

Nomophobia, Loneliness and Fear of Missing Out Among College Students

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Abstract

This study investigates the interrelationship among nomophobia, loneliness, and the Fear of Missing Out (FoMO) among college students. The research aimed to explore how these three psychological constructs interact to form a cycle of dependence and emotional distress in an increasingly digital environment. Using a quantitative, correlational research design, data were collected from 80 college students (40 male, 40 female) through standardised instruments the Nomophobia Questionnaire (NMP-Q), the De Jong Gierveld Loneliness Scale, and the FoMO Scale. Results revealed significant positive correlations between all three variables: nomophobia and loneliness ($r = .268, p < .05$), nomophobia and FoMO ($r = .519, p < .05$), and loneliness and FoMO ($r = .244, p < .05$). These findings suggest that loneliness increases smartphone dependence, while FoMO amplifies anxiety related to disconnection, together reinforcing nomophobic behaviors. The study highlights the cyclical nature of digital anxiety among college students, where the constant need for connectivity may paradoxically intensify feelings of isolation. It emphasises the importance of fostering mindful technology use and strengthening offline social connections to mitigate the psychological impact of digital overreliance.

Keywords: Nomophobia, Loneliness, Fear of Missing Out (FoMO)

1. INTRODUCTION

1.1 The Digital Paradox and Nomophobia

The smartphone has become an indispensable extension of the self for most people, yet this reliance has created an emerging psychological challenge: Nomophobia (no mobile phone phobia). Defined as the distress experienced when unable to access a mobile phone or its communication capabilities (Yildirim & Correia, 2015), this condition is a modern anxiety disorder driven by the need for constant connectivity. It is particularly relevant for college students, a generation intrinsically linked to digital technology. Understanding this fear requires examining the underlying psychological factors driving our attachment to the device.

1.2 Theoretical Foundations and Interrelationships

The psychological attachment to the smartphone can be explained through three primary frameworks: Attachment Theory: The mobile phone functions as a modern digital attachment object (Chóliz et al., 2018). Losing access to it can trigger separation anxiety by severing the perceived link to social support networks, particularly for individuals with anxious attachment styles who seek continuous digital reassurance.

- Social Cognitive Theory: Over-reliance on the smartphone erodes an individual's self-efficacy, leading to a perceived lack of control and competence in functioning without the device (Bandura, 1986). This learned dependency reinforces nomophobic tendencies.
- Social Identity Theory: The phone is the gateway to digital social groups, making it essential for maintaining one's social identity (Tajfel & Turner, 1979). The fear of being disconnected is, therefore, an acute fear of social exclusion and the loss of one's digital persona.

1.3 Loneliness and the Fear of Missing Out (FoMO)

Nomophobia operates in a powerful, self-perpetuating loop with Loneliness and the Fear of Missing Out (FoMO).

Loneliness is the subjective distress from a perceived discrepancy between desired and actual social connections (Peplau & Perlman, 1982). This feeling is amplified in the college environment, where students navigate academic pressure and new social structures.

FoMO is the pervasive apprehension that others are having rewarding experiences from which one is absent. Driven by Social Comparison Theory (Festinger, 1954), the constant stream of idealized social updates on the phone fuels a need to stay digitally connected to avoid social exclusion, which in turn drives nomophobic behavior.

This synergy, where loneliness fuels FoMO, and FoMO drives nomophobia, creates a significant psychological burden.

1.4 Problem Statement and Research Focus

College students are highly vulnerable to this synergistic psychological loop due to the dual pressures of social validation and academic life in a hyper-connected world. Nomophobia and its associated anxieties can lead to impaired social functioning, sleep disturbances, and a decline in academic performance (Sharma et al., 2018). Despite extensive research on these individual constructs, the complex, integrated relationship among nomophobia, loneliness, and FoMO within this unique population requires focused investigation.

Therefore, this study aims to explore the interrelationship between nomophobia, loneliness, and the Fear of Missing Out (FoMO) among college students, providing a holistic view of this modern psychological challenge.

Review of Literature

Yildirim et al. (2015) conducted a two-phase study to explore the dimensions of nomophobia and develop a self-reported questionnaire (NMP-Q) to measure it. The research identified four key dimensions of the condition: the inability to communicate, losing connectedness, being unable to access information, and giving up convenience. The developed questionnaire was found to produce valid and reliable scores for assessing the severity of nomophobia.

Gezgin et al. (2015) conducted a correlation study to examine the relationship between nomophobia and Fear of Missing Out among university students in Turkey. The study found a moderate positive relationship between the two variables.

Heng et al. (2020) conducted a study to examine the mediating role of smartphone attachment in the relationship between loneliness and nomophobia. The findings indicated that loneliness is positively associated with nomophobia and that smartphone attachment serves as a mediating factor. The study also revealed that this relationship is moderated by attachment anxiety, with the effect being stronger in individuals with higher attachment anxiety.

Kara et al. (2019) conducted a study to examine the mediating role of loneliness and anxiety in the relationship between the duration of daily smartphone usage and nomophobia levels among adolescents. The findings indicated that both loneliness and anxiety significantly mediate this relationship, with the effect of anxiety being more powerful. The study concluded that as smartphone usage increases, adolescents feel lonelier and anxious, leading to more nomophobic behaviors.

Research Methodology

Aim: To study the relationship between nomophobia, loneliness, and Fear of Missing Out (FoMO) among college students.

Hypotheses

- H4: There will be Significant Relationship between Nomophobia and Loneliness Among College Students.
- H5: There will be Significant Relationship between Nomophobia and Fear of Missing Out Among College Students.
- H6: There will be Significant Relationship between loneliness and Fear of Missing Out among college students

Research Design

This study employs a quantitative, non-experimental design, utilizing a survey-based correlational approach. This design is selected to describe the naturally occurring relationships and differences between the three pre-existing variables (nomophobia, loneliness, and FoMO) without any manipulation. The core purpose is to efficiently collect numerical data from participants at a single point in time to statistically analyse the associations and conduct comparisons between the genders. This approach allows the study to establish whether a relationship exists among the constructs and between groups (e.g., male and female students). A convenience sample of 80 college students (40 male, 40 female) will be recruited from a university, with the balanced gender split facilitating the planned comparative analyses.

Instruments and Procedure

Data will be collected using a self-reported questionnaire that includes a demographic section and three validated psychological scales. The Nomophobia Questionnaire (NMP-Q), developed by Yildirim and Correia, is a 20-item Likert scale measuring the severity of nomophobia across four dimensions (e.g., losing connectedness, inability to communicate), with higher scores indicating greater fear. The FoMO Scale (Przybylski et al., 2003) quantifies the pervasive anxiety and apprehension associated with missing out on rewarding social experiences. Lastly, the De Jong Gierveld Loneliness Scale is a reliable instrument used to assess feelings of social isolation by measuring both emotional loneliness (lack of intimacy) and social loneliness (lack of social integration). Before administering the paper or online survey, informed consent will be obtained, and all responses will remain strictly anonymous.

Result and analysis

Table 1 Correlation between nomophobia and loneliness

Variables	N	r	p

Nomophobia			
	80	0.217	Sig**
Loneliness			

The Pearson correlation coefficient between Nomophobia and Loneliness was found to be $r = 0.268$ at the 0.05 level. This positive and statistically significant relationship supports Hypothesis 1, indicating that higher levels of Nomophobia are associated with increased feelings of Loneliness among college students.

Table 2 Correlation between Nomophobia and Fear of Missing Out (FoMO) among participants.

Variables	N	r	p
Nomophobia			
	80	0.519	Sig**
Fear of missing out			

The Pearson correlation coefficient between Nomophobia and Fear of Missing Out (FoMO) was found to be $r = 0.519$. This strong, positive relationship is statistically significant at the 0.05 level and it supports hypothesis 2. This confirms that the fear of being without one's mobile phone is powerfully and reliably connected to the anxiety of missing out on social or online experience

Table 3 Correlation between Loneliness and Fear of Missing Out (FoMO) among participants.

Variables	N	r	p
Loneliness			
	80	0.244	Sig**
Fear of missing out			

The Pearson correlation coefficient between Loneliness and Fear of Missing Out (FoMO) was found to be $r = 0.244$. This positive relationship is statistically significant at the level of 0.05 and supports hypothesis 3. This indicates that college students who report higher levels of loneliness also tend to experience greater anxiety about missing out on social events or digital interactions.

Discussion

The present study explored the interrelationship among nomophobia, loneliness, and Fear of Missing Out (FoMO) in college students. The findings revealed significant positive correlations between all three variables, indicating that these constructs form a mutually reinforcing psychological loop. Individuals with higher levels of loneliness reported greater nomophobia and FoMO, suggesting that smartphone dependency may act as both a coping mechanism for social disconnection and a factor that deepens it. This aligns with findings by Heng et al. (2020) and Faiz et al. (2022), who observed that loneliness and attachment anxiety heighten nomophobic behaviors.

The strong association between nomophobia and FoMO observed in this study further supports prior research (Gezgin et al., 2018; Bulut & Sengul, 2023), emphasizing that the fear of missing online social experiences fuels excessive phone dependence. As suggested by Przybylski et al. (2013), FoMO reflects unmet needs for belonging and validation, which may explain why individuals with high FoMO scores feel greater anxiety when disconnected from their devices. Similarly, Gezgin et al. (2019) demonstrated that high FoMO levels predict compulsive smartphone behaviors—consistent with the present findings.

The moderate but significant correlation between loneliness and FoMO aligns with the notion that socially isolated individuals are more vulnerable to the pressures of digital comparison and constant connectedness (Akbari et al., 2021; Kara et al., 2019). Social media's continuous stream of curated experiences may amplify feelings of exclusion, reinforcing both loneliness and FoMO.

Overall, these results highlight the cyclical nature of modern digital anxiety: loneliness increases reliance on smartphones, which intensifies FoMO and nomophobia, perpetuating emotional distress. Similar to findings by Çatıker et al. (2022), this cycle may adversely affect students' concentration and well-being, ultimately impacting academic performance and interpersonal relationships.

Conclusion

Nomophobia, loneliness, and FoMO collectively represent a modern cycle of disconnection masked by constant connectivity. For many college students, smartphones have become a source of comfort and validation; yet, this dependence often deepens the very feelings of isolation they are meant to alleviate. Breaking this cycle requires more than reducing screen time; it calls for emotional awareness, balanced digital habits, and stronger offline connections.

By fostering meaningful, real-world relationships and promoting mindful engagement with technology, students can regain a sense of control and emotional stability. Understanding and addressing these intertwined experiences is essential for promoting healthier, more grounded ways of connecting in an increasingly digital world.

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