

The Rise of Nomophobia-Mobile Phone Dependency Among College Students

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Abstract:

➤ Background:

In recent times the world is well known and aware about the drug dependency than non-drug dependency like Nomophobia. “No Mobile Phobia” is the expansion of Nomophobia which is evoked by unavailability of smart phone or the thought of possibility of not having it. Since college students are more prone to nomophobia and causes cognitive, emotional, and academic impairments among students. Globally there is growing concern regarding smart phone dependency.

➤ Aim:

The main focus of the study is to measure mild, moderate and severe levels of Nomophobia among college students.

➤ Method:

A cross-sectional survey design was adopted to find out the levels of Nomophobia among college students. A convenient sampling method was used for the study. The NMP-Q (Nomophobia Questionnaire) was administered among college students through google form. It comprises of 20 items. 161 responses were received from students aged 18 to 24 years.

➤ Results:

Out of 161 respondents 115 (71%) were females and 46 (29%) were males. This study found that 13% were mild level of Nomophobia, 62.1% were moderate level and 24.8% were severe level. This study identified that males have higher prevalence rate of Nomophobia than females.

➤ Conclusion:

This study concluded that there is a prevalence of Nomophobia among college students. Overuse of smartphones increases the risk of nomophobia. To prevent and treat this problem interventions are needed.

Keywords: *Nomophobia, College Students, Nomophobia Questionnaire, Gender.*

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I. INTRODUCTION

➤ Nomophobia

The progress and creativity have come a long way in the mobile phone industry, which has integrated the use of mobile phone in all aspects of human activities and daily living which includes acquisition of knowledge, business, social networking and entertainment. Even though it gratifies the basic needs it may cause some problems associated with mobile phone use (1).

A study was conducted by the UK Post Office as a result of the study the term Nomophobia or No Mobile Phobia was

introduced. It aimed at investigating the psychological impacts of using smartphones, in terms of anxieties (2).

It also refers to the symptoms or collection of behaviors which has impacts on the physical and mental health due to improper utilization of smartphones (3). It can rise as a significant public health issue if left unidentified and corrected at the earliest phase.

Nomophobia has a potential to disrupt peer and family relationships and academic performance and impair one's personal social adjustment (4). Individuals with the pattern of excessive smartphone use or highly nomophobic tend to have

difficulty paying attention to daily tasks which includes distraction in the classrooms and increased level of anxiety because of losing connectedness or inability to access information (5).

Personality and self-esteem get affected. Additionally, it causes numerous clinical symptoms like depression, a sense of loneliness, stress and other physical and mental health problems (6). This condition leads to increased dependency in social media because of the comfort feeling and effortlessly ignore the real life and direct communication (7).

➤ *Prevalence Rate of Nomophobia*

Past studies denote that the growing concern of nomophobia among Indian students have reached to maximum range. Previous study tell that google form were distributed among Indian students, nearly 2061 responses were received and analyzed. In that responses 52.9% were male and 92.2% were female aged between 18 and 24 years. From metropolitan city 35.3% responses were obtained, from urban city 38.8% responses were received, 13.6% from rural areas. The study found that, 18.9% exhibited severe level, 74.8% were moderate, 6.3% had come under mild level (8).

Anaswara S Asok and Tarakishwor Singh (2020) were conducted a cross-sectional study in Bishnupur District of Manipur in which 27.9% had severe level, 60.4% had moderate level and 10.5% had mild Nomophobia (9). Khumukcham Anupama Devi and Priyanka Elizabeth Thomas (2023) did a study at Patna among undergraduate students found out that 55 come under mild, 128 had moderate and 46 had obtained severe level of nomophobia (10).

Globally, this issue is growing more frequent; a recent systematic review and meta-analysis of 20 papers, comprising 12,462 individuals from 10 countries, indicated that the prevalence of moderate-to-severe nomophobia is roughly 71%, with severe nomophobia being around 21% (11).

Many studies were conducted about nomophobia in different countries and adopted it as a problem. Those studies mainly included younger population. Felix, Mena and Ostoso (2017) were conducted a study which included computer engineering students in Mexico and found that majority of students were smartphone depended which resulted in loss of concentration during lecture hours (12).

➤ *Corelation Between Nomophobia and Psychological Factors*

The symptoms of nomophobia may be predicted by a number of mental illnesses, including social anxiety and panic disorder, as well as psychological traits including low self-esteem and self-efficacy, an extrovert personality, impulsivity, a sense of urgency, and seeking. There is a positive connection between Nomophobia and separation anxiety, social phobia and depression (13).

Inaccessibility of information, fear of losing connection and lack of communication are the causes of greatest anxiety among nomophobic individuals. The psychological conditions like stress, interpersonal sensitivity, depression, phobic anxiety, somatization, psychotism, obsession, social phobia, paranoid ideation, somatization and loneliness have association with nomophobia. Nomophobic behaviours are more common in individual with psychosocial disorder (14).

➤ *Nomophobia and College Students*

Among college students, nomophobia is more prevalent than usual (15). Particularly college students are considered as the early adopters of smartphones (Lee, 2014). An individuals aged between 18-24 years are the riskiest group for Nomophobia (12).

A potential marker regarding smartphone usage in college students is sleep dissatisfaction (11). Sleep difficulties have an impact on adolescent's academic performance and psychosocial health (16).

➤ *Aim and Objectives*

• *Aim*

- ✓ To find out the prevalence of Nomophobia among college students.

• *Objectives*

- ✓ To determine the levels of Nomophobia among college students using Nomophobia Questionnaire (NMP-Q).
- ✓ To compare the prevalence rate between female and male

➤ *Hypothesis*

• *Alternative Hypothesis*

There is a significant prevalence of Nomophobia among college students.

• *Null Hypothesis*

There is a no significant prevalence of Nomophobia among college students.

II. METHODOLOGY

- **Research Design:** A cross-sectional study design was selected
- **Setting of the Study:** The study was conducted in the Department of Therapeutics at National Institute for Empowerment of Persons with Multiple Disabilities, Chengalpattu district, Tamil Nadu.
- **Sampling Technique:** Convenience sampling method was used.
- **Sample Population:** College Students were chosen as participants
- **Sample Size:** (n) = 161
- **Dependent Variable:** Nomophobia
- **Independent Variable:** College Students and gender

➤ *Selection Criteria*• *Inclusion Criteria:*

- ✓ Both genders
- ✓ Students aged 18-24 years
- ✓ College students of NIEPMD

• *Exclusion Criteria:*

- ✓ Students with significant language barriers that could prevent them from understanding or accurately responding to the questionnaire.

➤ *Tool Description:*• *Nomophobia Questionnaire (NMP-Q)*

NMP-Q was created through a process which involved both quantitative and qualitative phases. It comprises of 20 items and all items are rated using a 7-point Likert scale. The scoring from 1 (strongly disagree) to 7 (strongly agree).

• *Scoring:*

- ✓ Strongly disagree - 1
- ✓ Disagree - 2
- ✓ Somewhat disagree - 3
- ✓ Neutral - 4
- ✓ Somewhat agree - 5
- ✓ Agree - 6
- ✓ Strongly agree - 7
- ✓ Scoring Interpretation:
- ✓ If the score of NMP-Q is 20 then there is absence of nomophobia.
- ✓ NMP-Q score from 21-59 indicates mild level of nomophobia.
- ✓ NMP-Q score from 60-99 indicates moderate level.
- ✓ NMP-Q score from 100-140 depicts severe level.

➤ *Psychometric Properties:*• *Reliability:*

This questionnaire has good consistency Cronbach's alpha reliability coefficient is .945, indicating that the questionnaire has good consistency.

• *Validity:*

The construct validity of NMP-Q is ensured that there is strong correlation between NMP-Q and MPIQ scores provided evidence of similarity between the two questionnaires.

➤ *Procedure:*

The study was conducted at the National Institute for Empowerment of Persons with Multiple Disabilities among college students. The convenient sampling method was used to collect the data. For the data collection the concern from the institute was obtained through proper channel. After obtaining the permission from the institute the google form which contains consent form, demographic sheets and Nomophobia Questionnaire was distributed among college students. The form was filled by 161 students. Finally, the collected data was analyzed and interpreted using SPSS software.

III. RESULTS

The main aim of the research is to find out the prevalence of Nomophobia among college students. The previous chapter laid out the methodology employed for the current study. This present chapter looks into the analysis of the results obtained.

➤ *Demographical Variables:*

Table 1 Demographical Variables

Demographic Variables	Frequency	Percentage
Age	< 20	90
	20 - 23	66
	> 23	5
	Mean \pm SD	20.43 \pm 1.642
	Min - Max	18 - 25
Gender	Female	115
	Male	46
NMP-Q Score	Mild	21
	Moderate	100
	Severe	40

- Table 1: The above table shows the demographic variables such as age, gender, NMP-Q Score.

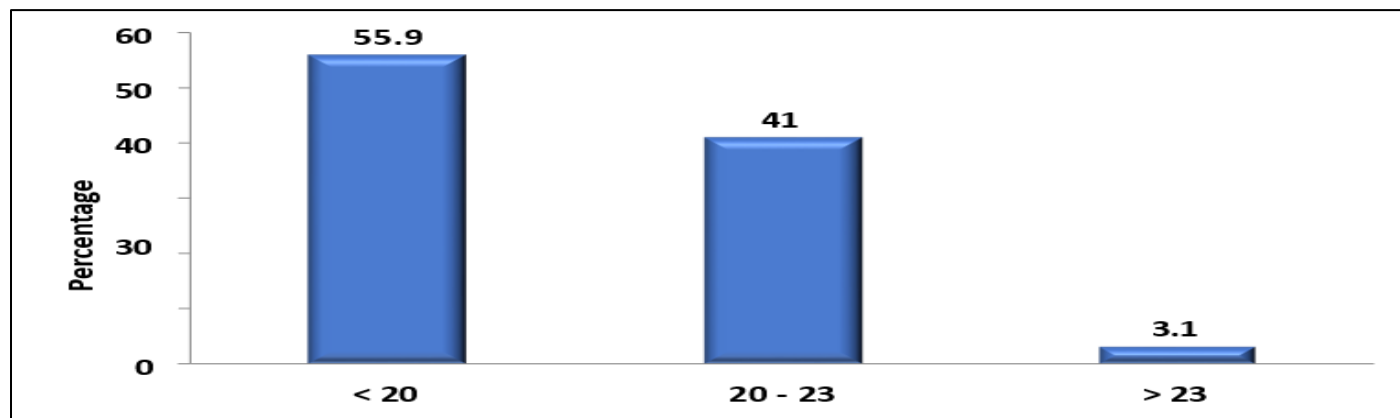


Fig 1 A: This Picture Depicts the Graphical Representation of Percentage of Ages.

➤ *Gender Distributions:*

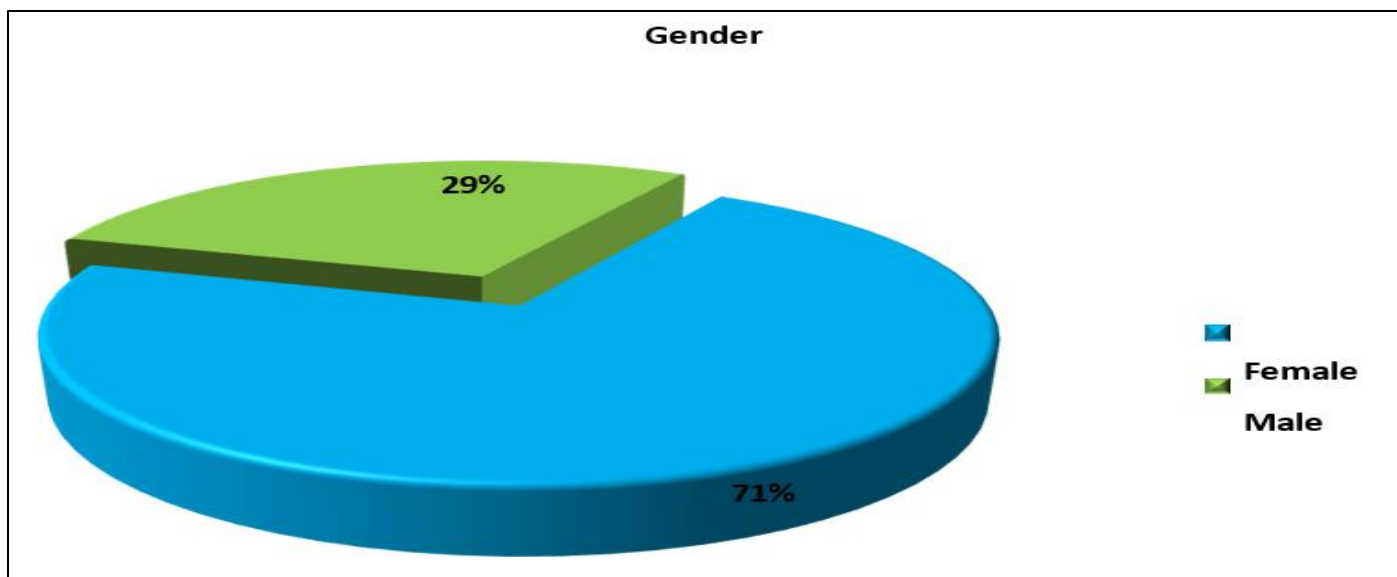


Fig 1 B: The above Picture Shows the Percentage of Females (71%) and Males (29%).

➤ *Levels of Nomophobia Among College Students:*

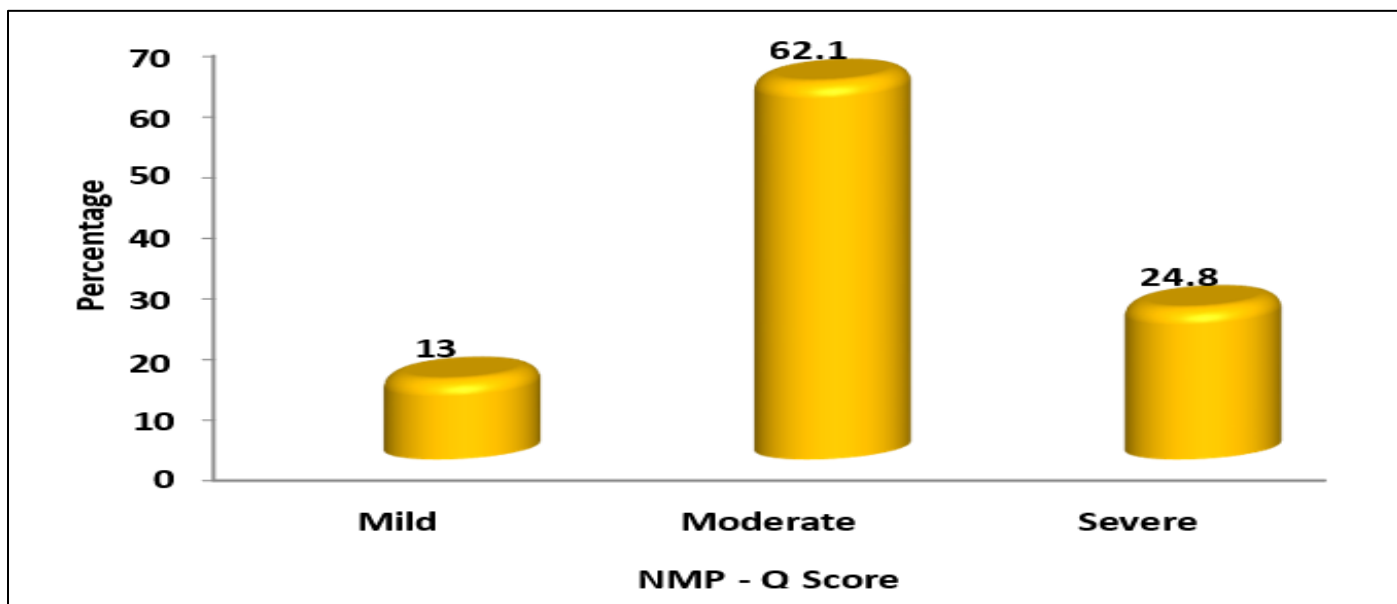


Fig 1 C: This Graph Represents the Mild, Moderate and Severe Level of Nomophobia Among College Students.

Table 2 Chi – Square with Fishers Exact Test was Performed to Associate the Age and NMP – Q Regarding College Students at 5% Level of Significance was Observed

		NMP – Q Score						Total		χ^2 – Value (P - Value)
		Mild		Moderate		Severe				
		N	%	N	%	N	%	N	%	
Age	< 20	13	61.9 %	55	55.0%	22	55.0 %	90	55.9%	
	20-23	8	38.1 %	42	42.0%	16	40.0%	66	41.0%	
	> 23	0	0%	3	3.0%	2	5.0 %	5	3.1%	
Total		21	100%	100	100.0%	40	100.0%	161	100.0%	

- Table 2: The above table shows that there is significant difference between age and Nomophobia. This table shows the age wise mild, moderate and severe NMP-Q

score among college students. It is observed that there is association between age and NMP- Q score among college students.

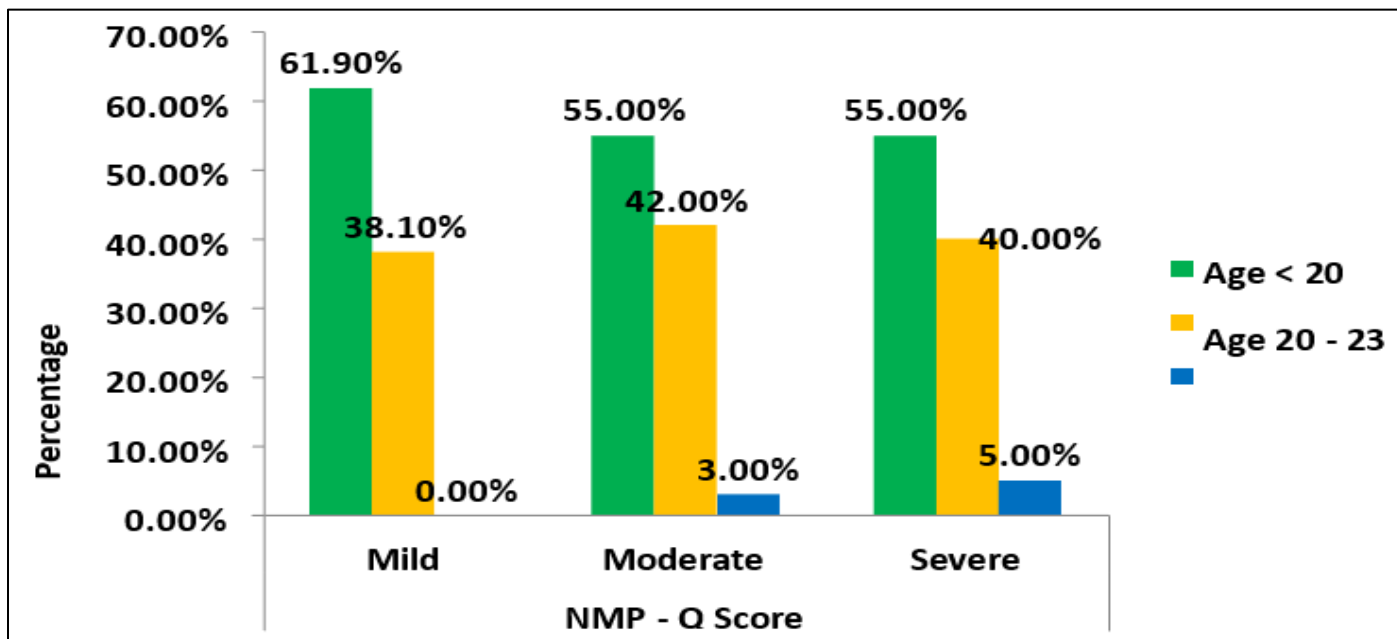


Fig 2 This Graph Represents the Percentage of Nomophobia Age Wise.

Table 3 Chi – Square with Fishers Exact Test was Performed to Associate the Gender and NMP – Q Regarding College Students at 5% Level of Significance was Observed

		5% Level of Significance was Observed						Total		χ^2 – Value (P - Value)
		NMP – Q Score		Severe						
		Mild				Moderate		N	%	
Gender	Female	19	90.5%	73	73.0%	23	57.5%	115	71.4%	7.616 (0.021) S
	Male	2	9.5%	27	27.0%	17	42.5%	46	28.6%	
Total		21	100.0%	100	100.0%	40	100.0%	161	100.0%	

- Table 3: This table shows the gender distribution of participants and the percentage of mild, moderate and severe level of Nomophobia in females and males.

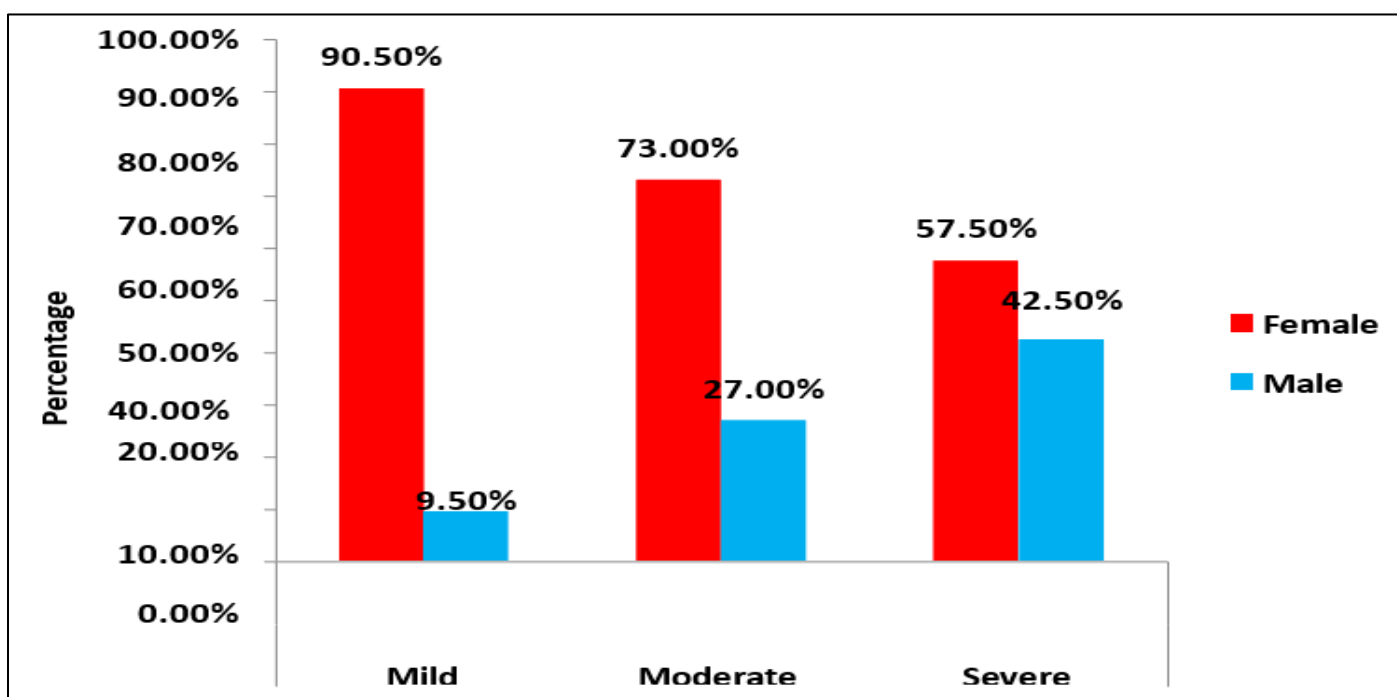


Fig 3 This Graph Shows the Gender Wise Percentage of Mild, Moderate and Severe Level of Nomophobia Among College Students.

Table 4 NOVA Test was Performed to Compare the Age and NMP – Q Regarding College Students at 5% Level of Significance was Observed

Age * NMP-Q Score	N	Mean	Std. Deviation	95% Confidence Interval for Mean		Min	Max	F –Value (P –Value)
				Lower Bound	Upper Bound			
< 20	90	83.73	19.732	79.60	87.87	30	124	3.257 (0.041) S
20 - 23	66	86.08	21.377	80.82	91.33	32	132	
> 23	5	83.80	17.108	62.56	105.04	65	102	
Total	161	84.70	20.270	81.54	87.85	30	132	

- Table 4: The above table found the mean value when compared the age and NMP-Q.

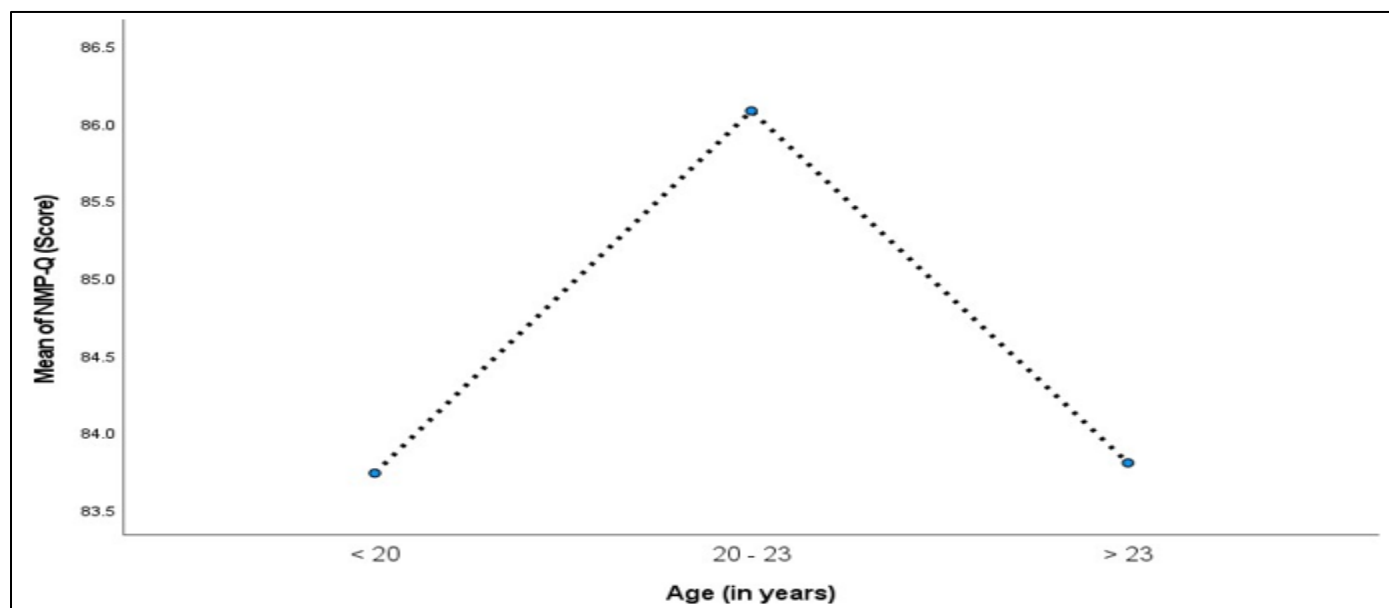


Fig 4 This Picture Depicts the Mean Value of Participants <20 years of Age, 20-23 years of Age and >23 years of Age Regarding NMP-Q

Table 5 Independent T- Test was Performed to Compare the Gender and NMP – Q Regarding College Students at 5% Level of Significance was Observed

GENDER		N	Mean	Std. Deviation	DF	t – Value (P –Value)
NMP-Q (Score)	Female	115	82.42	20.638	159	-2.284 (0.024) S
	Male	46	90.39	18.314		

- Table 5: The above table shows the mean value when compared the gender and NMP-Q.

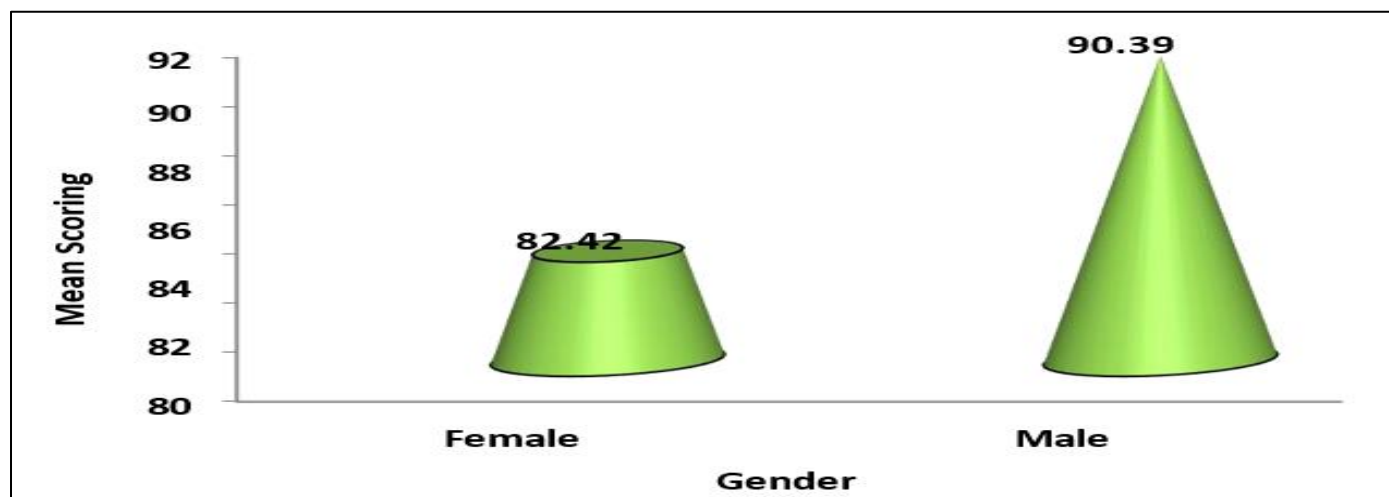


Fig 5 This Graph Represents the Mean Value of Male and Female Regarding Nomophobia.

IV. DISCUSSION

This chapter discuss about the results of the study interpreted from the statistical analysis. The present study was conducted to find out the prevalence of Nomophobia among college students using convenience sampling method. Through online mode 161 responses were received.

Table 1 shows the demographic variables such as age, gender, NMP-Q Score. It shows the percentage for the age group < 20 years is 55.9, 20-23 years is 41.0 and >23 years is 3.1%. and 71% were female and 29% were male. out of 161 participants, 13% of college students were mild nomophobia, 62.1% were moderate nomophobia and 24.8% were severe nomophobia. This finding of the present study is consistent with researcher (19)

Figure 1A depict the age wise percentage, 1B represents the percentage of males and females and 1C pictures the mild, moderate and severe level of Nomophobia among college students

Table 2 shows that there is significant relationship between age and nomophobia. It found that participants under 20 years of age 61.9% were mild, 55% were moderate nomophobia and 55% were severe level. Participants aged from 20 to 23 were found that 38.1% were mild, 42% were moderate and 40% were severe nomophobia. In age group above 23 years 3% were moderate and 5% were severe.

Figure 2 represents the age wise percentage of mild, moderate and severe level of nomophobia.

In Table 3 there is association between gender and NMP-Q scores among college students. Among 115 female participants 90.5% were mild nomophobia, 73% were moderate and 57.5% were severe level. Among 46 male participants 9.5% were mild, 27% were moderate and 42.5% were severe nomophobia. This result highlights that males have higher Nomophobia rate compared to females. This finding of the present study is consistent with researcher (1).

Figure 3 depicts the gender distribution and levels of Nomophobia in females and males.

In Table 4 ANOVA test analysis showed that there is association between Age and NMP – Q scores among college students. The results are interpreted as the mean value for less than 20 years of age is 83.73, the mean value for the participants aged from 20-23 is 86.08 and the mean value for above 23 years of age is 83.80. This indicates that college students age 20-23 years of age are more prone to nomophobia.

Figure 4 shows the age wise mean value regarding NMP-Q.

Table 5 shows that there is a strong association between Gender and NMP – Q scores among college students. Independent t – test analysis showed that the mean value for females is 82.42 and mean value for males is 90.39. This

indicates that males have higher nomophobia when compared to females.

Figure 5 shows the mean value of females and males regarding NMP-Q among college students.

Based on the overall analysis, there is a prevalence of nomophobia among college students with 13% of mild level, 62% of moderate level and 25% of severe level and males show higher rate of nomophobia with mean value of 90.39 than females with mean value of 82.42.

V. CONCLUSION

The study concluded that there is a significant relationship between nomophobia and college students, as well as strong association between gender and nomophobia. Hence, the study highlights mild, moderate and severe level of nomophobia among college students and found that males have a higher rate of nomophobia compared to females.

VI. LIMITATION

The findings may be specific to the cultural and educational background of students in India particularly in NIEPMD and may not be generalizable to students in other regions or countries.

RECOMMENDATIONS

- Preventive measures and awareness programs at addressing these issues could be beneficial.
- Further studies can focus on intervention for reducing nomophobia among college students.

This study can be considered for the adolescent's population

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