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# Comparative Study of Nomophobia Prevalence Among College Students in Relation to Gender Differences

# Anjan Kumar<sup>1</sup>, Dr. Amit Banerjee<sup>2</sup>

<sup>1</sup>Assistant Professor, Dept. of Physical Education, Brahmanand P.G. College, Kanpur, U.P- 208004 (India)

#### **Abstract:**

**Background:** Nomophobia refers to the fear or anxiety of not having mobile phone connectivity to use it for communication or being without one's mobile phone.

*Purpose of the Study:* To explore Nomophobia and provide a comparative analysis and manifestation on prevalence of Nomophobia among college students in relation to gender differences.

**Methodology:** NMP-Q questionnaire developed by Yildirim and Correia (2015) was used to screen out male and female students suffering with Nomophobia. The subjects were bonafide students of college of age between 17 to 25 years, using smartphone for more than 01 year.

**Result:** Prevalence of Nomophobia among male and female students was found 98.8% and 99.4% respectively. The mild, moderate and severe percentage of Nomophobia among male students was 13.8%, 65.2%, and 21% whereas, among female students 12.6%, 60.9%, and 26.5% respectively. The mean score across the participants among male students was 79.83 and female students was 82.17 reflecting moderate Nomophobia on an average among both the genders.

**Conclusion:** The Nomophobia prevalence among college students was high at 99.1% ranging from mild to severe, with male students having slightly lower at 98.8% in comparison to female students at 99.4%.

**Keywords:** Nomophobia, Prevalence, Smartphone, College Students

#### 1. Introduction

Nomophobia, a portmanteau of "no mobile phone phobia," refers to the fear or anxiety of being without one's mobile phone or being unable to use it for communication (Masip et al. 2023). Nomophobia, a contemporary psychological phenomenon stemming from the increasing reliance on mobile technology, has garnered significant attention in recent years. People with Nomophobia may also keep themselves away from social interactions by using devices; they find themselves more comfortable, safer, or more successful when using electronic connections compared to interacting with the physical world (Gezgin, Sumuer, Arslan, & Yildirim, 2017; Bragazzi & Del Puente, 2014). In today's digital age, where smartphones have become ubiquitous, Nomophobia has emerged as a significant concern, particularly among college students who are heavy users of mobile technology. Understanding the prevalence and impact of Nomophobia among college students is crucial for addressing its implications on their

<sup>&</sup>lt;sup>2</sup>Assistant Professor, Dept. of Physical Education, P.G.G.I.P.E., Banipur, West Bengal-743233 (India).



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psychological well-being and academic performance. The present study aims to provide a comparative analysis and manifestation on prevalence of Nomophobia among college male and female students.

### 1.1 Prevalence of Nomophobia among College Students

Numerous studies have highlighted the high prevalence of Nomophobia among college students. For instance, Yildirim and Correia (2015) found that over 90% of college students reported experiencing some level of Nomophobia. This prevalence underscores the importance of understanding the impact of Nomophobia, particularly within the college demographic that goes up tremendously after Covid 19 pandemic.

#### 1.2 Gender Differences in Mobile Phone Use

Research suggests that gender differences exists in mobile phone usage patterns, with females generally engaging in more frequent and diverse mobile phone activities compared to males (Chen et al., 2017). These differences may influence the experience and manifestation of Nomophobia among male and female college students.

### 1.3 Gender Disparities in Nomophobia Symptoms

While studies have consistently shown high levels of Nomophobia among both genders, some research indicates that the specific symptoms and manifestations of Nomophobia may differ between males and females. For example, Elhai et al. (2018) found that females were more likely to experience anxiety-related symptoms, such as fear of losing connection or missing out on important information, whereas males were more prone to exhibit dependency-related symptoms, such as feeling uncomfortable when not using their phones.

## 1.4 Impact of Nomophobia on Academic Performance and Well-being

Nomophobia has been associated with various negative outcomes, including impaired stress levels, and decreased overall well-being among college students (Gnardellis et al., 2023). Gender differences in the impact of Nomophobia on academic and social functioning warrant further investigation to inform targeted interventions.

### 1.5 Coping Mechanisms and Gender-Specific Strategies

Understanding how male and female college students cope with Nomophobia is essential for developing effective interventions. While research on this topic is limited, preliminary evidence suggests that gender-specific coping strategies may exist, with females more likely to seek social support and males more inclined to engage in distraction techniques (Lopez-Fernandez et al., 2017).

In summary, while Nomophobia affects both male and female college students, there is a growing body of literature suggesting that gender differences exist in its prevalence, symptoms, and coping mechanisms. However, further research employing comparative methodologies is needed to elucidate these differences and inform targeted interventions aimed at mitigating the negative effects of Nomophobia on college students' academic and psychological well-being.

### 2. Purpose of the study

The purpose of this study is to explore the Nomophobia and to conduct comparative analysis of Nomophobia prevalence among college male and female students. While previous research has explored Nomophobia in various demographic groups, limited attention has been paid to gender difference in its prevalence and manifestations among college students. By understanding how Nomophobia manifests differently among male and female students, educators, mental health professionals, and policymakers



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can develop targeted strategies to mitigate its negative effects and promote healthy mobile phone use habits among college students.

### 3. Methodology

### 3.1 Research Design and Setting

A descriptive comparative study was selected to describe the prevalence of Nomophobia among undergraduates and post-graduates students of Science and Commerce of Brahmanand Post Graduate College, Kanpur.

### 3.2 Sampling Technique and Sample Size

A convenience sampling technique was adopted for the screening of Nomophobs. NMP-Q questionnaire developed by Yildirim and Correia (2015) was distributed among 800 male and 800 female students of above mentioned college.

# 3.3 Eligibility Criteria

Bonafide students of college of age between 17 to 25 years and using smartphone over 01 years were taken as the eligibility criteria for the study.

## 3.4 Study instruments and description

A self-report questionnaire was used to collect the required information, divided into two parts: (1) Demographic Data, and (2) the Nomophobia Questionnaire (NMP-Q). The demographic data sought information such as, age, gender, class, use of smartphone, and associated behaviors. The Nomophobia Questionnaire (NMP-Q) developed by Yildrim and Correia (2015), consists of 20 Likert scale items that range from 1 (strongly disagree) to 7 (strongly agree). The reliability coefficient of NMP-Q using Cronbach alpha was 0.95. The NMP-Q has four sub-dimensions: (i) not being able to communicate (six items), (ii) losing connectedness (five items), (iii) not being able to access information (four items), and (iv) giving up convenience (five items).

# 3.5 Scoring Procedure and Interpretation

Total scores were calculated by totaling responses to all items, resulting in a Nomophobia score from 20 to 140, with higher scores corresponding to greater Nomophobia severity. A score of 20 suggest the absence of Nomophobia, scores 21-59 suggest mild Nomophobia, scores 60 – 99 suggest a moderate level of Nomophobia, and scores 100 and above correspond to severe Nomophobia.

#### 3.6 Data Collection

The data for the study were collected by a self-report demographic and Nomophobia questionnaire (NMP-Q) as stated above. The questionnaire was distributed among 800 male and 800 female college students. The instructions for providing demographic data and questionnaire responses were given to students. The questionnaire was collected from the students once, they filled the required information.

#### 3.7 Data Analysis

The collected demographic data and questionnaire were checked manually by the researcher. MS Excel was used for calculation and summarization of the data.

#### 4. Results

Nomophobia was assessed using the Nomophobia Questionnaire (NMP-Q) developed by Yildirim and Correia (2015). A self-report demographic and Nomophobia questionnaire was given, initially, to 800 male and 800 female college students for screening Nomophobs. On examining the questionnaire, it was found that 09 male and 12 female questionnaires were not properly filled, hence, excluded for analysis.



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The Nomophobia prevalence among male and female students was 98.8% and 99.4% respectively in the present study. Out of 791 male students, 10 students (1.2%) were assessed as absence of Nomophobia, and remaining 781 students (98.8%) suffering with mild to severe Nomophobia. Further, it was also found that, out of 781 male students 108 students (13.8%) were suffering with mild Nomophobia having Mean score of 42.1, SD  $\pm 9.45$ , and SE1.7; 509 students (65.2%) with moderate Nomophobia having Mean score of 81.4, SD  $\pm 8.9$ , and SE 1.62, and remaining 164 students (21%) with severe Nomophobia having Mean score of 116.4, SD  $\pm 9.7$ , and SE 1.71 as shown in Table1; similarly, out of 788 female students, 9805 students 981.7 students 982 students 983 students 984.7 were suffering with mild Nomophobia having Mean score of 983.1, SD 985, and SE 985, and SE 985, and SE 985, and SE 985, and remaining 987 students 988.7 students 989 students 989 with moderate Nomophobia having Mean score of 983.1, SD 985, and SE 985, and remaining 987 students 988 students 989 with severe Nomophobia having Mean score of 983.1, SD 985, and SE 985

**Table 1-Nomophobia Statistics (Male students)** 

Sample size						791	
Total number of students having no Nomophobia						10 (1.2%)	
Total number of students having Nomophobia						781 (98.8%)	
Nomophobi	Number	Percent	Mean	SD	SE	Mean	
a Level	of	-age	score			Nomophobi	
	students	(%)				a score	
Mild	108	13.8	42.1	±9.45	1.73		
Moderate	509	65.2	81.4	±8.9	1.62	79.83	
Severe	164	21	116	±9.7	1.71		

**Table 2-Nomophobia Statistics (Female students)** 

Sample size						788	
Total number of students having no Nomophobia						05 (0.6%)	
Total number of students having Nomophobia						783 (99.4%)	
Nomophobi	Number	Percent	Mean	SD	SE	Mean	
a Level	of	-	score			Nomophobi	
	students	age (%)				a score	
Mild	99	12.6	44.2	±9.5	1.76		
Moderate	477	60.9	83.1	±11.05	1.95	82.17	
Severe	207	26.5	119.2	±10.25	1.87		

The Mean Nomophobia scores for male and female, across the participants was 79.83 and 82.17 respectively, reflecting moderate Nomophobia on an average in both the genders (Figure 1).



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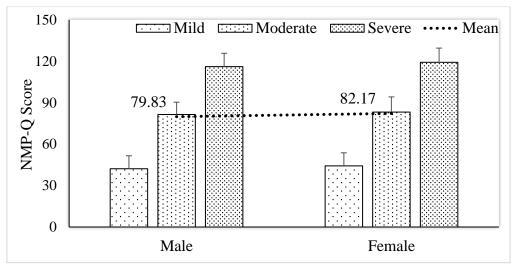


Figure 1. Mean NMP-Q score of male and female Nomophobs

#### 5. Discussion

In an era dominated by digital connectivity, the prevalence of Nomophobia among college students has emerged as a pertinent topic of discussion. Studies worldwide indicate a significant prevalence of Nomophobia among students. A cross-sectional study conducted by (Aldhahir et al., 2023) in Saudi Arabia revealed that prevalence of Nomophobia among respiratory therapy students was 97.3%. Research by Bian and Leung (2015) found that 89% of college students experienced moderate to severe levels of Nomophobia. The prevalence of Nomophobia in both developed and developing countries is between 77% and 99%, highest among young adults (Bharat, 2018; Ozdemir et al., 2018). In the present study, prevalence of Nomophobia among college students was found 99.1%. Female students (99.4%) having slightly higher Nomophobia in comparison to male students (98.8%). The present study also revealed that 13.8% male and 12.6% female suffering from mild Nomophobia; 65.2% male and 60.9% female having moderate Nomophobia; and 21% male and 26.5% female with severe Nomophobia (Figure 2).

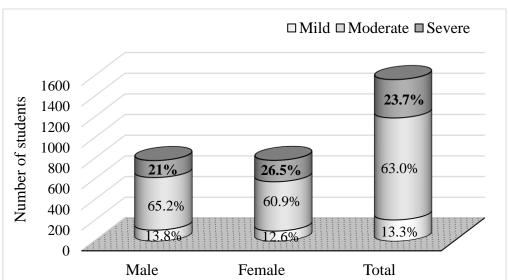


Figure 2. Student's percentage (%) in different category

A similar finding was reported in a study conducted by Sethia (2018), with most of the university students showing a moderate level of Nomophobia.



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#### 6. Conclusion

The Nomophobia prevalence among college students was high at 99.1% ranging from mild to severe Nomophobia. The male students having slightly lower Nomophobia at 98.8% in comparison to female students at 99.4%. The mild, moderate and severe percentage of Nomophobia among male students was 13.8%, 65.2%, and 21% and among female students 12.6%, 60.9%, and 26.5% respectively. The mean Nomophobia score across the participants among male students was 79.83 and female students was 82.17 reflecting moderate Nomophobia on an average among both the genders.

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