# Prevalence of Nomophobia among Students of Professional Post Graduate Program in Dehradun

\*Raghav Upadhyai \*\* Smriti Gupta

# **ABSTRACT**

With proliferation of digital devices and internet the society seems more and more connected to each other. This has resulted in the dependence of the individuals on the digital devices that they use, especially their mobile phones. This has resulted in seeding of a phobia in form of fear and anxiety of not having mobile phone called nomophobia. This study surveyed the university students of a professional post graduate program and found out the prevalence of nomophobia. A exploratory study through unstructured interview was conducted among ten students to identify the underlying dimensions of nomophobia. Based on the NMP-Q questionnaire a modified sixteen item questionnaire was made to survey the students in the second phase. A total of 212 mail based questionnaires were sent which resulted in 53.3% valid responses. A prevalence of 15.04% was reported among the students. The results indicate that the digital device addiction among the students is very high whose clinical and psychological complications should further be investigated.

Key Words: Nomophobia, Mobile phone dependence

## 1. Introduction

The first call from the hand held cell phone was made in 1973 by a Motorola engineer Marty Cooper. From that date onwards humankind through their pursuit for innovation has been working on various types of digital devices from communicating with each other. The significant contribution of mobile phones is their ability of develop a connected community. With the advent of Internet and its proliferation the mobile phones became smart and virtual environment got created. Although openina up various opportunities vet mobile phones are also associated with negative effects on the individuals (Hong et.al., 2012) and the associate problems with its usage such as excessive use of mobile phones (Pourrazavi et.al.,2016), mobile phone dependence. (Toda et.al., 2006; Choliz et.al., 2012), mobile phone addiction (Ehrenberg et.al., 2008; Hong et.al., 2012).

The term Nomophobia is an abbreviation of the term nomobile-phone phobia, and it was coined in the survey conducted by UK post office in year 2008 to survey the anxiety caused by the mobile phone users (Yeldirinm, 2015). Nomophobia is a relatively new area of psychiatric study where not much is studied about it. Some studies are indicative of the prevalence of this phobia with varying results. This may be attributed to the level of technology acceptance and its availability in the society. Thus, there exists a need to study the same as context specific approach rather than taking a generalized picture of it. The purpose of this study is to find out mobile phone dependence of certain section of society.

## 2. Literature Review

Nomophobia denotes discomfort or anxiety when out of

mobile phone of computer contact. It is a fear of becoming technologically incommunicable, distant from the mobile phone or not connected to the Web (King et. al, 2010). However, computers were also included in this definition but later it was meant to refer the virtual world created by the computers (Yildirim, 2015). King et.al. (2010) further termed it as situational phobia related to agoraphobia.

Although nomophobia is not included in the Diagnostic and Statistical Manual of Mental Disorder (DSM), yet recommendations regarding it have been put forward by the Anxiety Work Group (Bragazzi & Puente, 2014). According to the DSM, a simple phobia (later on changes to specific phobia) is an anxiety disorder that represents unreasonable and irrational fear prompted by a specific stimulus (an object or a situation). Nomophobia is considered a disorder of the contemporary digital and virtual society and refers to discomfort, anxiety, nervousness or anguish caused by being out of contact with a mobile phone or computer. Generally speaking, it is the pathological fear of remaining out of touch with technology(Bragazzi & Puente, 2014).

Most of the nomophobics have virtual dependence (King et.al., 2012), and "Rinxiety" also known as "Phantom vibration syndrome", "phantom ringing", "hypovibrochondriafauxcellarm" which means a false sensation of ringing of mobile phones (Sharma et.al., 2015). The gender and duration of usage, but not the age, has an effect on nomophobic behaviours in the young adults, which is to a tune of 42.6% (Yildirim, 2016). Nomophobia also changes the daily habits of the individuals (King et.al., 2012). The four dimensions of nomophobia identified by Yildirim were (1) not being able

<sup>\*</sup>Assistant Professor, School of Management, IMS Unison University, Dehradun

<sup>\*\*</sup> Student, School of Management, IMS Unison University

to communicate (2) losing connectedness (3) not being able to access information and (4) giving up convenience. Cognitive-behavioral psychotherapy has been suggested as an effective treatment for nomophobia. However, randomized trials are currently lacking (King et.al., 2014; Bragazzi & Puente, 2014).

Even though this is a new topic but various published validated psychometric scales are available to understand nomophobia. Following are a few scales that authors have reviewed for the current pilot study.

Yildirinm (2015) measured the nomophobia through a questionnaire based survey. The survey instrument had 20 items rated on a 7 point likert scale, with 1 being "strongly disagree" and 7 being "strongly agree". The scores were categorized in three range with less than 20 reflecting absence of nomophobia, 20-60 with mild, between 60-100 with moderate and scores of greater than 100 to 140 with severe level of nomophobia.

Choliz (2012) had developed a test for mobile phone dependence (TMD) which helped to identify the respondents who heavily depended upon the mobile phone. The inventory of questions measures the respondents who had atleast one year of mobile phone usage, had access to internet on their smartphone and spent more than an hour on their smartphone. Respondents with scores above the mean score were termed as dependent.

King (2014) developed a 29 item instrument to measure the mobile phone use and evaluation. The objective type dichotomous scale with yes no responses measures the extent of nomophobiain the samples.

A study conducted in India on students of medical program in Indore found 19% of the students to be nomophobes (Dixit et.al., 2010). However, contradictory to this study, almost 73% prevalence of nomophobia was identified in the medical students by Sharma et.al. (2015). Similar study conducted on the medical students in

enjoying a firm.

Bangluru found 39.5% of the students to be nomophobes (Pavithra & Madhukumar, 2015)

#### Method

The participants of the survey were studying post graduate professional program in a university at Dehradun, India aged 21-25 years, who agreed to take part in the survey. We conducted the study in two phases. In the first phase of the study we conducted unstructured interviews with ten students who were randomly selected. We identified certain dimensions related to the nomophobic behaviour by probing the respondents. Based in the reported dimensions and modifying the NMP-Q given by Yildirim & Corriea (2015) and taking some insights from the IAD questionnaire developed by Young (1998), we developed a 16 item questionnaire. The sixteen items measure the nomophobic behaviour of the respondents on a nominal scale of "ves", "no" and "sometimes". The responses were quantified by converting them with a value of 2=yes, 1 = sometimes and 0 = no. The questionnaire provided a score between 0 to 32.

The individual item wise value obtained from the respondents was summated to form the individual score of the respondent. The range was created using mean as base and dividing the scores on one standard deviation on both sides. The scores classified under a range of 0-10, 11-23 and 24-32 showing no evidence, slight evidence and significant evidence of nomophobia respectively.

#### 4. Results

The table 1 provide the summary of the responses for the individual items of the questionnaire. The item 1 (checking first thing in morning) and 9 (majority of work done on mobile) had very high response rate in terms of dependency. However, results of item 5 (face to face communication) has shown very less dependence as most the students are of same program in the same university and meet up regularly every day.

52

23

		Yes%	Sometimes%	No%
1.	Is your Smartphone the first thing check after waking up I the morning?	75	18	20
2.	Do you use your Smartphone in the washroom?	62	28	23
3.	Do you panic if you are not able to locate your Smartphone?	60	40	13
4.	Do you prefer communicating with people on the phone, even they are physically available?	13	49	81
5.	Are you able to concentrate on your work when you have an unread message or any other notification on your phone but cannot check it somehow?	44	31	38
6.	Do you find yourself regularly checking your phone even when you are	52	23	0.0

Table 1: Summary of Responses to individual Questions

38

7.	Do you get tensed if your Smartphone runs out of battery?	48	35	30
8.	Do you feel uncomfortable if your aren't able to stay up-to-date with social media and outline networks?	26	19	68
9.	Is majority of you online work done through your Smartphone?	82	11	20
10.	Do you remain hooked to your Smartphone for hours, often aimlessly?	46	29	38
11.	Would you be distressed if you did not have access to desired information form you phone?	46	35	32
12.	Do you avoid work to spend more time on the Smartphone?	21	34	58
13.	Do you get agitated if you are away form your Smartphone?	34	28	51
14.	Do you become defensive of secretive when anyone asks you to show/give them your Smartphone?	33	41	39
15.	Would you feel lost if you were not able to connect to people through your Smartphone?	31	29	53
16.	If you did not have a data signal ir could not connect to Wi-Fi, would you constantly check to see if it had a signal or could find a Wi-Fi network?	53	24	36

It can be seen in table 2 that 15.04% of the students are having nomophobia while the combined evidence of nomophobia (slight and significant) is almost 87 %.

Nomophobia Count Score Percentage 0-10 15 No Evidence 103.27 11-23 81 Slight Evidence 71.68 24-32 17 Significant Evidence 15.04

Table 2 : Prevalence of Nomophobia

## 5. Discussion

The mobile penetration in India is on constant rise. This leads us to think about the challenges that have been created by digital device dependence. The challenge is complimented by the fact that the mobile based internet usage is also on the rise. Internet addiction on the other hand will further worsen the state of affairs. The existing study is a partial attempt to address a broader problem of nomophobia which is prevailing and has not been taken care of. Nomophobia prevalence of almost fifteen percent is a cause of concern in the society which should be looked upon not only from the curative but also from the preventive aspects as well. Probably change in the habits could be one of the measures to address the issue of nomophobia, but that will take a long time to show effect, if any.

## 2. Conclusion

This study is limited in its scope as it is restricted to a smaller section of the wider population. A longitudinal study or a cohort analysis could be done to understand the gravity of nomophobia. Effects of technology acceptance of the society and the socio cultural context should also be

studied. Although there are abundant scales for measuring nomophobia but a golden standard for such a measurement is still missing.

## References:

- Bragazzi, N. L., & Del Puente, G. (2014). A proposal for including nomophobia in the new DSM-V. Psychology research and behavior management, 7, 155.
- Choliz, M. (2012). Mobile-phone addiction in adolescence: The Test of Mobile Phone Dependence, Progress in Health Sciences, 2(1), 33-44
- 3. Dixit, S., Shukla, H., Bhagwat, A., Bindal, A., Goyal, A., Zaidi, A., &Shrivastava, A. (2010). A study to evaluate mobile phone dependence among students of a medical college and associated hospital of central India. Indian Journal of Community Medicine, 35(2), 339.
- Ehrenberg, A., Juckes, S., White, K. M., & Walsh, S. P. (2008). Personality and self-esteem as predictors of young people's technology use. Cyberpsychology& behavior, 11(6), 739-741.

- Hong, F. Y., Chiu, S. I., & Huang, D. H. (2012).A model of the relationship between psychological characteristics, mobile phone addiction and use of mobile phones by Taiwanese university female students. Computers in Human Behavior, 28(6), 2152-2159.
- King, A. L. S., Valença, A. M., &Nardi, A. E. (2010).Nomophobia: the mobile phone in panic disorder with agoraphobia: reducing phobias or worsening of dependence?. Cognitive and Behavioral neurology, 23(1), 52-54.
- 7. King, A. L. S., Valença, A. M., Silva, A. C., Sancassiani, F., Machado, S., &Nardi, A. E. (2014). "Nomophobia": Impact of cell phone use interfering with symptoms and emotions of individuals with panic disorder compared with a control group. Clinical Practice & Epidemiology in Mental Health, 10(1).
- Pavithra, M. B., &Madhukumar, S. (2015). A Study on Nomophobia-Mobile Phone Dependence, Among Students of a Medical College in Bangalore. National Journal of Community Medicine, 6(3), 340-344.
- Pourrazavi, S., Allahverdipour, H., Jafarabadi, M. A., &Matlabi, H. (2014). A socio-cognitive inquiry of excessive mobile phone use. Asian journal of psychiatry, 10, 84-89.

- Sharma, N., Sharma, P., Sharma, N., &Wavare, R. R. (2015). Rising concern of nomophobia amongst Indian medical students.
- Toda, M., Monden, K., Kubo, K., & Morimoto, K. (2006). Mobile phone dependence and healthrelated lifestyle of university students. Social Behavior and Personality: an international journal, 34(10), 1277-1284.
- 12. Yildirim, C., &Correia, A. P. (2015). Exploring the dimensions of nomophobia: Development and validation of a self-reported questionnaire. Computers in human behavior, 49, 130-137.
- Yildirim, C., Sumuer, E., Adnan, M., &Yildirim, S. (2016). A growing fear: Prevalence of nomophobia among Turkish college students. Information Development, 32(5), 1322-1331.
- Young K (1998), Caught in the Net, New York, Wiley as cited in Kuss, D, Grifffiths.M.D., (2014), Internet addiction: A review of epidemiological research for the last decade, Current Pharmaceutical Design, Vol. 20, No.25