



## An Analytical Study On The Level Of Nomophobia And Its Associated Factor Among Nursing Students In Selected Nursing College

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**Abstract:** Nomophobia, which is conceptualized as a form of conditioned anxiety, caused by the inability to access a mobile telecommunication device, has received growing scholarly attention in the modern era of psychosocial paradigm. The increasing ubiquity of smart phones (at least amongst post-secondary cohorts) has led to a significant rise in digital dependence, thereby putting nomophobia in the forefront as an important construct to understand empirically.

**Objective:** The present investigation aimed at determining the epidemiological prevalence of nomophobia among smartphone users enrolled at an selected Nursing College and to critically analyze its possible correlates in a range of sociodemographic variables.

**Methods:** Using a cross-sectional approach, 188 people, aged between 15 and 55 years and having at least one year of antecedent smartphone use, were recruited in the study. Data acquisition was made through a semi-structured interview instrument that included the validated Nomophobia Questionnaire (NMP- Q). Statistical analyses were conducted using the statistical package, with version 22.0 of the statistical package (SPSS), in which the associations between variables were estimated using the Chi-squared test.  $p < 0.05$  was used to define the statistical significance.

**Results:** A surprisingly high prevalence of nomophobia was found. Specifically, 47.87% of the study participants showed mild nomophobia, 46.28% had moderate manifestations, and 2.66% had severe symptoms. Statistically significant correlation was observed between nomophobia and educational attainment, occupational status, socioeconomic stratum, familial structure, hours spent daily using smartphone and hours spent on social networking and frequency of use of phone per hour ( $p < 0.05$ ). No significant associations existed for gender and monthly expenditure for mobile services. This study has been undertaken to investigate the determinants of stock returns in Karachi Stock Exchange (KSE) using two assets pricing models the classical Capital Asset Pricing Model and Arbitrage Pricing Theory model. To test the CAPM market return is used and macroeconomic variables are used to test the APT. The macroeconomic variables include inflation, oil prices, interest rate and exchange rate. For the very purpose monthly time series data has been arranged from Jan 2010 to Dec 2014. The analytical framework contains.

**Index Terms - Component, formatting, style, styling, insert.**

### I. INTRODUCTION

In the present-day digital societies, anxiety has become a defining feature of modern life. A new stress-related condition that has been discovered is called nomophobia, derived from "No-Mobile-Phone Phobia" and first reported in research by the UK Post Office in 2008, which looked at anxiety levels that people exhibit when they use mobile phones. This phenomenon refers to fear or distress that people feel due to their inability to access or make use of their mobile devices. Classified as a contemporary psychological disorder, nomophobia has emerged as a result of increasingly intensified interaction between human beings and mobile communication technologies, in particular smart phones. The presence of Wi-Fi technology everywhere, growing processing power and operating systems in smartphones, as well as falling device prices, have greatly contributed to the massive increase in the use of smartphones.

Mobile phones - also known as cellular phones or cell phones - have made communication a lot easier by allowing users to make and receive calls from almost anywhere using wireless radio signals. Earlier generations mostly used traditional telephony to communicate, but the users in today's age depend upon smartphones for a wide range of functions owing to their multifunctional abilities. Modern smartphones have become essential parts of daily existence and are not only used as communication devices but as devices that can be used for internet, social networking, email correspondence, personal organization, entertainment, photography, gaming, and music consumption.

During the last decade, mobile phones have become highly smart smartphones with advanced technological features. For many people, these devices have become integral to daily routines, and they are used from the moment one wakes up until the onset of sleep. While the devices add to the convenience and connectivity, too much attachment could have negative effects. In several nations, the number of mobile subscriptions now exceeds the total population of the nations, and India is one of the most considerable markets for mobile phone usage in the world.

Smartphones have become so integrated into the techno-culture of the twenty-first century, especially among the younger generation whose social needs revolve around interaction, acceptance, and connectivity. Empirical evidence shows that nomophobia is rising across the world with a growing group of people experiencing fear or anxiety when they are disconnected from their mobile devices.

The growing use of digital technologies such as personal computers, tablets or smartphones has had a significant impact on the pattern of behaviour and habits of daily life. Despite all the benefits of these technologies, they can also cause problems for society at large including social isolation and financial pressure due to spending too much money on devices and accessories. Furthermore, excessive use may lead to physical and psychological adverse outcomes, such as sleep problems, increased stress and anxiety, poor academic performance, less physical activity and accidents related to using the devices while distracted. Continuous checking and extended involvement with smartphones have been linked to declining health and general well-being. Accordingly, the current study aimed to examine the prevalence and degree of nomophobia in smartphone users. This is sample paper format only please use this format and follow this structure as per your requirement.

## II. Review of Literature

**Sadeghi et al. (2025)** studied the prevalence of nomophobia and its factors in nursing students in descriptive-analytical design. Findings showed that social interaction anxiety and excessive smartphone use was a significant predictor of increased levels of nomophobia. In addition, nomophobia severity was also influenced by demographic variables (age, academic year). The authors recommended that awareness programs should be included in nursing curriculum to combat the dependency on smartphones.

**Hatami et al. (2025)** assessed the relationship between nomophobia, sleeping quality, communication skills and stress among nursing students. Their results showed that the higher the nomophobia score the poorer the sleep quality and the higher the levels of stress. The study revealed the negative effect of overuse of smartphones on psychological well-being as well as interpersonal communication skills, and the need to promote balanced technology use among nursing students.

**Bernabe\_Mateo, E et al. (2025)** Nomophobia and its wider implications on lifestyle practices of nursing students. Their analysis found strong links between higher levels of nomophobia and unhealthy behaviours including poor sleeping patterns, poor diet, increased alcohol consumption and increased anxiety. These findings show that nomophobia not only negatively affects psychological well-being, but also leads to adverse lifestyle habits.

**Janatolmakan et al. (2024)** conducted a cross section study to determine the prevalence of nomophobia and its effects on academic performance of nursing students. Using the Nomophobia Questionnaire (NMP - Q) the investigators reported that a majority of the participants displayed moderate to severe levels of nomophobia. The study found a statistically significant relationship between higher smartphone use and higher nomophobia scores. Moreover, the higher the levels of nomophobia, the less academic the participants were, indicating that excessive smartphone dependency may have a detrimental effect on educational performance.

**Mudgal et al. (2024)** conducted a systematic review and meta-analysis to evaluate the prevalence and severity of the clinical presentation of nomophobia among nursing students in the world. Their results showed the high prevalence of nomophobia in multiple countries with the majority of students displaying in the moderate severity category. The validity and omnipresence of the NMP-Q as a measuring instrument of nomophobia was highlighted. The authors called for structured interventions within nursing education to deal with the growing digital dependence among nursing students.

**Sheikh et al. (2024)** evaluation of the prevalence and determinants of nomophobia among the general population in Saudi Arabia. The study found an incredibly high rate of prevalence and younger age and prolonged daily smartphone use to be important predictors. Although the study was carried out in the general population, the results are relevant for nursing students, as they are generally in the high-risk age group for smartphone dependence.

**CopajaCorzo et al. (2022)** Nomophobia and its determinants in medical students: insights for nursing populations. The study found that screen time and the amount of time spent on smartphones each day were highly correlated with the higher the nomophobia scores. Psychological factors such as anxiety were also significantly correlated. These findings support the concerns about an overdependence of smartphones among healthcare students.

**Rawas et al. (2021)** examined the link between nomophobia and psychological distress in nursing students in Saudi Arabia. Their cross sectional analysis showed that there was a significant positive correlation between nomophobia and measures of depression, anxiety and stress. The higher the students scored on the NMP-Q, the more likely they were to report significant emotional distress. The authors concluded that nomophobia may play a role in mental health challenges and suggested psychological support strategies in academic institutions should be implemented.

**Bacaksiz et al.,** conducted a cross section study to determine the degree of nomophobia, netlessphobia, and fear of missing out (FoMO) among nursing students using distance education. The results showed a positive association between nomophobia and FoMO, showing that students with an anxiety of missing out on social updates were more likely to have smartphone-related anxiety. The study clarified the role played by online learning environments in increasing digital dependence.

### III. MATERIALS AND METHODS

#### Study Area:

The study was conducted at the selected Nursing College.

#### Study Period:

The study was carried out over two months, from Oct 2025 to Dec 2025.

#### Study Design:

A cross-sectional study design was employed.

#### Study population:

The study included individuals aged 17–24 years who had been using smartphones for more than one year.

#### Sample Size:

A total of 188 participants were included in the study.

#### Inclusion Criteria:

1. Individuals aged 17–24 years who have been using smartphones for more than one year.
2. Individuals who provided informed consent to participate in the study.

#### Exclusion Criteria:

Individuals using iPhones were excluded from the study.

#### Data Collection:

Data was collected using a semi-structured questionnaire administered by researcher at the Selected Nursing College after obtaining informed consent from the participants.

### The questionnaire comprised the following sections:

1. Sociodemographic Data: Information on age, gender, education level, occupation, and socioeconomic status.
2. Smartphone Usage Data: Details on duration, frequency, and purpose of smartphone use.
3. Nomophobia Questionnaire (NMP-Q): A validated questionnaire consisting of 20 items, measured on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The total scores were categorized as follows:
  - a. No Nomophobia: 20
  - b. Mild Nomophobia: 21–59
  - c. Moderate Nomophobia: 60–99
  - d. Severe Nomophobia: 100–140

### Statistical Analysis:

Data entry was performed using Microsoft Excel, and statistical analysis was conducted using SPSS version 22.0. Categorical variables were analyzed using frequencies and percentages. The Chi-square test was used to assess the association between Nomophobia and other variables, with a significance level set at  $p < 0.05$

## IV. RESULTS AND OBSERVATIONS

### Sociodemographic Characteristics of Study Participants

Table 1 shows the distribution of the population studied regarding sociodemographic characteristics. More than half of the respondents (54.26%) indicated that they belong to the 20-35 years age group. The study sample included a slightly higher number of males (53.19%) compared to females. Nearly all the participants were literate (97.87% of the sample). With regard to occupational status, 30.32 percent were employed while the majority (69.68 percent) were not employed. Concerning the family structure, the majority of the participants (68.62%) were members of nuclear families, and thus, the most common type of family in the study.

Table 1: Distribution of Study Participants According to Sociodemographic Characteristics

Sociodemographic Variables	Number (%)
<b>Age</b>	
17-19	61 (32.44)
20-22	102 (54.26)
23-25	25 (13.29)
<b>Gender</b>	
Male	100 (53.19)
Female	88 (46.81)
<b>Marital Status</b>	
Married	4(2.13)
Unmarried	184(97.87)
<b>Type of Family</b>	
Nuclear	129(68.62)
Joint	52(27.66)
Three Generation	7(3.72)
<b>Socioeconomic Class</b>	
Class I	78 (41.49)
Class II	14(7.45)
Class III	18(9.57)
Class IV	73(38.83)
Class V	5 (2.66)

Table 2. Levels of Nomophobia in Study Participants

Levels of Nomophobia	Number (%)
No Nomophobia	6 (3.19)
Mild Nomophobia	87 (46.28)
Moderate Nomophobia	90 (47.87)
Severe Nomophobia	5 (2.66)

The following table (Table 2) displays the distribution of the level of nomophobia of the participants. About forty-seven point eighty seven percent (47.87%) of the respondents showed little nomophobia, while forty six point twenty eight percent (46.28%) had moderate levels of nomophobia. A minor fraction of the participants, two-point sixty-six percent (2.66), were noted as being severely affected by nomophobia.

Table 3: Association of Nomophobia with Study Variables

Variables	Chi-square	Df	p-value
Age	12.513	6	0.051
Gender	1.812	3	0.612
Education	43.262	12	<0.01*
Occupation	13.022	3	<0.01*
Socioeconomic Status	57.310	12	<0.01*
Type of Family	24.611	6	<0.01*
Hours of Smartphone Use in a Day	41.002	6	<0.01*
Hours of Smartphone Use for Social Networking	39.291	6	<0.01*
Frequency of Smartphone Usage in an Hour	8.613	3	0.035*
Total Expenditure on Smartphone Services per Month	7.364	3	0.06

(\*Statistically significant at  $p < 0.05$ )

Table 3 shows the relationship between nomophobia and the various sociodemographic variables and smartphone usage behaviors. Statistically significant associations were present between nomophobia and educational attainment, employment status, socioeconomic class, family type, daily smartphone usage duration, time spent social networking, and smartphone use per hour frequency ( $p < 0.05$ ).

On the contrary, for nomophobia, there was no significant relation with gender, and monthly smart phone services expenditure, as their respective p-values were higher than the standard threshold for statistical significance.

## V. DISCUSSION

This study was designed to estimate the prevalence of nomophobia in smartphone users attending the Selected Nursing College and to find a relationship between them and various sociodemographic factors. The data showed that a considerable percentage of the participants showed different levels of nomophobia: 47.87% of participants had a mild level of symptoms, 46.28% had a moderate level of symptoms, and 2.66% of the sample had a severe level of symptoms. These findings are in line with previous studies that report a high prevalence of nomophobia, particularly in younger cohorts.

Nomophobia was found to be most common among the study participants between the ages of 20 and 35 years (54.26 percent of the sample) after analysis of sociodemographic variables. This finding supports the report in Yildirim and Correia which reported that among younger population, there is greater vulnerability to smartphone dependency due to higher digital engagement and frequent use of social networking platforms. Furthermore, there was no significant difference in the association between gender and nomophobia ( $p = 0.612$ ), which is in accordance with other studies in the literature which state that male and female users are equally prone to smartphone addiction.

A statistically significant relationship was found between the different educational status and nomophobia ( $p < 0.01$ ). Consistent with previous studies, people with greater educational attainment seem to rely more heavily on the smartphones for academic, professional, and social purposes, thereby increasing the risk of dependence. Occupational status was also found to be significantly related to nomophobia ( $p < 0.01$ ), indicating that employed participants may be more anxious in situations where they never have access to their smartphone because of their work-related duties.

Socioeconomic status was found to be significantly related to nomophobia ( $p < 0.01$ ) with the participants in the higher socioeconomic groups showing more smartphone dependency. This is consistent with earlier studies showing that access to and higher income levels tend to lead to greater access to more advanced smartphones and internet connection, which may lead to higher usage and dependency.

Moreover, family type was significantly associated with nomophobia ( $p < 0.01$ ) with higher levels of the condition being reported by the participants from nuclear families. This could be due to the reduced face-to-face interaction within smaller family units, making people more dependent on using digital communication for social interaction.

Patterns of smartphone usage also showed high links with nomophobia. Total daily hours of usage, and hours spent on social networking platforms were highly correlated with high levels of nomophobia ( $p < 0.01$ ). Consistent with prior studies, excessive social media, gaming and entertainment activities increase the risk for developing smartphone-related anxiety. Additionally, frequent smartphone checking behaviour was significantly associated with nomophobia ( $p < 0.035$ ), which is consistent with results that repetitive checking, even in the absence of notifications, is a characteristic behaviour of people with elevated nomophobia.

Despite offering important information on the prevalence and correlates of nomophobia, this study has several limitations. Conducted in a single Nursing college, its results may not be generalisable to other populations. Additionally, self-reported data dependence would lead to susceptibility to recall bias. Future research should involve larger and more diverse samples in order to achieve a full understanding of nomophobia in different demographic groups.

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