

Comparative Study of Mobile Phone Dependence among Youth and Adults

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ABSTRACT

Mobile phone or cell phone is the technical boon to the mankind. Over the last decade particularly, due to availability of mobile phones to common people at a reasonable price and considering its ever-increasing utility, mobile phones have become part and parcel of the life of a common man for all ages (Ling & Perdersen, 2005; Madell & Muncer, 2004; Mezei et al, 2007). In spite of its tremendous utilities, it is also emerged that excessive use of mobile phones may interfere with the physical and psychological well being of human being. New researches have shown that excessive use of mobile phones may lead to development of symptoms similar to dependence syndrome.

The present study was therefore undertaken to assess the prevalence of Mobile Phone Dependence among youth and adults and also attempted to find out whether any association exists between Mobile Phone Dependence with gender in both the groups. Moreover, the study intended to investigate the self perceived physical discomforts among respondents with Mobile Phone Dependence. A total sample of 100 youth in the age group of 18-29 years and 100 adults in the age group of 40-52 were drawn randomly. 'Mobile Phone Dependence Questionnaire' developed by Agarwal et al (2012) was administered to collect the required information. Results of the study indicated that the 25 percent of youth and 12 percent of adults had Mobile Phone Dependence. The chi-square results of the study also indicated that, gender and Mobile Phone Dependence are independent of each other for both adults and youth. Majority (80 percent) of youth with Mobile Phone Dependence experience headaches followed by burn and itching of the eyes (68 percent). It was also found that majority of adults (83.33) experience neck pain for excessive use of mobile phones.

Keywords: Mobile Phone, Youth and Adults

INTRODUCTION

Mobile phone is a technological boon to the mankind. Research over the last two decades has evidenced the benefits of mobile phone use in terms of communication between individuals or daily life organization (Geser,

2004; Walsh, White, & Young, 2008). Therefore, this convenient mode of communication is used by individuals of all age groups; however, the reasons behind its usage, pattern differ across age groups.

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Mobile phone helps working parents to mend their children while at work whereas, it helps youngsters to share their emotional feelings and get psychic support from their families (Chen & Katz, 2009). As suggested by Kim et al. (2014), teenagers and young adults use smart phone mainly for the purpose of entertainment; whereas, people in their thirties and forties age group use smartphone to organize their work schedules and other business related work. Srivastava (2005) suggested that mobile phone has become such an important aspect of a user's daily life that it has moved from being a mere 'technological object' to a key 'social object'. But it has been realised that excessive use of mobile phones may also lead to development of symptoms similar to substance dependence syndrome, (Bhatia, 2008; Bivin et al., 2013; Bragazzi & Del, 2014; King et al, 2014; Lopez et al, 2014). It also interferes with the physical and psychological well-being of human being. Negative consequences of excessive use include self-reported feelings of dependence and addictive use (Bianchi & Phillips, 2005; Billieux, Van der Linden, d'Acremont, Ceschi, & Zermatten, 2007), financial problems (Billieux et al, 2008), risky driving (White, Eiser, & Harris, 2004), banned use in prohibited areas (Nickerson, Isaac, & Mak, 2008), sleep interference (Thomé, Harenstam, & Hagberg, 2011), reduced physical activity (Kim, Kim, & Jee, 2015), cyberbullying (Nicol & Fleming, 2010) and phantom cell phone ringing (Kruger & Djerf, 2016).

This Behavioural addiction for mobile phones has been variously termed as mobile phone dependence, mobile phone problematic use, problem cell phone use, mobile phone abuse and nomophobia (a portmanteau for “no mobile phone” and phobia) (Bhatia, 2008; Bivin et al., 2013; Bragazzi & Del, 2014; King et al, 2014; Lopez et al, 2014). The symptoms include preoccupation with the device, excessive use with loss of control, use in socially inappropriate/dangerous situations, adverse effects on relationships, symptoms of withdrawal (e.g. feelings of anger, tension, depression when the phone/network

inaccessible, ringer anxiety, constant worry that battery will drain, signs of craving), evidence of tolerance (e.g. need for new better phone, more software or more hours of use), and functional/behavioural impairments (e.g. lying, arguments, poor achievements, social isolation, communifaking i.e. engaging in fake conversations on mobile phone for purpose of avoiding others) (Nikhita et al., 2015). These seem to parallel the substance dependence syndrome and thus some researchers deem that it has become important to consider mobile phone dependence (MPD) as a diagnostic entity (Choliz, 2010; Bhise et al., 2014; Merlo et al., 2013). Excessive mobile phone use has recently been considered as a public health concern by the World Health Organization (2015). People engage themselves in any behavioural addiction like mobile phone dependence through its excessive use will hamper the growth of our society. Therefore, more awareness needs to be created in the society regarding mobile phone dependence and its ill effects on physical and mental health. This could be achieved only through research and training. Hence, keeping the importance of the subject in mind, the study has been undertaken with the following objectives.

OBJECTIVES:

1. To assess the prevalence of mobile phone dependence among youth and adults
2. To find out whether any association exists between mobile phone dependence and gender in case of youth and adults
3. To investigate the self -perceived physical discomforts among youth and adults due to mobile phone dependence

MATERIALS AND METHODS

Sampling:

Three numbers of co-educational colleges and five Government organisations of Jorhat district of Assam were selected randomly to draw the required sample. A total of 100 youth in the age group of 18-29 and a total 100 adults in the age group of 40-52 were drawn randomly from the selected colleges and organisations.

Tools used:

To collect the required information ‘Mobile phone dependence questionnaire’ developed by Agarwal et al, (2012) was administered. The questionnaire consisted of 23 items. The initial three items enquired about the duration of use in years, time spent on mobile phones per day and the main purpose of use. The other 20 items were to provide information about the pattern of mobile use and whether such use fulfilled the International Classification of Disease-10 (ICD-10) criteria for dependence syndrome i.e intense desire, impaired control, withdrawal, evidence of tolerance, progressive neglect of alternative interests, harmful use. Participants who fulfilled three or more of the criteria for dependence (as per ICD-10) were said to have mobile phone dependence. In addition to the questionnaire, an interview schedule was developed to collect the

background information and also to find out the physical discomforts experienced by the respondents due to excessive use of mobile phone.

Procedure of data collection:

With prior permission from the concerned authority, the data was collected from the respondents. The questionnaire was distributed among the respondents and they were requested to give their response honestly without omitting any statement. Information was also collected by using self-structured interview schedule. Researcher also assured to keep the responses confidential as well as to be used only for research purpose.

Data Analysis:

Frequency, percentage and Chi square test were used to analyse the collected data.

RESULTS AND DISCUSSION

Table 1: Distribution of respondents according to diagnostic criteria for mobile phone dependence syndrome

Diagnostic Criteria	Youth (N=100)		Adults (N=100)	
	Frequency	Percentage	Frequency	Percentage
Intense Desire	30	30	21	21
Impaired control	1	1	2	2
Withdrawal	31	31	22	22
Evidence Tolerance	65	65	10	10
Progressive neglect of alternative interests	10	10	2	4
Harmful use	21	21	17	17
Dependence syndrome among Mobile phone users (i.e. Participants fulfilling three or more of the above six criteria)	25	25	12	12

Results of the study indicated that 25 per cent of youth and 12 per cent adults had mobile phone dependence. Moreover, in relation to individual diagnostic criteria, it was found that majority of youth (65%) exhibited evidence of tolerance i.e need for a new better phone, more software or more hours of use which was followed by withdrawal (31%) i.e feelings of anger, tension, depression when the phone/network inaccessible, ringer anxiety, constant worry that battery will drain, signs of

craving and intense desire (30 %) i.e need to use the cell phone more and more often in order to achieve satisfaction. In case of adults, it was found that majority (22%) exhibited withdrawal which was followed by intense desire (21%) and harmful use (30%). The reason behind this may be numerous attributes of a mobile phone attract both youth and adults. This can be supported by studies, which reflected that the introduction of 4G and 5G technologies along with the constantly

evolving functions of smartphones (e.g., facilitated use of social networks, video gaming, and gambling platforms) are structural factors susceptible to increasing the likelihood of deregulated or addictive use of the mobile phone (Jeong, Kim, Yum, & Hwang, 2016;

Lee, 2015). As a result of which a considerable portion of youth (25%) and comparatively less number of adults (12 %) had shown the syndrome of mobile phone dependence.

Table 2: Association of gender and ICD-10 diagnostic criteria for dependence syndrome in relation to Mobile Phone Dependence

Diagnostic criteria	Youth (N=100)				Adults (N=100)			
	Diagnostic criteria present in respondents (N=100)		χ^2	p value	Diagnostic criteria present in respondents (N=100)		χ^2	p value
	Boys (N=50)	Girls (N=50)			Male (N=50)	Female (N=50)		
Intense Desire	5 (10)	25 (50)	19.048	.000	8(16)	13 (26)	1.507	.220
Impaired control	0 (0)	1 (2)	1.010	.315	0 (0)	2 (4)	2.041	.153
Withdrawal	15 (30)	16 (32)	.047	.829	14 (28)	8 (16)	2.098	.148
Evidence of Tolerance	45 (90)	20 (40)	27.473	.000	6 (12)	4 (8)	.444	.505
Progressive neglect of alternative interests	5 (10)	5 (10)	.000	1.00	0 (0)	2 (4)	2.041	.153
Harmful use	15 (30)	6 (12)	4.882	.027	13 (26)	4 (8)	5.741	.017
Mobile Phone Dependence(i.e. Participants fulfilling three or more of the above six criteria)	15 (30)	10 (20)	1.333	.248	8 (16)	4 (8)	1.515	.218

Figures within the brackets indicate the percentages to the total

It was found from the analysis that, calculated χ^2 values in relation to gender for both youth and adults (1.333 and 1.515 respectively) were less than the table value at 5% probability level and 1 d.f. Hence, the chi square results of the study indicated that (table 2), gender and mobile phone dependence were independent of each other both in case of youth and adults. It may be due to the fact that the mobile phone appeals youth irrespective of their gender, and both the genders embrace mobile phone technology equally. A similar research study found that female were more likely to use it for social reasons while males use it more for technology and work purposes (Bianchi, 2005).

But in case of individual diagnostic criteria in case of youth, it was found that calculated χ^2 values for both male and female in relation to intense desire, evidence of tolerance and harmful use were 19.048, 27.473 and 4.882 respectively, which were greater than the table value at 5% probability level and 1 d.f. Hence, they were found be associated with gender. Whereas in case of adults, harmful use was found to be associated with gender as χ^2 values for male and female was 5.741 which was greater than the table value at 5% probability level and 1 d.f. More no of male than female were found to use mobile phone in situations which may become threat to their life and well being.

Table 3: Distribution of respondents with mobile phone dependence according to their perceived physical discomforts

Effects of Mobile Use	Respondents (N=25)		Respondents (N=12)	
	Frequency	%	Frequency	%
Pain and discomfort in the eye	14	56	8	66.67
Burn and itching of the eyes	17	68	8	66.67
Blurred vision	7	28	8	66.67
Headaches	20	80	6	50
Neck pain resulting from looking down at cell phone or tablet for too long	12	48	10	83.33
Insomnia	10	40	2	16.67
Numbness and pain in the thumb and index finger	5	20	4	33.33

In relation to the self- perceived physical discomforts, majority (80%) of youth with mobile phone dependence had reported that they experienced headache followed by burn and itching of the eyes (68%) and pain as well as discomfort in the eyes (56%). In case of adults majority (83.33%) with mobile phone dependence had reported that they experienced neck pain resulting from looking down at cell phone or tablet for too long followed by Pain and discomfort in the eye (66.67%), Burn and itching of the eyes (66.67%) and Blurred vision (66.67%). For both the age groups, it may be because of excessive strain on the eyes and muscles due to the prolonged use of mobile phones.

CONCLUSION

It can be concluded from the present study that a considerable number of youth and adults (12%) have mobile phone dependence and it is independent of gender. It is a matter of great concern because this behavioural addiction may lead to dependence syndrome similar to substance dependence, which may further interfere with their mental health status. As in today's world we cannot think of our life without our mobile phone as it makes our life more convenient and easy. But we should be sensible and responsible enough in its use so that this technological boon can not indulge

ourselves in behavioural addiction which may lead to dependence syndrome.

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