Internet Addiction and Impulsivity- A Comparative Study Between Male and Female Hosteliers of Aligarh Muslim University

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Abstract:

The present study is an attempt to assess internet addiction and impulsivity among Male and Female Hosteliers of Aligarh Muslim University. The sample in the study consisted of one hundred university students out of which 53 were males and 47 were females who were selected on the purposive basis from different male and female hostels of Aligarh Muslim University. Young's Internet Addiction Scale (IAT), Barratt Impulsiveness Scale (BIS-11) and Demographic Data sheet were used to collect research data from informants. The obtained data were analysed by frequency method, Pearson correlation method and t-test. The results showed that the male Hosteliers experienced more internet addiction and impulsivity as compared to the female Hosteliers and a significant positive correlation was found between internet addiction and impulsivity among them.

Keywords: *Internet Addiction. Impulsivity, Hosteliers, University Students*

I. INTRODUCTION

Internet Addiction and University Students

The term Addiction is defined as person's or being's feeling of necessity for something (like another person, substance, internet, sex, etc.) in order to sustain her/his existence and continue her/his way of existence as she/he desires (West, 2005). The concept of internet addiction was first coined by Goldberg (1996) and by following DSM IV addiction criteria it was defined as "very strong desire or urge for using the internet" (Aboujaoude, Koran, Gamel, Large, & Serpe 2006; Block, 2008; Korkeila, Kaarlas, Jaaskelainen, Vahlberg, & Taiminen, 2009). It has generally been defined as an inability to control the use of the Internet, causing psychological, social, family, school and work impairment (Davis, 2001; Young & Rogers, 1998). It has become the most widely accepted label for the general behaviours identified with an addiction to the Internet. Other terms used for Internet Addiction are Pathological Internet use, (Davis, 2001; Milani, Di Blasio, & Osualdella, 2009; Morahan-Martin & Schumacher, 2000); Internet addictive behaviour (Li & Chung, 2006); compulsive Internet use (Meerkerk, Van Den Eijnden, Vermulst, & Garretsen, 2009); or Internet dependency (Scherer, 1997). This study uses the term Internet Addiction to encompass all the various terms used in the literature. Davis, Flett, and Besser (2002) discuss that Internet Addiction is more than merely spending too much time online and it has multiple dimensions (i.e., social comfort, loneliness/depression, diminished impulse control and distraction) based on their investigation about association between various cognitive and behavioral variables. Similarly, Caplan (2005) considers Internet Addiction as a, "multidimensional syndrome consisting of cognitive and behavioral symptoms that result in negative social, academic, or professional consequences"

The Internet, as a medium of information and communication, has an important place in social and academic life of university students in many societies (Munoz & Towner, 2009; Kirschner & Karpinski, 2010; Ceyhan, 2008). However, while the Internet has become a major information and communication medium for the students, the number of unhealthy or excessive Internet users among them has also grown remarkably (Zhu & Wu, 2004; Frangos, Ceyhan, 2008; Li, Wang, & Wang, 2009; Frangos, & Sotiropoulos, 2010; Kirschner, & Karpinski, 2010). The excessive Internet use can be associated with Internet Addiction that causes problems in psychological and social lives of individuals as well as difficulties at school and work (Li, Zhang, Li, Zhen & Wang, 2010; Kim, LaRose, & Peng, 2009; Morahan-Martin & Schumacher 2000; Beard & Wolf, 2001). According to the related literature, the Internet activities which are positively associated with the level of

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Internet Addiction are real-time interactive activities (e.g., chat lines, online games) and social networking tools (Morahan-Martin & Schumacher 2000; Li, & Chung, 2006; Charlton & Danforth 2007; Frangos & Sotiropoulos 2010). For instance, a study about online games in Taiwan showed that the quality of interpersonal relationships decreased and the amount of social anxiety increased as the amount of time spent playing online games increased among college-age online players (Lo, Wang & Fang, 2005). Also, Davis, Flett, & Besser, (2002) in their study found that e-mail and web-surfing are less problematic than the interactive applications (e.g., chat, instant messaging). In addition, Ceyhan's study (2008) indicates that Internet Addiction levels of the students, whose primary reason is to communicate with their relatives and to have fun, are significantly higher than those of the students who use it to gather information about a topic. Thus, chat, online games and social networking can be considered as problematic activities, based on the literature. Moreover, it was also found that university students who use the Internet at night are more likely to be unhealthy and problematic Internet users (Kubey, Lavin, & Barrows, 2001; Ceyhan, 2008).

Impulsivity and University Students

Impulsivity is typically defined as a general tendency towards quick, unplanned reactions to internal or external stimuli without a consideration of the consequences of these actions to self or others. It is thought to encompass a broad set of behaviours including rapid decision-making, inattention, lack of perseverance, acting without thinking, lack of planning, sensation seeking, and risk-taking (Moeller, Barratt, Dougherty, Schmitz, & Swann, 2001). Impulsivity is acknowledged as a deficit phenomenon: that is, it appears when "normal" regulation is not functioning properly. Individuals exhibiting this deficit are poor at delaying gratifications, are often overly concerned with novelty seeking, and have difficulty showing emotions in a socially appropriate manner, particularly aggressive or sexual emotions (Barratt, 1985; Patton, Stanford, & Barratt, 1995; Plutchik & van Praag, 1995). Impulsivity has both biological and social-cognitive determinants. It is a defining feature of several neurological disorders: hyperactive syndrome in children, antisocial personality disorder, borderline personality disorder, delinquency, alcohol and substance abuse (Plutchik & van Praag, 1995), and Internet Addiction (Cao, Su, Liu, &Gao,2007; Mazhari, 2012). On the other hand, Internet Addiction has also been found to be associated with attention-deficit hyperactivity disorder, low self-esteem, shyness, depressive symptoms, hostility, interpersonal sensitivity, impairments in relationships, obsessive-compulsive symptoms (OCS), and also with impulsivity (Yen, Ko, Yen, Wu, & Yang, 2007; Kim & Davis, 2009; Mazhari, 2012; Treuer, Fabian, & Furedi, 2001; Jang, Hwang,& Choi, 2008).

Internet Addiction and Impulsivity

The previous research reveals that the students who reported excessive internet use are characterized by complaints of indecisiveness, preoccupation with details, nervousness, irritability, aggressiveness, and impulsivity (Yang, Choe, Baity, Lee, & Cho, 2005). Moreover, Cao, Su, Liu, & Gao, (2007) found that adolescents with Internet Addiction exhibit higher impulsivity than controls and have various comorbid psychiatric disorders, which could be associated with Internet Addiction. Consistent with this, recent literature findings consistently supported the relationship between impulsivity and Internet Addiction. For example, Mazhari (2012) stated that those with Internet Addiction also had higher impulsivity. Moreover, Lee, Choi, Shin, Lee, Jung, & Kwon, (2012) in their study found that those with Internet Addiction Showed increased levels of trait impulsivity than patients with Pathological Gambling and the severity of Internet Addiction was associated with the level of trait impulsivity in patients with Internet Addiction. The authors even suggested that the trait impulsivity could be a marker for vulnerability to Internet Addiction (Lee et al., 2012). Moreover, a Number of studies have also shown that addicts tend to be more impulsive than non addicts (Acton, 2003; Bickel &Marsch, 2001; Verdejo-Garcia, Lawrence, & Clark, 2008).

Different factors are associated with internet addiction that operate differently in different cultures, races and countries, and since there is dearth of such systematic study under Indian set up, it is appropriate to investigate empirically that whether or not impulsivity, gender and residence independently are accountable for differences in internet addiction.

II. OBJECTIVES OF THE STUDY

1. To study internet addiction and impulsivity among male and female Hosteliers of Aligarh Muslim University.
2. To study the relationship between internet addiction and impulsivity among male and female Hosteliers of Aligarh Muslim University.
3. To study the difference in internet addiction among male and female Hosteliers of Aligarh Muslim University.
4. To study the difference in impulsivity among male and female Hosteliers of Aligarh Muslim University.

III. HYPOTHESES OF THE STUDY

On the basis of above mentioned objectives, following hypothesis were formulated.

Ho_1: There is no significant relationship between internet addiction and impulsivity among male and female Hosteliers of Aligarh Muslim University.

Ho_2: There is no significant difference in internet addiction among male and female Hosteliers of Aligarh Muslim University.

Ho_3: There is no significant difference in impulsivity among male and female Hosteliers of Aligarh Muslim University.

IV. METHODOLOGY

Sample

The sample of the present study consisted of 100 university students who were selected on purposive basis from different Male and female hostels of the Aligarh Muslim University. Out of 100 Hosteliers 53 were males and 47 were females.

V. TOOLS USED

Young Internet Addiction Scale (IAT)

Young's questionnaire which contains 20 questions is one the most popular questionnaire in the majority of researches (Ghasemzadeh, Shahraray & Moradi, 2007). The 1998 version of the above mentioned questionnaire was implemented in this study. Yoo & colleagues (2004) found Chronbach Alfa coefficient to be greater than 0.9 as did Whang and colleagues. Dargahi (2006) found the coefficient of stability of this questionnaire to be 0.88 (Ghasemzadeh et al, 2007) .The 20 questions of this questionnaire are scored on a 5-point scale, (ranging from 1 to 5). The marking range for this test is from 0 to 100, where the higher the mark the greater dependence on the internet.

Barratt Impulsiveness Scale (BIS-11)

Impulsivity was assessed with the Barratt Impulsiveness Scale, Version 11 (BIS-11) (Patton et al., 1995). The BIS-11 contains 30 items which assess impulsivity in daily life, including common impulsive and non-impulsive (for reverse scored items) behaviours and preferences. Items are rated on a 4-point scale: Rarely/Never (=1), Occasionally (=2), Often (=3), and Almost Always/Always (=4). The BIS-11 has three subscales: Attentional Impulsiveness (8 items), Motor Impulsiveness (11 items), and Non-Planning Impulsiveness (11 items) (Patton et al., 1995). The three subscales assess Attentional Impulsiveness (i.e., a tendency to rapid shifts in attention and to impatience with complexity), Motor Impulsiveness (i.e., a tendency to rash, immediate actions), and Non- Planning Impulsiveness (i.e., a tendency not to plan ahead and to ignore long-term consequences of one's actions). These three aspects of impulsivity are postulated to independently contribute to impulsive behavior in daily life. Published reliability coefficients for the BIS-11 total score (Cronbach's alpha) range from 0.72 to 0.83.

Procedure for Data Collection

In the present study purposive sampling method was used. The students were approached personally in their hostels. Informed consent was taken from them in order to seek their voluntary participation and only those students were included who agreed to take part in this study.

Statistical Analysis

The information/responses collected from the respondents were subjected to various statistical treatments. The data was analysed by using Statistical Product and Service Solutions (SPSS 16.0). Statistical techniques used for analyzing data were: frequencies, percentages, correlation and t-test. Frequencies and percentages were calculated to describe levels of internet addiction and impulsivity among male and female Hosteliers of Aligarh Muslim University. Pearson's product moment correlation was used to study correlation of internet addiction and impulsivity. t-test was used to study the difference in internet addiction and impulsivity among male and female Hosteliers of Aligarh Muslim University.

Results and Interpretations

Table 1: Showing Frequency and Percentage of University with Respect to Internet Addiction

Level	Range	f	%
Mild	0-49	67	67
Moderate	50-79	30	30
Severe	80-100	3	3
Total		100	100

Table 1 reveals that out of 100 university students, 67% were found mild on internet addiction, where as 30% found moderate and 3% were found severe on internet addiction.

Table 2: Showing Frequency and Percentage of University Students with Respect to Impulsivity

Level	Range	f	%
Over Controlled	Below 51	11	11
Normal	52-71	60	60
High	72 & above	29	29
Total		100	100

Table 1 reveals that out of 100 university students, 11% were found over controlled on impulsivity, where as 60% found normal and 29% were found high on impulsivity.

Table 3: Showing Pearson's Correlation Coefficient(r) Between Internet Addiction and Impulsivity of the Sample Group

Variable	r
Internet Addiction	
	.596* (p=<0.005)
Impulsivity	

*.P≤0.05 Level of significance

Table 3 reveals that there is a significant positive correlation (r=-.596, p=<0.005) between internet addiction and impulsivity among male and female Hosteliers of Aligarh Muslim University, indicating *"more the internet addiction, more is impulsivity and vice-versa."* Thus our null hypothesis Ho1 which states that, T*here is no significant relationship between internet addiction and impulsivity among male and female Hosteliers of Aligarh Muslim University* stands rejected.

Table 4: Showing Comparison of Mean Scores of Internet Addiction and Impulsivity among the University students with Respect to their Gender

Variable	Gender	*n*	*M*	*SD*	*df*	*t-value*
	Male	53	44.71	20.51		
Internet Addiction					98	5.27*
	Female	47	23.40	17.67		
	Male	53	67.51	11.20		
Impulsivity					98	3.33*
	Female	47	64.27	10.92		
Total N=100						

*.P≤0.05 Level of significance

The table 4 shows that there is a significant difference in internet addiction and impulsivity between male and female Hosteliers of Aligarh Muslim University (t = 5.27& t = 3.33). The results show that males have more internet addiction and impulsivity as compared to their counterparts. Thus, our null hypotheses Ho2 which states that, *There is no significant difference in internet addiction among male and female Hosteliers of Aligarh Muslim University* and Ho3 which states that, *There is no significant difference in impulsivity among male and female Hosteliers of Aligarh Muslim University*, stand rejected.

VI. DISCUSSION

The aim of the present study was to study internet addiction and impulsivity and the relation of internet addiction with impulsivity among male and female Hosteliers of Aligarh Muslim University. The comparison among Hosteliers on internet addiction and impulsivity with respect to their gender has also been examined.

The results of the present study revealed that there is a significant positive correlation between internet addiction and impulsivity among male and female Hosteliers of Aligarh Muslim University. The present study revealed that there is a significant positive correlation between internet addiction and impulsivity among Hosteliers of Aligarh Muslim University. There are several studies which are in line with these results. Research studies have shown that internet addiction has a positive correlation with impulsivity. For example, Cao, Su, Liu, and Gao (2007) found that young adults who met the criteria for Internet addiction had significantly higher scores on the Barratt Impulsiveness Scale-11 (BIS-11) than a group of matched controls. In another study, Kim, Namkoong, Ku, and Kim (2008) observed that Internet-addicted high school students tended to score lower on a measure of self-control and had a harder time inhibiting their responses.

Comparing the university students on internet addiction and impulsivity with respect to their gender, significant difference was found among them on both internet addiction and impulsivity. The mean score of male university students was found high on internet addiction as compared to female students. There are several studies which are in consistence with our findings. For example, Akman and Mishra (2010) in their study found that male students are more likely to become addicted to internet than are females and pathological internet users are likely to be males. That might be due to the traditional stereotypes of gender roles holding that women are not as technologically oriented as men and computer has been considered stereotypically masculine (Papastergiou and Solomonidou, 2005); and females may cultivate a fairly negative attitude towards it and their mild disinterest (Durndell & Haag, 2002). Moreover, Rees and Noyes (2007) found that there are significant gender differences that were reported for computer and internet use, internet attitudes, and computer anxiety. Although males and females were generally used this technologies, but females are less frequent user of technology as compared to males and that females have less positive attitude and greater anxiety towards technology.

As compared to female students, male students were found high on impulsivity. The earlier research on impulsivity are in consistency of our findings. For example, Chou & Hsiao (2000) found significant gender differences exist in the way adolescents make their decisions, with boys taking more risks and choosing more options associated with negative outcomes. Similarly, King & Gurian (1999) found that Girls are reportedly less impulsive than boys because the frontal lobe, which is the decision making area of the brain, develops sooner and is more active. This allows girls to sit still, read and write earlier.

VII. LIMITATIONS OF THE STUDY

Research is a continuous process and is never completely perfect due to certain unavoidable circumstances researchers face during the process and especially when we talk about social science research. Every research carries certain flaws that give insights for new researches. Keeping in view the above facts, the present study is also subject to certain limitations which can be discussed as under:

a) The sampling technique used to collect data is purposive sampling which brings bias in the selection of sample and weakens the generalization of results of the study.

b) Another limitation is that minimal demographic data were collected for the sample in this study. Information regarding the family type, residence and income of parents would also have been an important variable to include in the analysis.

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