a 7-point Likert scale (1 being strongly disagree and 7 being strongly agree). The questionnaire is designed to assess various aspects of nomophobia, such as anxiety, dependence, as well as a lack of control over one's mobile phone usage. The items on the Nomophobia Questionnaire cover a range of topics related to mobile phone use, including feelings of discomfort when separated from one's phone, the need to constantly check one's phone and the extent to which one's phone use interferes with daily activities. The Nomophobia Questionnaire has been validated in several studies and has demonstrated good reliability and validity in measuring nomophobia

**b.** Personality Assessment Inventory: The Somatic Complaints subscale is a component of the 'Personality Assessment Inventory' (PAI) developed by Leslie Morey. The Personality Assessment Inventory (PAI) is a commonly used self-reporting personality assessment tool that assesses many elements of an individual's personality and psychopathology. The Somatic Complaints subscale specifically measures an individual's tendency to report physical symptoms without an underlying medical cause. The Somatic Complaints subscale has 24 items that are assessed on a 4-point Likert scale from 0 (not at all true) to 3 (extremely true). The items on the subscale assess a wide range of physical symptoms, including headaches, back pain, fatigue, and digestive problems. The Somatic Complaints subscale is designed to assess the extent to which an individual may be experiencing somatic symptoms as a manifestation of psychological distress or as a way of coping with stress.

### Procedure

In order to achieve the objectives of this study, a purposive sample of 219 young adults aged between 19 to 35 years was recruited through personal contact. After establishing rapport, the participants were briefed on the purpose of the research, and with their consent, they were provided with questionnaires and instructed on how to complete them according to the provided manual. Once the questionnaires were completed, they were collected and scored according to their respective manuals. In addition, clear instructions were provided to the participants to minimize any potential sources of bias or error in their responses. Once the data was collected and tabulated, statistical analyses were conducted using appropriate methods, such as Pearson's Product moment correlation and linear-regression analysis, to determine the relationships between the variables of interest. The results of these analyses were carefully interpreted and

reported, with appropriate statistical measures used to indicate the strength and significance of the observed relationships.

### Results

SPSS software was used to analyze the data. To define the sample characteristics and variables of interest, descriptive statistics such as means and standard deviations were produced. The correlation coefficient of Pearson was utilized to investigate the association between nomophobia and somatic complaints.

	Ν	Range	Mean	Std. Deviation	Variance
NMP(TOTAL)		76	79.954	13.227	174.979
D1		33	24.214	5.628	31.683
D2		28	19.648	5.028	25.284
D3		21	16.237	4.220	17.814
D4		25	19.881	5.064	25.646
SOM-C	219	13	11.735	2.406	5.791
SOM-S		13	11.936	2.493	6.216
SOM-H	DM-H	12	12.000	2.451	6.009
SOM (TOTAL)		32	35.671	5.191	26.946

*Table 1.* Descriptive statistical values for sample (N=219).

"D1: Not being able to communicate, D2: Losing Connectedness, D3: Not being able to access information, D4: Giving-up convenience, SOM-C: Somatic Complaints-Conversion, SOM-S: Somatic Complaints-Somatization, SOM-H: Somatic complaints-Health Concerns, SOM-T: Somatic Complaints-Total."

*Figure 1.* Graphical representation of descriptives values of nomophobia and somatic complaints for N=219.



To test the first hypothesis, the intercorrelation between the variables (nomophobia and somatic complaints) was computed by using Pearson's method of correlation and the results were indicated in Table 2.

**Table 2.** Correlation matrix of Nomophobia (with its dimensions) and somatic complaints forN=219.

	NMP	D1	D2	D3	D4	SOM- C	SOM-S	SOM- H	SOM-T
NMP	1.00								
D1	.731**	1.00							
D2	.637**	.307**	1.00						
D3	.548**	.213**	.067	1.00					
D4	.727**	.333**	.287**	304**	1.00				
SOM- C	.332**	.260**	.253**	.172*	.195**	1.00			
SOM-S	.488**	.335**	.323**	.260**	.378**	.249**	1.00		
SOM- H	.306**	.191**	.166*	.147*	.307**	.209**	.284**	1.00	
SOM- T	.533**	.371**	.351**	.274**	.417**	.682**	.730**	.705**	1.00

\*\*Correlation is significant at .01 level, \*Correlation is significant at .05.

Correlational Matrix (Table 2) indicated the relationship between nomophobia (with four dimensions) i.e., "Not being able to communicate, Losing Connectedness Not being able

to access information, and Giving-up convenience" and somatic complaints. It can be easily seen from the correlational values that nomophobia is significantly correlated with overall somatic complaints (r = .533, p < .001). This correlation coefficient (r) of 0.533 with p < .001, indicates a moderate positive correlation between Nomophobia (fear or anxiety related to being without a mobile phone) and somatic complaints; which means that as the levels of Nomophobia increase, the levels of the (somatic complaints among young adults also tend to increase). In this case, as the fear or anxiety related to being without a mobile phone increases; individuals may experience more physical symptoms without any clear medical cause. In other words, these findings exhibit that persons who were highly nomophobic experiencing concerns about health functioning and physical ailments such as headache, pain or other kinds of gastrointestinal problems.

The correlation coefficient of 0.332 indicates a positive correlation between Nomophobia and SOM-Conversion subscale scores; suggesting that the two variables have a minor propensity to rise or decrease together., but the relationship is of moderate level but not very strong. The correlation coefficient between Nomophobia and SOM-Somatization (r =0.488) indicates a positive and moderately strong correlation between Nomophobia and SOM-S. This indicates the fact that there is a relatively strong tendency for the two variables (nomophobia and somatization) to increase or decrease together. The correlation value between Nomophobia and SOM-Health concerns (r = 0.306) indicates a positive but relatively weak correlation between Nomophobia and SOM-H. This means that there is a small tendency for the two variables to increase or decrease together, but the relationship is not very strong. The positive correlation suggests that as Health concern increases, Nomophobia also tends to increase, and vice versa, but the association is not particularly strong.

All four dimensions of nomophobia were found significantly linked or associated with the overall somatic complaints of young adults (correlation coefficients for each dimension of nomophobia with levels of significance are indicated in Table 2).

Table 3. Linear regression analysis for prediction of somatic complaints from Nomophobia.

	$\mathbb{R}^2$	Beta	В	F-value
NMP	.284	.533	.209	86.113

The linear regression analysis aimed to predict somatic complaints based on levels of nomophobia. The coefficient of determination, denoted as  $R^2$ , measures the proportion of the variance in the criterion variable i.e., somatic complaints that can be explained by the Nomophobia. In this scenario, an  $R^2$  value of 0.284 suggests that Nomophobia may explain

roughly 28.4 per-cent of the variability in somatic symptoms. Other factors/issues not included in the analysis account for the remaining 71.6% of the variation; the Beta coefficient represents the standardized regression coefficient or the effect size of the Nomophobia on the criterion somatic complaints i.e., the Beta value of 0.533 suggests that a one-unit increase in Nomophobia is associated with a 0.533-unit increase in somatic complaints, after controlling for other variables in the model.

A larger F-value suggests a better fit for the model. In this case, an F-value of 86.113 indicates that the regression model with Nomophobia as a predictor variable is statistically significant, suggesting that Nomophobia significantly contributes to explaining the variance in somatic complaints.

To summarize, based on the results, nomophobia has a statistically significant relationship with somatic complaints. Greater degrees of Nomophobia are associated with higher levels of somatic complaints. However, it is important to note that the predictor variable only explains about 28.4% of the variance in somatic complaints, indicating that other factors not included in the analysis also influence somatic complaints.

#### Discussion

Numerous studies have revealed a positive connection between nomophobia and various physical health issues. For instance, research has shown that excessive mobile phone use or nomophobia has been linked to vision problems. Excessive screen time and staring at small screens can cause eye strain, dryness, and discomfort, commonly known as "digital eye strain" or "computer vision syndrome." Individuals with greater degrees of nomophobia are more prone to develop visual symptoms, according to studies (Yan, Xie, & Zheng, 2020). Moreover, understanding the predictive role of nomophobia in physical health outcomes can guide the development of targeted interventions. For example, interventions that promote healthy mobile phone use habits, such as taking breaks, maintaining proper posture, and practising eye exercises, may assist in mitigating the unpleasant effects of nomophobia on physical health. Hence, available literature concluded that there is a moderate positive correlation between Nomophobia and somatic complaints, indicating that individuals experiencing higher levels of Nomophobia are also more likely to report physical symptoms without an underlying medical cause.

#### Conclusion

In conclusion, the results of the study suggest that nomophobia has negative physical health consequences among young adults, including musculoskeletal symptoms, vision

problems, poor sleep quality, and other physical symptoms. The relationship between nomophobia and physical or somatic health is complicated and impacted by several aspects, including gender, age, and type of mobile phone use, as well as psychological factors such as anxiety and stress. Future research studies should continue to explore or focus on the relationship between nomophobia and physical health and investigate potential interventions to mitigate the negative physical health consequences of excessive mobile phone use.

#### References

- Choliz, M. (2010). Mobile phone addiction: A point of issue. Addiction, 105(2), 373-374. https://doi.org/10.1111/j.1360-0443.2009.02854.x
- Demirci, K., Akgönül, M., & Akpinar, A. (2015). Relationship of smartphone use severity with sleep quality, depression, and anxiety in university students. Journal of Behavioral Addictions, 4(2), 85-92. https://doi.org/10.1556/2006.4.2015.010
- Morey, L. C. (1991). Personality assessment inventory: Professional manual. Psychological Assessment Resources.
- Salehan, M., & Negahban, A. (2013). Social networking on smartphones: When mobile phones become addictive. Computers in Human Behavior, 29(6), 2632-2639. https://doi.org/10.1016/j.chb.2013.07.003
- Thomee, S., Harenstam, A., & Hagberg, M. (2011). Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults—a prospective cohort study. BMC Public Health, 11(1), 66. https://doi.org/10.1186/1471-2458-11-66
- Yan, Z., Xie, M., & Zheng, B. (2020). The relationship between nomophobia and visual symptoms among college students: The mediating effect of smartphone usage patterns. International Journal of Environmental Research and Public Health, 17(19), 1-11. https://doi.org/10.3390/ijerph17196908
- Yildirim, C., & Correia, A. P. (2015). Exploring the dimensions of nomophobia: Development and validation of a self-reported questionnaire. Computers in Human Behavior, 49, 130-137. https://doi.org/10.1016/j.chb.2015.02.059

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