

Nomophobia: e-Relationship and its determinants across Different Generation

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Abstract

Background : With every passing day, technology is overtaking our daily lives. Regardless of age, gender, ethnicity, career or economic status, we're probably packing a Smartphone right now. The smart phone have become not just an object, but for many a best friend. Many suffer from anxiety if they lose their phone, even if only for a few minutes. They rely on it to do everything from saying to doing. The "*I-must-have-my-phone-with-me-at-all-times*" mindset has become such a real problem, there's now a name coined for the fear of being without smart phone: nomophobia -- as in **no-mo**(bile) phone-**phobia**. It is on the rise across the globe. **Objectives :** To find out the prevalence of nomophobia and its determinants among people of Lucknow city across different generation. **Methodology :** This was a survey study conducted among the respondents of different age groups (young adults : 18-35 years, middle aged adults : 36-55 years, and old adults : 56 years and above) in Lucknow city. The prevalence of nomophobia was assessed using the nomophobia questionnaire (NMP-Q). **Results :** The prevalence of nomophobia was 96%. The scores of nomophobia showed statistically significant in association with generation ($P = 0.001$) with highest prevalence among young adults with age group of 18-35 years. 99.06% young adults were using smart phones for using social media (google, facebook, youtube, instagram, whatsapp, etc.), 91.84% for calling friends & family, and 88.57% for listening to music. **Conclusions :** Nomophobia is a "first world problem" that's showing no signs of slowing down, regardless of age. Anything can be abused, even the Smartphone. As on today, our culture becomes ever more tech savvy and tech hungry, mobile phone addiction has to be considered as dependence syndrome and preventive measures have to be undertaken to avoid the greater risk of psychological illness among young generations. It is a right time to initiate preventive measures against this severe problem without further delay. Everyone has to accept that relationship with mobile phones are risky for anyone, and it can steer us into "mobile phone mania" or "nomophobia," a psychological disorder which is equally dangerous as similar to narcotic drug addictions.

Keywords – *Smartphone Addiction, Psychological Illness, Young Adults*

Introduction – From the times of pigeons, letters, Morse codes, telegraphs and telephones, communication has been an integral part of human social life. Building relations, expression of emotions, sharing of thoughts, knowledge of current happenings etc. have been essential forms of interaction amidst our fast paced life. Marching along with the digitally transforming world, today we live in an era of wireless communication. As soon as the Smartphone set its foot into the garden of electronic gadgets, it exerted its spell on the conscious and intelligent part of human brain. Nowadays, the use of internet, smart phones, video games, social networks and other technological tools is very common. Their use is increasingly popular regardless of age, sex, social class and culture. India is rapidly advancing in the technological space.

With the growing population and increasing smart phone penetration, India is going mobile and digital. From 200 million internet users in 2013 to over 500 million internet users by 2017 -- including 314 million mobile internet users -- the growth story of mobile internet in India is on the upsurge. India has a mere 125 million smart phone users currently, the world's third-largest base after China and the United States. However, the growth opportunity is huge. The country is slated to overtake the United States in 2016 and become the world's second-largest market for smart phones, exceeding 200 million smart phone users says research firm e-Marketer. China, in contrast, already has over 500 million smart phone users.

As yet, just about a fourth of large Indian telcos' revenues come from data usage but that is set to change. Indian telcos will come under pressure to offer creative new pricing packages for data users. With the launch of the ambitious Reliance Jio in 2016, India has heated action in both voice tariffs and data pricing (Forbes, 2016).

In some countries, the number of cell phone connections has exceeded the total population that indicating a replicate cell phone connection to an individual. It is a surprise report that 29% of mobile phone users have stated that their cell phone as "something they can't imagine living without." There is an increase in the nomophobic population in India because the number of mobile phone users has increased. Other research shows that about 45% of the Indian population is nomophobic.

The smart phone has changed our lives. The age of cell phone initiation is becoming increasingly younger : 30% of 14-16 years of children have a cell phone; the rate increases to nearly 70% at age 17 and 83% at age 18. Furthermore, starting at the age of 4–5 years, Indian

children habitually access their parents' devices. These data imply that the cell phone enables stress, depression, sleep disturbances, aggression, and to a list of risky behaviours, particularly in 15-35 years old age group.

Mobile phones, one of the greatest inventions in the late 20th century, now have become the newest addiction in the world. Even though it has given us convenient and comfort, it doesn't mean it has no adverse effect. It is something that is going to affect everyone on day to day basis. This fact has become more and more evident in communications media, inspiring new pathologies, such as "Nomophobia" (No-Mobile- Phobia), "FOMO" (Fear Of Missing Out) – the fear of being without a cell phone, disconnected or off the Internet, "Textaphrenia" and "Ringxiety" – the false sensation of having received a text message or call that leads to constantly checking the device, and "Textiety" – the anxiety of receiving and responding immediately to text messages.

Smart phones are not just becoming a part of our daily lives - but a part of each and every one of us. The presence of this handy device that holds the world just a touch away has been greatly significant and unavoidable in our standard of living. It is surprising to note that an average person checks their phone 110 times per day, even without their knowledge or any reason. With the augmented ownership and usage of smart phones among adolescents, the young population is more at risk, partly because they can access the Internet through phones more easily, increasing the time spent on phones.

Researchers have found out that people who use mobile phones for more than three hours a day have a higher chance of getting nomophobia, warning this can pose potential dangers. It is not just perceived as a gadget, but as a digital umbilical cord connecting us to a fulfilled life. While the presence of smart phones has its mark, its absence has notable impacts too. Nomophobia (NO-Mobile phone-PHOBIAS) -The fear/anxiety of being away from mobile phone contact- is an alarmingly raising specific phobia in the recent times.

Nomophobia is considered "**a 21st century disorder resulting from new technologies**" and even has an entry in the *Urban Dictionary* which is suitably brief so as to more succinctly illustrate the horror that is nomophobia: Fear of being away from a mobile phone. Technically, nomophobia refers a fear of being unable to communicate via a mobile phone or via the internet.

It is a fact that, millions of people suffer from Nomophobia around the globe. Although Nomophobia does not appear in the current DSM-V, it has been proposed as a "specific phobia", based on definitions given in the DSM-IV.

In order to refer to people with nomophobia, two other terms were introduced and colloquially used: *nomophobe* and *nomophobic*. A nomophobe is a noun and refers to someone who is afflicted with nomophobia. The term, nomophobic, on the other hand, is an adjective and is used to describe the characteristics of nomophobes and/or behaviours related to nomophobia.

The 2008 study in the UK, conducted with over 2,100 people, demonstrated that some 53% of mobile phone users suffered from nomophobia (Mail Online, 2008). The study also revealed that men were more prone to nomophobia than were women, with 58% of male participants and 48% of female participants indicating feelings of anxiety when unable to use their phone. In terms of the relationship between age and nomophobia, the study found that young adults, aged 18-24 were most prone to nomophobia with 77% of them identified as nomophobic, followed by users aged 25-34 at 68%. Moreover, mobile phone users in the 55 and over group were found to be the third most nomophobic users.

One of the very first research studies into nomophobia is a case report by King, Valença and Nardi (2010). In their study, they consider nomophobia as a 21st century disorder resulting from new technologies. In their definition, nomophobia “denotes discomfort or anxiety when out of mobile phone or computer contact. It is the fear of becoming technologically incommunicable, distant from the mobile phone or not connected to the Web” (King et al., 2010, p. 52).

Their definition seems to encompass not only mobile phones but computers, as well. Although their definition includes the unavailability of computers, they argue that computers are replaced by mobile phones, which presumably have smart phone capabilities, and tablets. Therefore, they state that their research focus is less on computers and more on the virtual communication environments, including mobile phones (King et al., 2010, p. 142). Their definition implies a dependency on virtual environments for communication.

According to the survey, the younger you are, the more prone you are to nomophobia. The youngest age group (18-35) tops the nomophobic list at 77%, which is 11% more than that of the next group, i.e. middle aged adults - those aged 36-55.

This is the most tribal generation of young people. Adolescents want to be with their digital friend on a 24-hour basis. Major drivers of nomophobia include boredom, loneliness, and insecurity, while some young nomophobes cannot bear solitude. Most people go to bed with their mobile phones while sleeping just like how one will have the pillow. While pillow doesn't communicate, the phone does, adding insomnia to the list of potential problems. This reduced the amount of time to reflect. Some cannot entertain themselves. The phone has become our digital security blanket.

India, after China, is the second largest mobile phone market in the world. The Telecom Regulatory Authority of India (TRAI) reported that there were 884.37 million mobile connections in India as of November, while China had 963.68 million.

The cross-sectional study published by the Indian Journal of Community Medicine three years ago, recruited 200 medical students and scholars. About one in five students were nomophobic, results showed. The study claimed that the mobile phone has become "a necessity because of the countless perks that a mobile phone provides like personal diary, email dispatcher, calculator, video game player, and camera and music player."

Now-a-days, it has been noticed that usage of mobile as a routine practice during eating, walking, listening, driving, etc. Of course, a psychologist stated that mobile usage while driving is 6 times more dangerous than driving in alcohol drinks. In addition, many psychologists stated that an over usage of the cell phone has to be considered as "addiction" as similar as addiction to cigarette smoking and alcohol drinking. In fact, cell phone abuse or addiction may be more dangerous than other addiction. Accidents lurk while nomophobes fix their attention on phones. According to recent studies, up to 47% nomophobes reported accidents while messaging or talking on the phone, which includes minor road accidents, falling while going upstairs or downstairs and stumbling while walking. More than 20% also reported pain in the thumbs due to excessive texting.

One could look at this as a form of addiction to the phone. The fear is part of the addiction. The use of hand phone has some features that predispose this activity to addiction, similar to video games, naming, and easy access.

People also carry a charger all the time. Other study shows that the no-battery-situation upsets nomophobes the most. People can also prepay phone cards for emergency calls and credit balance in phones to ensure a constant and functioning network. Other solutions

include supplying friends with an alternate contact number and storing important phone numbers somewhere else as backups.

e-Relationships : The Good and the Bad

As adults observe adolescents spending time ‘alone together’ (Turkle, 2011) — physically together but each interacting with their mobile device — the concern is that young people are missing out on opportunities to develop key social and relationship skills. Experimental research has shown that simply placing a mobile phone on the table beside a pair of strangers’ decreases their closeness and the amount of personal information they disclose (Przybylski & Weinstein, 2012). If the mere presence of a mobile phone can influence the quality of conversations among adults, how are the relationships of young people who are born into the digital world affected?

Interestingly, most research has not supported the idea the time adolescents spend on their mobile devices is preventing them from developing or maintaining close relationships. While time spent online does displace time spent with friends and family, for most adolescents frequent virtual communication has been shown to strengthen the quality of existing relationships (e.g., Davis, 2012). In addition, network analyses of adolescents’ online communications illustrate substantial overlap between online and offline peers (Bryant, Sanders-Jackson, & Smallwood, 2006), and fine-grained analyses of the content of their exchanges have shown that most online communication involves positive (or neutral) interactions between friends (Underwood, Ehrenreich, More, Solis, & Brinkley, 2014). Mobile devices also allow children and adolescents separated from close friends and family to stay more closely connected, including, for example, with deployed military parents or noncustodial parents.

Admittedly, mobile technologies have not had universally positive effects on young people’s social relationships. That is, most adolescents have been involved in or witnessed online victimization and bullying; this is important as involvement in cyber-bullying is associated with a wide range of negative outcomes (Kowalski, Giumetti, Schroeder, & Lattanner, 2014). While most research shows that there is substantial overlap between adolescents who are bullies/victims online and offline, mobile platforms can also exacerbate offline risks. For example, perpetrators can remain anonymous and victimization may occur at any time of day or night.

To summarize, there is significant overlap between online versus offline relationships and communications among young people. For most adolescents, mobile devices have become a tool for engaging in routine exchanges with friends and strengthening existing relationships. However, mobile technologies have also introduced new tools for bullying — although not necessarily new bullies or victims.

The current study finding out the prevalence of nomophobia helps us in assessing the severity of nomophobia also. Currently, there are no studies available in India which has employed the new NMP-Q. Hence, in this background, the present study was conducted to find out the prevalence of nomophobia and its determinants across different generation in Lucknow city. Different generations were chosen because every generation whether children or young or elders use phones more frequently.

Objectives – To find out the prevalence of nomophobia and its determinants among people of Lucknow city across different generation.

Sample – The sample of 429 people was taken for this research from three different age group. Age group of 18-35 years were named as young adults, age group of 36-55 years were named as middle aged adults, and age group of 56 years and above were named as old adults. From each age group, 143 respondents were involved in this study. All the respondents were from Lucknow city. Convenient random sampling was used for this study.

Tools – The nomophobia questionnaire (NMP-Q) was developed and validated by Yildirim and Correia. The questionnaire includes 20 questions using a Likert scale from 1 to 7, with 1 being “totally disagree” and 7 being “totally agree”. These questions are divided into four main themes: not being able to access information (items 1±4); giving up convenience (items 5±9); not being able to communicate (items 10±15) and losing connectedness (items 16±20). The total score is found by adding up the number in each item, which allows for a range of scores from 20 to 140 points. Higher scores correspond to a higher degree of nomophobia. Chronbach's alpha reliability test was performed, which measures the internal consistency of the scale, and was found to be 0.945.

Result – **Figure 1 showing the distribution of nomophobia of the total sample.**

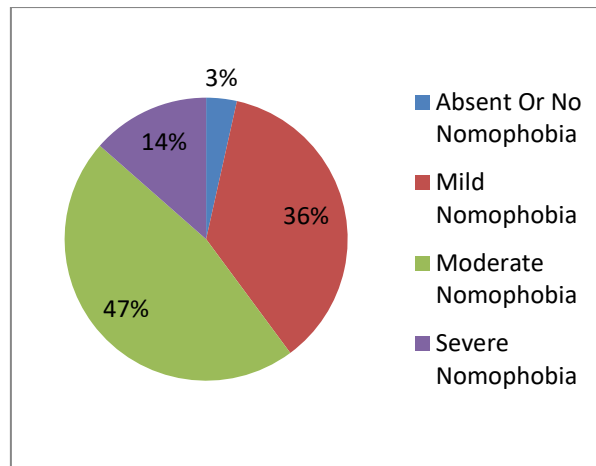


Table 1 :- showing the distribution of scores of nomophobia across different age groups.

	Nomophobia Category					<i>P</i>
	<i>No Or Absent Nomophobia</i>	<i>Mild Nomophobia</i>	<i>Moderate Nomophobia</i>	<i>Severe Nomophobia</i>	<i>Total</i>	
<i>Young Adults (18-35yrs.)</i>	3	43	71	24	141	0.001
<i>Middle-Aged Adults (36-55yrs.)</i>	4	74	69	20	167	
<i>Old Adults (56yrs. & above)</i>	8	39	60	14	121	

Table 2 :- showing reasons for mobile use:

Reasons	Percentage of young adults using
Social Media (google for academics & personal use both, facebook, youtube, instagram, whatsapp, etc.)	99.06%
Calling Friends & Family	91.84%
Listening Music	88.57%
Texting	74.36%
Playing Games	57.58%

The total numbers of respondents selected were 429, of which 143 (%) were from each group. The most common reason for the use of smart phones in this study was using internet, and calling of friends / family members which was similar to the findings of other studies. The possible reason for this could be launching of free 4G services by a private provider during this time.

The limitations of the study are that it is based on four different generations of one particular city only and hence it cannot be used to generalize the prevalence of nomophobia to the entire state, country or world.

Overall, 414 (97%) of the respondents were nomophobic and 15 (3%) non-nomophobic. 156 (36%) showed mild, 200 (47%) moderate, and 58 (14%) severe nomophobic (Figure 1). The scores of nomophobia showed statistically significant association with different generation ($P = 0.001$) with no nomophobia and mild nomophobia categories more among middle-aged adults and old adults, moderate nomophobia and severe among young adults (Table 1).

About 99.06% young adults were using smart phones for using social media (google, facebook, youtube, instagram, whatsapp, etc.), 91.84% for calling friends & family, and 88.57% for listening to music which were the most common reasons for using smart phones (Table 2).

Conclusion – The prevalence of nomophobia in our study was as per the ICD-10 diagnostic criteria for dependence syndrome. The mobile phone has been dubbed as one of the biggest non-drug addictions of the 21st century. As observed use of cell phone is increasing and unjustified use may result in problems. Prevention is better than cure, most of the subjects using mobile phone belong to younger adult age group, and therefore health education strategies should be targeted to youth adults to prevent harmful effect of this great invention. Though treating inappropriate mobile phone use may just be addressing a symptom, rather than the underlying problem, but there is still a need to recognize these growing trends and the potential for negative consequences of inappropriate mobile phone use in young users.

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