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### NOMOPHOBIA AND MENTAL HEALTH

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#### **ABSTRACT**

The mobile phone was one's need but now-a-days this need has turned into an addiction and this addiction has serious consequences over our mental health which in turn affects the lives of people. The present research was conducted to study the relationship between nomophobia and mental health. Nomophobia is a term used for defining no-mobile phone-phobia. Difficulty in daily life functioning and social interaction is one of the problems associated with this addiction. This study investigates the relationship between nomophobia and mental health. For this purpose, a sample of 70 females was collected from college-going students from the age range of 18-22. The purpose of the study was explained to them and their consent was taken. Correlation between nomophobia and mental health of the respondents was calculated.

KEYWORDS: Nomophobia, Mental Health, Anxiety, FOMO

### INTRODUCTION

"All of the biggest technological inventions created by man - the airplane, the automobile, and the computer - says little about his intelligence, but speaks volumes about his laziness". - Mark Kennedy

In today's world, we are surrounded by technology. At just one click we have access to any information. One such technology is a mobile phone. A mobile phone is a device that makes possible to dial and receive calls while roaming around, also makes possible to move freely and are also are new best friends. John F. Mitchell and Martin Cooper of Motorola in 1973, invented the 1st handset, weighs around c. 2 kilograms (4.4 lbs). During recent years, the worldwide use of mobile phone grew to over seven billion, stifling 100% of the global population and reaching the bottom of the economic pyramid. Indian markets have emerged as the 2<sup>nd</sup> largest after China. These mobile phones have become our necessity. From waking up to important dates everything is connected to our phones. We are surrounded by so many different social networking sites which connect us to the world. Dating, marriages, and new friends everything is made possible at just one click. This little box does wonder and has thousand of attractive features. Got pimples? Can't afford a portfolio you have an answer just at the click. Need a new home? Want to ride till friends house? Need food? All you got to do is just one click. But as we know every coin has two sides, if mobile phones connect us with the world then this excessive dependence on mobile phones has given rise to nomophobia. Your mobile phones have become a prestige issue children are in continuous competition to own the best cell phone out there. People invest their most of the time in mobile phones which has now become an addiction which has started to interfere with interpersonal relationships. Not only interpersonal relationships but this internet addiction have also adversely affected psychologically. People misuse it to harass other people online. Due to its problematic effects mobile phone has been banned in many settings like hospitals,

schools, petrol pumps, planes etc. We are so addicted that we can't keep our hands away from it even while driving, our hands are never at rest. The internet has created a new world of social media where's everyone is happy and rich, everyone has their life sorted and skin glowing which directly affects the self-esteem of other people. A wrong sense of living life is promoted, materialism, showoff, people start to run after things that don't even exist. Social media is like a mask behind which the reality hides. Also there's this paradox that links with many people online risks one's reputation but also is important for stronger reputation because it shows how trustworthy one is, how well one is connected with others but this makes such people an easy target of bullies.

### Nomophobia

Nomophobia is a proposed name for the phobia of modern fear of being unable to communicate through a mobile phone or internet. A phobia is a type of anxiety disorder, defined by a continuous fear of no-mobile phone. The person might suffer from low self-esteem, poor real-life relation etc. It is also possible that these symptoms may be caused by any other underlying mental disorders. A person might develop the social phobia or social anxiety disorder, social anxiety (King, Valenca, Silva, Baczysnki, Carvalho & Nardi, 2013) and panic disorder. "No-mobile-phone" phobia is the term that was coined during a study conducted by the UK Post Office a UK-based research organization in 2008 which calculated anxieties suffered by mobile phone users. A study conducted in Britain revealed that nearly 53% of mobile phone users tend to feel anxious about losing their mobile phone. These users also feel anxious about running out of battery, or when they have no network coverage. A sample of 2,163 people was collected; it was found that about 58% of men and 47% of women suffer from this phobia.

This excess use of mobile phone has led to so many more different types of new problems like Ringxiety, which means the phenomenon when one thinks that their cell phone or mobile is ringing or vibrating. It's a blend of ring and anxiety. People spend most of their time scrolling down the news feed. One of the reasons behind this nomophobia proposed by today's information age is "FOMO" fear of missing out. People are in a constant phobia of missing out the latest on their newsfeed. They want themselves to be up to date. They are so addicted to mobile phones that they become restless with mere idea of being without phones. For some people, it's a way of connecting to other people they know and for some, it's a medium to get access to information. For some, it's important so that they can connect themselves with their family and other.

According to Shambare et al. mobile phone use is found to be very addictive and habit-forming (Shambare, Rugimbana, Zhowa)

#### **Mental Health**

Mental health is something that affects our daily life, relationships with others, and even our physical health. Mental health includes our ability to enjoy life. According to Medilexicon's medical dictionary, mental health is:

"Behavioral, emotional, and social; absence of any disorder mental or behavioral; a state of mental well-being. A state where one has achieved an integration of one's instinctual drives acceptable to both society and oneself; an appropriate balance of love, work, and leisure pursuits". According to the WHO (World Health Organization), mental health is: "a state of well-being in which the one realizes his or her own abilities, is able to cope with the stresses of life, can work effectively, fruitfully and productively, and is capable enough to make some contribution to towards

community".

The WHO maintains that mental health is not merely an absence of mental disorder but it's much more than that. Mental health is one of the most neglected areas here in India. There is a much social stigma attached to mental illness. This shows a clear lack of awareness among people.

Almost every fifth American experiences mental health problems each year (18.5 percent). It is estimated that around 9 million adults in the United States suffer from a serious mental disorder. That equates to 4.8 percent of all American adults. An overuse of mobile phones is directly proportional to mental health problems. Bad posture, poor eyesight, leads to loss of interest in other activities, feeling irritable or uneasy if separated from phone, loneliness etc. A number of studies have shown the effects of mobile phones and its frequency in brain electrical activity, sleep, heart rate, cognitive function, sleep, and blood pressure. Beydokhti et al found that the use of information and communication technology could lead to social anxiety as well as sleep disorders. (Beydokhti, Hassanzadeh, Mirzaian, 2012) Results of studies show that mobile phone causes changes in gene regulation, auditory and visual problems, increased pressure on the cornea and lens tissue causing headache, heat sensation in the ears, loss of memory, and fatigue. (Zhao, Zou, Knapp, and Neurosci, 2007) Studies have also shown that prolonged use of cell phones can cause brain tumors(Mild, Hardell, Carlberg, and Ergon, 2007;2013). Other researchers contend that and overuse of mobile phones causes anxiety, insomnia, depression, psychological distress, and unhealthy lifestyle. Communication technology reduces social relations and the welfare of the individual causes loneliness, depression, and isolation. Addiction to text messages and its relationship with students' social anxiety, nervousness, and personality traits of extraversion and neuroticism. The rate of addiction to mobile phones or messages were different in all groups of students (Nassiri, Hashembeik, Siadat, 2012). Some other studies showed a positive correlation between depression and anxiety, the amount of sent text messages in a day, and loss of control (Billieux, Van der Linden, Acremont, Zermatter, 2007; Park, Hwang, Huh 2010)

"Over-connection syndrome" is a new type of syndrome which has caused a reduced amount of face-to-face interactions which interferes with an individual's social and family interactions. Also, technostress is a new term that denotes a psychosomatic illness which is caused by working with technology like mobiles or computers on daily basis it is a negative psychological link. Anxiety is reported to be provoked by several factors, such as dead mobile phone battery, the loss of a mobile phone, no internet connection etc.

### REVIEW OF LITERATURE

Psychology professor Alejandro Lleras from the University of Illinois found that nomophobia is linked with depression and anxiety. He found that there's a history of the people fearing new technologies as they are deployed in society. Lleras and colleagues surveyed over 300 university students with questionnaires about the students' mental health, level and manner of cell phone and Internet use, their motivations for turning to electronic devices. They wanted to explore if using devices for emotional escapism is detrimental to mental health. The participants who self-described their really addictive-style behaviors were seen scoring much higher on anxiety and depression scales.

Using mobile phone technologies was found to be linked with higher depression and anxiety scores. The study consisted of all the students of Payame Noor University, Islamic Azad University, and the University of Medical Sciences. The sample consisted of 296 students which were randomly selected from the target population. The results indicated that

the mobile phone usage among students could be categorized as habitual behaviors (21.49%), addiction (21.49%), and intentional (21.49%) categories. By reviewing mental health indicators, it was seen that students were highly affected by depressive disorder (17.30%), obsessive-compulsive disorder (14.20%), and interpersonal sensitivity (13.80%). The results showed the relationship between mental health and habitual behaviors (r = -0.417), dependence (r = -0.317), addiction (r = -0.330), and incontinence (r = -0.309) in using mobile phone (r = -0.001).

Acharya, Acaraya, and Wagdrey (2013), conducted a study on students of both sexes, age group 17-23. Total no. of respondents was 459. The objective of this study was to find out the psychological health effects due to mobile phones. It was observed that a few students (2.3%) mentioned asthma and migraine which they were already suffering.

The most common complaint was of a headache (52%). 227 students complained about a headache. (50.8%) admitted that they felt irritated or angry. (47.4%) students responded positively towards lack of concentration. 170(38.5%) students said they got anxious while using the phone. (35.4%) students suffered from sleeplessness. 105(23.8%) students said they were forgetful of the things.

In Australia 946 adolescents and ages group 15 - 24 participated in a mobile phone research study <sup>(</sup>Walsh, White, and Young, 2010). The study focused on the relationship between mobile phones and its psychological effects.

Participants with signs of nomophobia or excessive mobile phone use were seen increasing their use when receiving validation from others. Other factors received from the population studied was self-identity, self- esteem and social identity, adolescents and adults were more likely to develop mobile phone dependency because they may be going through these factors.

Studies have been conducted which show an increase in personal internet usage is associated with depression and other addictive disorder. Need for approval, Low self- esteem, fear of rejection, lack of motivation leads to increase in internet usage.

### Objective of the Study

• To study the effect of nomophobia on mental health

## Hypothesis

- Overuse of mobile phone causes harmful effects on mental health.
- There is a negative relationship between nomophobia and mental health.

### **METHODS**

### **Participants**

The sample for the study was drawn from college students (70 females). The participants ranged in age from 18-22 years pursuing bachelors and masters degrees from arts and science streams, majorly belonged to middle socioeconomic class.

### Design

The current study was designed to investigate the relationship between nomophobia and mental health utilized. The variables were measured with the help of standardized scales. Correlation among the variables was calculated.

#### Measure Used

- NMP-Q: All 20 items in NMP-Q are rated using a 7-point Likert scale, 1 presents "Strongly Disagree" and 7 presents "Strongly Agree" only at the extremes. Total scores are calculated by summing up responses to each item, with higher scores corresponding to greater nomophobia severity. Scoring for the NMP-Q are as follows: a subject scorning 20 shows the absence of nomophobia whereas a subject scoring greater than 20 and less than 60 indicates to a mild level of nomophobia; if a subject scoring greater than or equal to 60 and less than 100 indicates to a moderate level of nomophobia; and if a subject scores greater than or equal to 100 indicates to a severe nomophobia.
- WHO Mental Health Test: Adapted for use in India by Wig (1999) was used which has three dimensions viz. being comfortable with self, being comfortable with others and perceived ability to meet life demands. The response format has two categories, yes or no. A score of one is given if subject selected yes and zero if he selects no.

#### Procedure

This study was designed to investigate the relationship between nomophobia and mental health. Participants were selected from college with an age range of 18-22 years and were solicited to fillout the questionnaire. The two scales were administered to each participant: *NPQ*, measuring nomophobia and WHO *Mental health test*, measuring mental health. There was no time limit. The participants were informed about the purpose of the study.

#### RESULTS

Table 1: Showingskewness and Kurtosis in Nomophobia and Mental Health

	Variables	Skewness	Kurtosis
1.	Nomophobia	-0.164	-0.831
2.	Mental health	0.332	0.021

Table 2: Showing Mean and S.D

Variables	Mean	S.D.
1.Nomophobia	90.085	21.75
2.Mental health	8.3	1.92

Table 1 show skewness and kurtosis in nomophobia and mental health the given data was scanned for kurtosis and skewness, which fall in the acceptable range i.e. between −1 and + 1 (Marcoulides& Hershberger, 1997; Muthén& Kaplan, 1985).

Table 2 shows the mean and SD for nomophobia and mental health.

A LOW, positive and significant correlation was found between nomophobia and mental health (r0.32, significant at 0.05 level).

### **DISCUSSIONS**

The objective of the study has been met which was to find a correlation between nomophobia and mental health. The findings support our hypothesis which stated that there is a significant relationship between nomophobia and mental health. There was a significant negative relation between nomophobia and mental health. Many reasons came up as a reason for the excess use of mobile phone. Students felt uncomfortable without constant access to information through their cell phones, they would feel anxious if they could not communicate with their family and friends, would feel nervous if they were not able to receive text messages or calls, and there is a constant desire to check their cell phones every next minute. One of the mines reasons behind is the fear of missing out. (Przybylski et al., 2013; Alt, 2015) found a general moderate positive relationship between FOMO (fear of missing out) and Social Media Engagement. Another reason that came up was leisure time; students tend to use mobile phone whenever they are free or for their entertainment. In 2007, A study by Francisca and Lopez, University of Granada, showed that mobile phone addiction could lead to problems as dangerous as those caused by alcohols or narcotic drugs. In 2012, there was another study on female students which indicated that psychological characteristics, anxiety and social extraversion, have a positive effect on mobile. (Hong, Chiu, and Huang DH 2012). In 2014, a study showed that an average college student uses mobile phone 9 h/day which is longer than their duration of sleep. Further, there is a significant relationship between cell phone addiction and sociopsychological factors such as loneliness, boredom, egoism, and self-independence is seen.[Oluyinka TA, 2014] In support of the above reports, a study from Iran, confirmed that this addiction behavior in students has shown an absolute relation to depressive disorders. The results were highly significant with P < 0.001. [Babadi- Akashe Z, Zamani BE, Abedini y, Akbari H, Hedayati N 2014]. Another study conducted in 2017 whereby the objective of the study was to focus on the psychopathological and social demographic condition of the daily users of the CIC, as well as to point out the difference between pathological dependent individuals of the CIC the psychopathologic profile revealed following results in the mental disorders, anxiety disorder was the one to show a larger relation and interdependence of the technology: 85%. Following it, panic was found on 51%, Agoraphobia with 49%, depression with 43%, social phobia with 15%, obsessivecompulsive disorder with 13%, post-traumatic stress with 6% and anorexia with 1% (Anna Lucia Spear King, Eduardo Guedes, José Pedro Neto, FláviaGuimarães, Antonio Egidio Nardi July 31, 2017 )Moreover, some other studies showed that there is a positive correlation between mental disease like depression and anxiety and the use of mobile phone in a day, and social anxiety(Billieux J, Van der Linden M, Acremont M, Cesch G, Zermatten A. 2007. Park N, Hwang Y, Huh E. 2010).

Above given clinical manifestations of mobile phone mania, some researchers have undertaken studies on mobile phone addiction known as nomophobia, and its significant relationship with mental health.

# **CONCLUSIONS**

Studies showed that an increase in the use of mobile phone causes declined mental health problems. Adverse effect on studies is seen. Hence, it is important to develop such programs which help students to know more about this phobia and methods to overcome should be taught. Proper utilization of leisure time should be taught. Importance of book reading should be taught instead of mobile phone usage. Training programs inducing physical health importance should be conducted by educational institutes.

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