Phubbing Behaviour - a proclivity among young adults

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ABSTRACT

Background: Besides making life easy, the smartphone has brought many psychological issues to their verge. Especially, the face-to-face communication of humans is facing challenges. A common behaviour encountered during social conversations is the use of smartphones simultaneously while conversing, which psychologists have termed as Phubbing. **Aim**: To explore Phubbing Behaviour in relation to its determinants, namely, Mobile phone usage and Internet Addiction, Gaming Addiction and Fear of Missing Out among young adults. **Materials and Method**: The sample comprised of 184 young adults in the age range of 18 to 30 years, of which 83 are males and 101 are females, belonging to the middle class socio-economic strata of India. The participants completed the e-questionnaires comprising of Mobile Phone Usage and Internet Addiction Scale, Game Addiction Scale, Fear of Missing Out Scale and Phubbing Scale. Firstly, evaluation of mean and standard deviation, have been done; secondly, independent samples t-test has been employed to reveal the significant difference of mean scores between the male group and the female group involved in the study. Furthermore, a correlation has been incorporated to establish the relationship between Phubbing behaviour and all the other factors. **Results:** The findings suggest that there exists a positive significant correlation between phubbing behaviour and its determinants. The study further indicates that there prevails a significant difference in mean scores on gaming addiction between the male group and the female group. **Conclusions:** The research variables overlap and have circular relationships.

Keywords: Phubbing, mobile addiction, internet addiction, game addiction, fear of missing out

INTRODUCTION

The rapid advancement of technology-enabled millions of people living in this developed and concurrently developing world to connect with others with just a click of a button on the mobile phone.[1] Smartphones provide opportunities for users to connect with friends, family, colleagues and absent others,[2] to play games,[3] for entertainment,[4] for education,[5] and for research.[6] Despite their obvious advantages smart phones may sometimes create gaps between people and pull them apart,[7] in recent years researchers have become increasingly concerned about their potential adverse effects on mental and physical health, and the quality of social interactions.

The term Phubbing was originally coined in a campaign by the Macquarie Dictionary to represent a growing problem of smartphone misuse in social situations.[8] This newly coined term refers to "snubbing someone in a social setting by looking at your phone instead of paying attention".[9] A study conducted in order to find the determinants of Phubbing found various possible determinants such as smartphone addiction, Social Media addiction, Online Gaming addiction which can significantly predict Phubbing.[10] In another research paper, Phubbing and what could be its determinants tried to understand the phenomenon and concluded that smartphone addiction or Internet Addiction, Social Media addiction, Gaming addiction and Personal and Situational factors as important determinants of Phubbing behaviour.[11]

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Mobile phone usage addiction or Smartphone addiction refers to individuals preoccupied with their smartphone use to the extent that they neglect other areas of life. Users get information while surfing on the Internet which helps them to escape from uncomfortable situations. As a result, it appears that many students tend to rely heavily on their phones, which obligate even heavier use. Charged by the widespread interest in Social Media apps,[12] using smartphones is fun, informative, useful, and highly addictive.

A recent survey of college students indicated that females spent an average of 10 hours every day on their phones, while males spent an average of 8 hours each day on their smartphones.[13] The consequences of smartphone overuse on the quality of social interactions between individuals have also caused concern. In research, conversations, where smartphones were present, found lower levels of empathic concern compared to those in the absence of a smartphone on the table.[14] Other researchers have found lower levels of perceived empathy, partner trust and perceived relationship quality in the presence of mobile phones.[1] Many recent media reports have also made comments on the intended and unintended disconnection among people that occurs when people use smartphones.[15]

Internet addiction is defined as obsessive-compulsive, uncontrollable, excessive use of the Internet, leading to significant distress and impairments in daily functioning (i.e., emotional stability, family relationships, work, and study),[16] implying "a maladaptive pattern of Internet use leading to clinically significant impairment or distress".[17] Undoubtedly, increased time spent on the Internet.[18] improved access to the Internet, and an urge to access a variety of Internet content may have significantly given rise to the increased prevalence of Internet addiction and phubbing behaviour.

Among the factors affecting phubbing, Game Addiction is as important as phone addiction. Individuals who lack time management skills use games to escape from problems and as mental relaxation. Game Addiction,[19] which refers to online games[20] video games[20] computer games, all of which have a considerably similar origin, refers to playing games to the extent that it affects everyday life and is regarded as addictive behaviour. Factors, such as being engaged with a game for long periods of time, levels varying according to a person's performance, increase addiction to a game, immediately being rewarded even for the smallest progress in the game. Gaming has a significant place among the phone, internet and computer interactions that lead to phubbing.

Fear of Missing Out (FoMO) debilitates people by arousing their insecurities and has been found to be associated with strong urge mobile phone overuse.[21] This anxiety about being left out of the information circuit also plays a crucial role in seeking out social networking services, life satisfaction, need satisfaction and mood,[1] which have all been connected to levels of smartphone addiction.[22] 79% of Americans keep their smartphones nearby for 22 hours of the day, checking it on average 221 times per day;[23] 25% of Americans cannot recall a time of the day that their smartphone was not within their reach. Two-thirds check their phone even when it is not ringing or vibrating,[24] and 70%–80% of drivers use their smartphone while they are driving.[25] The fear of missing out drives slavish obedience to our phones. Recent research has found FoMO to be associated with problematic mobile phone use.[26] It is therefore plausible to suggest that FoMO would predict mobile phone addiction, which in turn may predict phubbing behaviour.

Gender has been found to play a crucial role in influencing many smartphone associated behaviour such as preference for online activities,[27] mobile phone addiction,[28] internet addiction,[28] self-control,[29] and communication etiquette.[30] However, very little is currently known about how phubbing behaviour, being phubbed, and perceived social norms of phubbing differ between males and females.

In India, 21% of the population are adolescents and nearly 20% of adolescents exhibit the consequences of smart phones' over usage in mental health problems in the form of difficulty in concentration and attention deficit-hyperactivity disorder, but the contribution of phubbing is practically still unknown. In the Indian scenario, smartphone's addiction and problematic internet use among

adolescents are on the increase, indicating possibility of phubbing among adolescents and youth. Moreover, there are practically no studies in India except a few on the negative impact of the use of a mobile phone such as smartphone and Internet addiction on the impact of predictors or consequences of the phubbing phenomenon on Indian adolescents and youth. This, therefore, remains a blind researchable area and thus one of the main reasons for this rather unique research.

The present study aims to explore phubbing behaviour in relation to its determinants, namely, mobile phone usage and internet addiction, gaming addiction and fear of missing out among young adults.

MATERIALS AND METHOD

The study sample consisted of participants aged between 18-30 years of age. A total of 184 participants were selected, where the number of females was 103 and the number of males was 81. Participants whose age is not falling in the range of 18-30 years, Participants with any history of major physical and psychological illnesses, Participants who are in not a heterosexual romantic relationship and Participants who are married were excluded from the study. To conduct the study, after the introduction of the researcher to the participants, the participants were assured complete confidentiality and their consent was taken.

The Mobile Phone Usage and Internet Addiction Scale,[10] was used as a measure of Mobile phone usage and Internet Addiction, consisting of 21 items, graded from 1 (never) 5 (always) on a 5-point Likert Scale. The items of the Scale were developed using the data obtained from the focus group interviews. Game Addiction Scale was used as a measure of Gaming Addiction,[10] consisting of 8 items, graded from 1 (never) to 5 (always). The items were derived from the qualitative research conducted by the researchers. Fear of Missing Out Scale (FoMOs), used as a measure of, was developed and published in 2013,[1] with 10 items. The individual has to indicate how often they felt the way described in a 5 pointer Scale, with response anchor ranges from-Not at all true of me (1), Slightly true of me (2), Moderately true of me (3), Very true of me Extremely true of me (5). Finally, the scores are summed up and it produces a possible

of 10 to 50. Following this, Phubbing Scale[10] was administered as a measure of phubbing behaviour. Its items were developed through the use of data obtained from focus group interviews by Karadag, 2015. The scale consists of 10 items, graded from 1 (never) to (always) on a 5-point Likert Scale.

Participants were provided with the online form booklet containing the information schedule and 4 different questionnaires which were presented according to a predetermined sequence as follows: Information Schedule, 1. Mobile phone usage Addiction and Internet Addiction Scale, 2. Game Addiction Scale, 3. Fear of Missing Out Scale (FoMOs), 4. Phubbing Scale. Participants took 15-20 minutes on average to fill up the online form. Afterwards, the participants were provided with information about the different measures that have been administered and about the aim and objectives of the research. Following the data collection, the responses were scored according to the procedures given in the manuals.

Data for each of the questionnaires were scored following the scoring procedure for each of them accordingly. The data was statistically analyzed. Computation of Mean, Standard Deviation, Correlation and t-test were done; For analysis, 0.05 and 0.01 levels of significance were accepted.

RESULTS

The results obtained by the statistical computation have been mentioned in the following tables and have been discussed in detail in the latter part of this paper.

Table 1 shows means and standard deviations of each gender (male and female) for phubbing behaviour, its determinants (mobile phone usage and internet addiction, gaming addiction and fear of missing out).

Table 2 is representative of "t" ratios of the female group with respect to the male group for phubbing behaviour, mobile phone usage and internet addiction, gaming addiction and fear of missing out

Table 3 is representative of correlation (r) between phubbing behaviour, mobile phone usage and internet addiction, gaming addiction and fear of missing out.

Table 1: Phubbing behaviour and its determinants

GENDER		Mobile Phone Usage & Internet Addiction	Gaming Addiction	Fear of Missing Out	Phubbing behaviour
Female	Mean	61.815	14.825	25.805	27.952
	N	103	103	103	103
	Std. Deviation	12.931	6.592	7.516	5.808
Male	Mean	64.839	18.592	26.629	27.225
	N	81	81	81	81
	Std. Deviation	13.114	7.966	7.529	5.918
Total	Mean	63.147	16.483	26.168	27.630
	N	184	184	184	184
	Std. Deviation	13.063	7.449	7.512	5.851

Table 2: "t" ratios of the Female group with respect to the Male group

Variables	t ratio	df	Level of Significance
Mobile phone usage and Internet Addiction	-1.565	182	.119
Gaming Addiction	-3.509	182	.001**
Fear of Missing Out	-.737	182	.462
Phubbing behaviour	.838	182	.403

*P<0.05, **P<0.01

Table 3: Correlation between Phubbing behaviour, Mobile phone usage and Internet Addiction, Gaming Addiction and Fear of Missing Out

Variables	Mobile phone usage and Internet Addiction	Gaming Addiction	Fear of Missing Out	Phubbing behaviour
Mobile phone usage & Internet Addiction	1			
Gaming Addiction	.386**	1		
Fear of Missing Out	.379**	.313**	1	
Phubbing behaviour	.590**	.195**	.355**	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

DISCUSSION

The result obtained from the statistical analysis of the data appears to show certain interesting findings with respect to the above-mentioned measures, which will be discussed at length below.

Table 1 shows that the Means of Mobile phone usage and Internet Addiction, Gaming Addiction and Fear of Missing Out are greater in the male group than in the female group. Means of Phubbing behaviour are greater in the female group than in the male group. The table depicts the Mean of Mobile Phone Usage and Internet Addiction is greater in males than females. The finding is also supported by an Indian study [31]. This overuse of the internet among male in Indian settings can be because of more freedom and accessibility men experiences due to the societal structure of the country in comparison to female students. The other reason that can explain such a result is the inclination and interest of males in technical aspects have been found more when compared to the females. The mean of Gaming addiction is higher in males than in females, indicating men are more addicted to gaming than women. This finding corroborated with prior studies of Ko et al. who found that boys are more addicted than girls.[32] This can be accounted to the fact that until recently due to the long-held stereotype that males are better gamers than females, most video games were accordingly designed. These findings might take a new shape in the very near future when the availability and exposure of smartphones in both genders reach equity. The Mean for Fear of Missing Out was higher in males compared to females. These findings corroborate a study that was conducted among the students of Oman conducted in 2020. The findings can be attributed to the fact that males use more internet than females, hence are more addicted to internet games and experience higher need to be on the Social networking sites (SNSs) in which people build their virtual reality than females. Table 1 also reflected mean of phubbing behaviour was slightly higher in women than men, which goes in hand with literature, which indicates women were rated higher than men in phubbing factors: communication disorders and telephone obsession, which are not under the consideration of the present study. This is the reason for the fact that in spite of men having higher means in the phubbing determining variables(Mobile phone usage and Internet Addiction, Gaming Addiction and Fear of Missing Out) are more frequently phubbed than females.

Table 2 depicts that there is no significant difference in mean scores on Mobile Phone Usage and Internet Addiction, Fear of Missing Out and Phubbing behaviour between the male group and the female group, only Gaming Addiction exhibited a significant mean difference. This can be accounted for by the fact that because men usually play more games on the computer and phone, there are more games for men. Also, the games designed exclusively for females are less in number; increasing the statistical likelihood of males being addicted to playing a mobile game. There are similar results in the literature. [33][34]

Table 3 revealed that there is a significant positive correlation between Phubbing behaviour, Mobile phone usage and Internet Addiction, Gaming Addiction and Fear of Missing Out. The findings suggest there is a positive significant correlation between Phubbing behaviour and Mobile phone usage and Internet Addiction. The findings show that the highest correlation value explaining phubbing was observed for Mobile phone usage and Internet Addiction compared to the other correlation values. This is indicative that the other variables involved in the study are dependent on the phone and internet availability and accessibility. Previous researches depicted individuals tend to use their mobile phones in many environments, both appropriate and inappropriate.[35] The lack of research on phubbing, which is the focus of the present research, restricts interpretations. Nevertheless, it can be said, the increasing tendency towards mobile phone use makes up the basis of phubbing. Internet addiction has a strong effect as the creator of many addictions related to the Internet. For example, social media addiction[36] is fed entirely from the Internet, and a part of Game Addiction[37] is also fed from the Internet. As a result, Internet addiction is one of the strongest determinants of phubbing. Because the Internet is a boundless field of development, which is fed from human imagination and intelligence, its future cannot be predicted today. Contextually, unless a broader scope of technologies covers our current and future

internet environment, the Internet will continue to be a permanent factor of phubbing.

There exists a low positive significant correlation between Gaming Addiction and Phubbing behaviour. The main reason is the hierarchical relation of Game Addiction to Mobile Phone Usage and Internet Addiction. It should be assumed here that Game Addiction which falls into the category of computer game addiction is different from the Game Addiction mentioned and considered in the studies phubbing. The games which can be played and accessed through mobile phone with or without the intervention of the internet is only considered under the realm of phubbing studies. The Game Addiction type that affects phubbing includes games such as Candy Crush and Angry Birds,[37] which are located in the phone memory and exist in social media rather than computer games. In this context, it is natural for Game Addiction, to have a low-level impact because the user has to enter the Internet first and then enter a social media environment in order to play the game. This explains the detected low-level effect.

The data depicts a positive significant correlation between Phubbing behaviour and FoMO. The findings were supported by a study conducted by Cheever et al., (2014) which reveal that there was a significant increase in anxiety over time among students who had high daily usage of wireless mobile devices i.e mobile phones or smartphones when their devices were either switched off or not in possession.[38] Taking away their devices is equivalent to cutting off their connection with the world resulting in minimal awareness of updates from their surroundings causes them to feel anxious about missing out. With the increased accessibility of mobile phones and the internet, people depend heavily upon the devices to gratify their social needs. Lee and Chiou claimed that a convincing explanation for this extensive use of social networking sites (SNS) among people is due to the desire of the individuals to gratify their social needs namely the need to belong and the need for popularity[39] for which people had to previously rely upon many other extrinsic social factors. Besides that, individuals are increasingly reliant on SNSs since these platforms allow the construction of social identities.[40] Given these, failure to gratify these psychological needs could escalate one's

sensitivity to developing a FOMO on things. Hence, this instantaneous source of update motivates an individual to constantly and habitually check on their phones, eventually leading to phubbing in social situations.

CONCLUSION

Thus in conclusion this study sheds light on how the research variables overlap and have circular relationships, that especially Gaming Addiction and Fear of Missing Out with Mobile Phone Usage and Internet Addiction, and that consequently, this Mobile Phone Usage and Internet Addiction leads to Phubbing behaviour in an individual.

The main limitation of the study is the data from just one specific geographical area and the study was conceived and performed during the hours of a global pandemic. Moreover, the number of participants was relatively small compared to other online surveys and the ratio of gender was not 1:1. Although the limitation cannot be completely removed from the research, the errors can be minimized. To minimize errors, the necessary precautions were taken into consideration during the data collection process. Firstly, the validity and reliability of the scale used for data collection were tested. Finally, the participants were told that the scales would be kept confidential and would not be shared with anybody under any circumstances. Despite limitations, one of the major implications of the study is that, by analyzing the variables that correlate with phubbing behaviour, this study can contribute to the assessment of problematic phubbing behaviour and interventions to deal with this. These findings of the study might also be employed in intervention programmes that are suited for family/relationship counselling.

Further research on secondary, higher secondary school and university, as well as on various non-student groups, may reflect and reveal among which group phubbing is more common and whether it is active in non-student groups. Therefore, advanced research about the triggers of phubbing can be incurred. Phubbing can be seen in different age groups; however, the variables that cause phubbing in these age groups should be discovered and extracted. Since married participants were not included in the present study, a comparative profile examining phubbing effects in different relationships

contexts. For example, the research could investigate the effects of phubbing by different individuals (e.g., enemies/friends) and groups (out-groups/ in-groups) could not be obtained. Comparative research can be conducted on a group of students from lower-level socioeconomic groups who own cell phones and a group of students owning smartphones to reveal the phubbing disturbance on different groups. The qualitative analysis could also have been done on the basis of the information schedule as filled out by the participants. Future research should also consider more naturalistic communication settings to increase external validity, actual behaviours of participants on the receiving end of phubbing (e.g., nonverbal responses, eye tracking responses), and the extent to which social exclusion in the form of phubbing produces different outcomes to other types of social exclusion.

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