REGIONAL LENS

# Investigating Fear of Missing Out in Underpinning Nomophobia: A Perspective of College Students

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**Abstract:** As smartphone usage by college students grows, a number of psychological issues, such as nomophobia (the fear of being without one's phone) arise from heavy reliance on smartphones. Beyond this, increasing use of smartphones and increasing digital interaction is also linked to FoMo (or fear of missing out). The objective of this research study was to examine whether or fear of missing out influences the nomophobia in College students. A cross-sectional correlational design was used to collect data on students enrolled in government intermediate and undergraduate programs with the use of a convenient sampling method and with completion of three data collection instruments: the Nomophobia Questionnaire (Urdu), FoMo Scale, and Demographic Information. Simple Regression Analysis was performed using SPSS 24, and the results indicated that or fear of missing out was a significant predictor of nomophobia ($F_{(1, 498)} = 56.99$, $p < .001$). Thus, not only does an individual with higher levels of or fear of missing out have greater nomophobia than does an individual who experiences lower or fear of missing out but also 10.3% of the variance in nomophobia ($R2 = .103$) as predicted by the or fear of missing out regression model and a beta coefficient of ($\beta = 0.320$). These results corroborate prior studies indicating that an individual with higher levels of or fear of missing out tends to overindulge in excessive use of smartphones and, when not engaging in smartphone activity, experiences heightened levels of anxiety.

## Introduction

With the advancements of technology over the last few years, smartphones have become a part of everyday life for many individuals; smartphones enable communication by way of text and call, in addition, smartphones provide entertainment and educational resources. For college/university students, smartphones are useful for developing a routine on a daily basis, taking online courses, accessing digital readings and e-books from the web and e-Bookstores, and maintaining contact with peers (Thapa et al., 2018). Furthermore, students can use smartphones to participate in online conversation boards, submit assignments via email, keep track of deadlines and exam reminders, and access educational applications that assist in the learning process. Although they were once considered luxury items, smartphones have become an almost immediate requirement for many young adults due to the amount of reliance they place on smartphones in their daily lives. Additionally, since smartphones have become such an important facet of a person's social and academic life, they help maintain close friendships, provide immediate updates about current events and news through social media, and provide opportunities for leisure activities such as listening to music, playing games, and viewing media via streaming services (Boumosleh & Jaalouk, 2017).

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## Nomophobia

Increasing smartphone dependency is becoming an increasing concern for researchers around world. As a result, many studies have shown a relationship between increased smartphone use and an increase in many behavioral and psychological problems. One of most common problems associated with excessive smartphone usage is nomophobia. As detailed by Yildirim & Corrêa, (2015), 'nomophobia' is defined as a fear, anxiety or discomfort people experience when they can't use their mobile phones. Commonly, this fear is triggered by loss of network connectivity, a lost mobile phone, a dead battery or being asked to put away their mobile phone. Research has shown that nomophobia can result in various negative impacts including:

- ▶ Sleep irregularities
- ▶ Higher levels of stress
- ▶ Decreased ability to concentrate on academic tasks
- ▶ A greater degree of emotional instability

Nomophobia causes students to struggle with time management, be anxious when they are away from their phones, and ultimately result in a decrease in productivity (Mengi et al., 2020). The nomophobia can be altered by fear of missing out. Let check it.

## Fear of Missing Out (FOMO)

Another important element of contemporary research is the Fear of Missing Out (FoMO), which refers to the feeling that other people may experience or have valuable experiences without you. This fear causes people to be constantly online and checking social media feeds, notifications, direct messages, and updates. FoMO causes individuals to feel extreme emotional pressure to maintain contact with others, and to attend all their friends' social events (Przybylski et al., 2013; Elhai et al., 2016). Przybylski and colleagues first proposed and validated the concept of FoMO in 2013, noting that people who have high FoMO will often feel socially excluded when they are not connected to their friends by some means. Qutishat & Abu-Sharour, (2019) supported these findings with their own research demonstrating that FoMO increases a person's anxiety, creates a need to check social media frequently, and ultimately decreases a person's academic performance due to the constant distractions caused by FoMO. FoMO can also lead to negative digital habits such as difficulty unplugging from social media during study sessions, and feeling pressure to keep up with every social activity currently taking place. Because of this, FoMO has a negative effect on the emotional well-being of many young adults, as well as their focus, sleep, and daily functioning.

## Vulnerability

Nomophobia and FOMO are two phenomena that affect college students more than any other age group. College students rely on their smartphones for numerous purposes, including socializing, doing classwork, making presentations, online communication and maintaining friendships. Additionally, social media has developed an environment where young people are continuously comparing themselves to others, trying to impress someone, and seeking likes and comments, so these individuals feel an even stronger need to be aware of what everyone else is doing (Daraj et al., 2023).

Several studies investigating the relationship between FOMO and Nomophobia show that college-age students who experience FOMO are significantly more likely to experience Nomophobia and significantly heavier users of their smartphone. Hoşgör & Gündüz, (2019) and Qutishat & Abu-Sharour, (2019) have shown repeatedly that students who experience a greater degree of FOMO are more likely to experience Nomophobia and engage in excessive smartphone use than students who have a lower level of FOMO. These findings indicate that college students are highly susceptible to digital dependencies and smartphone-related mental health issues and they are often encouraged to keep connected through various social media platforms.

## Context

Although numerous international studies have investigated the relationship between FoMO and nomophobia, there remains a limited amount of research within Pakistan/South Asia that is freely available. Tanveer et al., (2023), indicate

a limited amount of research in Pakistan has been conducted into nomophobia among youth, medical students and university students. The analysis of studies indicate that smartphones are related to moderate/high levels of fear. However, there is currently little research regarding the use of advanced statistical analyses (i.e. regression analysis) to assess the relationship between FoMO and Nomophobia. There are no clear findings about how FoMO leads to or defines Nomophobia.

Current research indicates that Nomophobia is having a greater impact on Young People in Pakistan. Yet no comprehensive studies exist examining how FoMO will serve as a predictive factor for levels of anxiety and emotional well-being associated with the use of Smartphones. Researchers are in critical need of studies that explore the role of FoMO in leading to/creating Nomophobia, as well as how it affects the development of learning, health, daily living and socialization within their respective educational environments. The lack of these studies represents an important gap in regional literature and requires knowledge from educators, parents and decision-makers on how to implement the right interventions to help assuage the fear of smartphones.

## Significance

The present research, therefore, is intended to analyze how the fear of missing out (FoMO) could predict the severity of nomophobia (the fear of running out of mobile phone power to communicate with others), among college-aged Gujarati students. The study will provide a more in-depth knowledge of how digital actions impact college students in their everyday lives, educational achievement, and emotional well-being. The information will help parents, teachers, and lawmakers to better understand the growing prevalence of negative outcomes from excessive smartphone use: increased levels of anxiety, distraction, and social pressure.

The research further emphasizes the need for schools and universities to teach students how to properly use technology, including how to develop and practice healthy habits when using their smartphone, in addition to creating and disseminating programs aimed at reducing the negative effects of technology-related anxiety and promoting emotional resilience in students (Daraj et al., 2023). Moreover, research conducted at the local level and in culturally specific settings can provide culturally relevant information to help develop policies and programs for government intervention targeting specifically the adolescent population in Pakistan.

## Objective of the Study

To explore the role of fear of missing out in underpinning the nomophobia among college students

## Methods

### Design

Correlational cross-sectional research design was used to determine if college students' levels of nomophobia could be predicted by their level of fear of missing out (FoMO). This type of research design is suitable because it allows the users to observe and analyze relationships between two (2) or more variables at a particular time and does not affect how the study was conducted. In addition, this method enables the researcher(s) to investigate the direction and strength of the predicted association between nomophobia and FoMO within a representative sample of college students. Furthermore, a cross-sectional strategy yields preliminary insights into patterns of smartphone-related psychological behaviors that might guide future longitudinal or experimental investigations, and it is effective for gathering data from a big sample in a short amount of time.

### Population of the Study

To ascertain the degree to which college students' nomophobia (fear of being without access to one's phone) is predicted by FoMO (Fear of Missing Out), a correlational cross-sectional study design was chosen. This type of study allows for observation and analysis of the correlation between nomophobia and FoMO (including the direction and strength of that relationship) between most of the participants in this sample population within the same time period and under the same environmental conditions as other studies using different methods (such as longitudinal or

experimental). While this method may be beneficial in establishing associations and similarities/differences between groups of students at different levels of college education, it can also provide the foundation for future longitudinal or experimental research. A larger number of students can be sampled from multiple colleges in a relatively short period of time with this design. As such, based on the research objectives outlined above, the target population for this study was college students enrolled in multiple colleges throughout Gujarat, Pakistan. Both intermediate (i.e., first and second year students) and undergraduate (i.e., third and fourth year students) were included in the sample in order to create a representative sample of the college student population as a whole. The combination of both intermediate and undergraduate students has allowed for a more complete understanding of students' nomophobia, FoMO, and smartphone use across various stages of the college experience. In addition, by using both intermediate and undergraduate students, this study was also able to capture FoMO and smartphone use patterns in both genders (males and females). Another advantage of using this design is that researchers may use it to easily collect large amounts of data resulting from all students enrolled at a college/university.

## Inclusion Criteria

▶ Student must have a smartphone
▶ Students enrolled in colleges of city Gujrat were included.
▶ Intermediate and undergraduate academic level was included.
▶ Only public sector colleges were included.

## Exclusion Criteria

▶ College students with any **psychological disorders** and physical problems were excluded.
▶ Students that do not have smartphone were eliminated from the study.

## Sampling Technique

The participants for this study were selected through convenient sampling technique, a simple sampling method, a type of sampling approach that doesn't give equal probabilities to everyone sampled (nonprobability sampling). Students who were willing and able to participate in this study were included based on their lack of availability. Convenient sampling was selected so that data collection could take place quickly due to time constraints on the study's completion, although a formal sampling frame did exist. This method was also suited to a cross-sectional design, as it allowed researchers to easily reach college students who were available and willing to participate. Convenient sampling is a commonly used method for initial or exploratory research, as sufficient time and resources are not available. However, even though this method limits the scope of findings to one specific group, it still provides useful information regarding the distribution of FoMO and nomophobia among college students who were surveyed.

## Measures

Along with demographic information the following scales were used for data collection. To measure participants' Fear of Missing Out (FOMO) level, the Fear of Missing Out Scale (FoMOS) was devised by Przybylski et al., 2013. FoMOS is composed of 10 different items designed to measure specific aspects of worry about missing out on fulfilling social activities and interactions. A five-point Likert scale was used to score responses, with 1 representing 'not at all true of me' and with 5 representing 'extremely true of me'; the greater the number of 5's, the greater the level of FOMO. The FoMOS has been found to have good reliability and internal consistency with previous research producing Cronbach's alpha values between .87 and .90, indicating it accurately reflects FOMO across diverse populations.

The study used the Urdu version of the Nomophobia Questionnaire (NMP-Q) developed by Naz et al., 2025, as a self-administered survey to measure Nomophobia levels. The NMP-Q conforms to the DSM-5 criteria for diagnosing specific phobias (American Psychiatric Association, 2013) and includes 14 items, grouped into four sub-factors or dimensions of nomophobia: (1) sacrificing convenience; (2) fear of loss of connections; (3) personal distress, and (4) emotional distress.

## Procedure

The researcher obtained approval from the college officials before collecting information from college Students in the Gujrat area. Prior to data collection, Students were told about the study's aims and Procedures, and were informed that their responses would be confidential and only used for the research. Students were informed that participation was voluntary and could withdraw from the study if they chose to do so without consequence. The researcher obtained Informed Consent from participants, which included oral consent and written consent, in order to comply with ethical principles and respect the right to choose autonomy. Participants were provided a Structured Booklet of Questionnaires, which included the Urdu Version of Nomophobia Questionnaire (Naz et al., 2025), Fear of Missing Out Scale (Przybylski et al., 2013), and a Demographic Section. Participants can expect to complete the booklet within ten to fifteen minutes. The researcher ensured that no aspect of the setting allowed other Researchers or participants to influence the responses of Participants. Participants were asked to respond to the questionnaires in a thoughtful and honest manner. The researcher was also available to answer questions regarding any of the questionnaires. After Participants' Responses were reviewed for completeness, the Data were then entered into SPSS (Statistical Package for Social Sciences) for analysis.

## Statistical Analysis

The data from this study were analyzed with IBM SPSS Statistics (Version 24). First, descriptive statistics (mean, frequency, and percentage) were calculated to give a detailed description of the demographic characteristics of the participants — their ages, genders, college academic years, and fields of study were examined. Completing the descriptive statistics allows us to have an overview of what kind of demographic representation exists in the sample and gives us insight into how people in these groups are distributing themselves. A simple linear regression was completed to find a predictive correlation between college students' nomophobia and their fear of missing out (FoMO). In the regression analysis, you can see the strength of the association between nomophobia and FoMO and how the difference between foaming and nomophobia can be explained by FoMO.

## Results

In the findings section, we can report that College students are typically about 20.93 years old on average, most of them are single and more than half (53%) are male for this sample; the first year seemed to be the busiest time of college students enrolling. There were also a smaller percentage of newly enrolling student (4th year) than the total number that enrolled in other years (2nd-3rd). The next step was to look at the regression analysis that would allow us to examine if there was a correlation between nomophobia and FoMO.

Table 1

*Multiple Regression Analysis Predicting Nomophobia*

| Predictor | B | SE B | B | t | P |
|---|---|---|---|---|---|
| Constant | 31.64 | 1.53 | — | 20.65 | < .001 |
| Fear of Missing Out | 0.453 | 0.060 | .320 | 7.55 | < .001 |

*Note:* R = .320, $R^2$ = .103, Adjusted $R^2$ = .101, F (1, 498) = 56.99, p < .001.

## Dependent Variable: Nomophobia

The findings indicate that there was a statistically significant predictive relationship between FoMO and Nomophobia among the sample population (F(1, 498) = 56.99, p <.001). The model accounts for approximately 10.3% of the variance in Nomophobia ($R^2$ =.103, Adjusted $R^2$ =.101). Although there were other factors that could influence Nomophobia among college students, there was evidence that FoMO was a significant predictor of Nomophobia related to smartphone use.

The unstandardized B = .453, SE = .060, standardized beta coefficient β =.320, t ratio of 7.55, and the probability level of p<0.00, indicates that FoMO is an extremely significant predictor of Nomophobia. More precisely, Nomophobia increases by 0.45 for each unit increase in FoMO. The standardized beta coefficient also supports this

positive correlation between Nomophobia and FoMO in that $\beta$ =.320 means that an individual who has a higher degree of FoMO has a greater degree of anxiety when their devices are taken away from them than do individuals with lower degrees of FoMO.

## Discussion

The study found that nomophobia is a significant predictor of FOMO in college students. Through regression analysis, it was determined that FOMO predicts nomophobia. Also, FOMO and nomophobia both displayed a statistically significant correlation, as demonstrated in the beta coefficient, where increased scores of FOMO correlate with increased nomophobia as denoted by a .320 R value. There is thus a moderately strong relationship between anxiety about not having access to one's phone and fear of missing out. While the R2 value indicates that FOMO accounts for only a small portion (10.3%) of the overall variance in nomophobia, this percentage is consistent with findings from past psychological studies on both FOMO and nomophobia which have found to be strongly related. These findings also lend credence to the theory that the psychological pressure to stay connected because of FOMO causes students to use their smartphones excessively. When students do not have their smartphones available to use, they tend to feel anxious, afraid, and disconnected from their social environments; it is this emotional state which Casale et al., (2022) have described as the leading contributor to nomophobia. Overall, the results of this study support the idea that FoMO is one of the significant psychological factors that affect digital behavior and mental well-being for students.

Feeding off of this is the fact that foMo causes an increase in the social comparison stage of development. People who suffer from the foMo experience feel a pressure to "keep up" with their friends and peers via social media and are often pushed to maintain a close the connection with their peers. FoMo has also caused a level of anxiety in foMo sufferers who believe they are missing out on being part of the latest and most important updates in their social and intellectual peer group (Elhai et al., 2018). There are also students who suffer from high levels of foMo that constantly search for digital validation from their phones and feel a greater attachment to their phones (Arif et al., 2025). These factors have caused foMo sufferers to feel an increase in both anxiety and discomfort when they are not in possession of their phones. It is also clear from this research that college students are particularly vulnerable to this trend. As we can see from this research, young adults utilize their phones to assist with fulfilling their social needs and completing activities with friends, as well as meeting college requirements. Because of this dependency, they may feel unsafe if they are separated from their phone. The research conducted by Pakistani college students has provided additional support for current regional studies on this topic, and has added to the need to increase awareness of mental health concerns by educating students and providing therapeutic resources to help students eliminate the negative effects of foMo and nomophobia so that they can develop healthy habits related to their use of smartphones.

## Conclusion

The research indicated that college students had a greater experience with both Nomophobia and Fear of Missing Out. Moreover, the findings of the research showed that the student's fears regarding their mobile devices were a contributing factor to several of the problematic behaviours associated with the use of mobile devices.

# References

American Psychiatric Association, DSM-5 Task Force. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5™* (5th ed.). American Psychiatric Publishing, Inc.. https://doi.org/10.1176/appi.books.9780890425596

Arif, Z., Khurshid, N., & Abid, E. (2025). Disconnected and Distressed: Unpacking the Link Between Fomo and Nomophobia in the Age of Digital Dependency. *Social Sciences & Humanity Research Review, 3*(3). https://sshrr.online/index.php/4/article/view/229/218

Boumosleh, J.M., & Jaalouk, D. (2017). Smartphone Addiction among University Students and Its Relationship with Academic Performance. *Global Journal of Health Science, 10*, 48. https://doi.org/10.5539/gjhs.v10n1p48

Casale, S., Fioravanti, G., Gioia, F., Redditi, E., & Spada, M. (2022). Fear of missing out and fear of not being up to date: investigating different pathways towards social and process problematic smartphone use. Current Psychology, *42*(26), 22847-22856. https://doi.org/10.1007/s12144-022-03368-5

Daraj, L. R., AlGhareeb, M., Almutawa, Y. M., Trabelsi, K., & Jahrami, H. (2023). Systematic Review and Meta-Analysis of the Correlation Coefficients between Nomophobia and Anxiety, Smartphone Addiction, and Insomnia Symptoms. *Healthcare (Basel, Switzerland), 11*(14), 2066. https://doi.org/10.3390/healthcare11142066

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. Computers in Human Behavior, *63*, 509-516. https://doi.org/10.1016/j.chb.2016.05.079

Hoşgör, H., & Gündüz Hoşgör, D. (2019). THE RELATIONSHIP AMONG NOMOPHOBIA, FEAR OF MISSING OUT AND DEMOGRAPHIC VARIABLES: EXAMPLE OF THE HEALTHCARE MANAGER CANDIDATES. *Current Addiction Research, 3*(1), 16-24. https://doi.org/10.5455/car.105-1562758780

Mengi, A., Singh, A., & Gupta, V. (2020). An institution-based study to assess the prevalence of Nomophobia and its related impact among medical students in Southern Haryana, India. *Journal of family medicine and primary care, 9*(5), 2303–2308. https://doi.org/10.4103/jfmpc.jfmpc_58_20

Naz, I., Mumtaz, S., & Mazhar, M. (2025). Development of Indigenous Scale of Nomophobia, Urdu Version. Physical Education, *Health and Social Sciences. 3*. 612-625. https://doi.org/10.63163/jpehss.v3i2.489

Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, Emotional, and Behavioural Correlates of Fear of Missing Out. *Computers in Human Behaviour, 29*, 1841-1848. https://doi.org/10.1016/j.chb.2013.02.014

Qutishat, M., & Abu Sharour, L. (2019). Relationship Between Fear of Missing Out and Academic Performance Among Omani University Students: A Descriptive Correlation Study. *Oman medical journal, 34*(5), 404–411. https://doi.org/10.5001/omj.2019.75

Tanveer, E., Kumar, V., Amna, S., & Ahmed, H. (2025). Nomophobia among Medical Students in Karachi: A Cross-Sectional Analysis of Prevalence, Sleep Quality, Anxiety, and Academic Performance. *Allied Medical Research Journal, 3*(03), 14-20. https://doi.org/10.59564/amrj/03.03/001

Thapa, K., Pokharel, R., Sigdel, R., & Rimal, S. P. (2018). Pattern of Mobile Phone Use among Students of an Institution. *JNMA; journal of the Nepal Medical Association, 56*(209), 522–526. https://pmc.ncbi.nlm.nih.gov/articles/PMC8997326/

Yildirim, C., & Correia, A. (2015). Exploring the dimensions of nomophobia: Development and validation of a self-reported questionnaire. *Comput. Hum. Behav., 49*, 130-137. https://doi.org/10.1016/j.chb.2015.02.059