The Relationship between Internet Addiction and Anxiety among students of University of Sargodha

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Abstract

The objective of this study was to investigate not only the prevalence of internet addiction among the male and female students in the University of Sargodha but also the relationship between internet addiction and anxiety level of students. There were 300 students, from Masters' classes, as sample, selected through cluster sampling. Internet Addiction Scale (I.A.S) and Beck Anxiety Scale were used as assessment tools for data collection. Data was analyzed using mean, standard deviation, T-test and regression analysis. The results showed that prevalence of internet is more in male students than female students. Regression analysis showed a positive and significant relation between internet addiction and anxiety level among University students.

Key Words: Internet addiction, anxiety, students, University of Sargodha.

1. Introduction

The internet is a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols. The origins of the Internet reach back to research commissioned by the United State Government in the 1960s to build robust, fault-tolerant communication via computer networks. While this work together with work in the United Kingdom and France lead to important precursor networks, they were not the Internet. There is no consensus on the exact date when the modern Internet came into being, but sometime in the early to mid-1980s is considered reasonable. It is a network of networks that connect millions of the people around the world. The internet is a widely recognized channel for information exchange, academic research, entertainment, communication and commerce. Now the use of internet and its outcomes has become a controversial issue. At one hand it is a most important and useful need of modern man while at the other hand people are sickly addicted to it. Researches show that the frequent use of internet caused a lot of psychological and mental disorders like anxiety, depression, stress and obsessive compulsive disorder. Our present research is also an investigation of internet addiction and its negative influences on students.

2. Literature Review

Internet is being widely used all around the world. The number of users is increasing day by day. The usage of internet and other social networks has increased by 230 percent in USA since 2007(Diana, 2010).

Globally there is an 82 percent increase in 2009 with an average of 5 and half hours spend on internet and other social networks (Nielsenwire, 2010). This wide usage of internet made people addict to it. Internet addiction is an impulse control disorder which does not involve intoxication (young, 1999). It is a psychological dependence on the internet, regardless of the activity once logged in (kandell, 1998).

It is characterized by excessive and poorly controlled preoccupation or behaviors regarding the computer use and internet access that's lead to disorder (Martha, 2008). The use of interactive screen media is wide spread and for some users leads to pathological symptoms that are phenomenological similar to signs of addictive disorders (Rehbein, 2013).There are different types of internet addiction; web surfer, pornography, chatting and video games characterized by dry eyes, headache, sleep disturbance, neglect of family, problems with school or job etc.(ASAM, 2012). Internet addiction disorder means excessive use of internet with symptoms like anger, tension and anxiety (Goldberg, 1995). It is a significant threat to once health and social well being in that it enforces antisocial behavior (Paul Bansal, 2010). Internet addiction disorders (IAD) is rapidly becoming a prevalent mental health concern around the world. The neurobiological underpinnings of IAD should be studied to unravel the potential heterogeneity (Dong, 2013). It is associated with a wide spread and significant decrease of functional connectivity in cortico-striatal circuits, in the absence of global changes in brain functional network topology (Hong, 2013). Internet addiction also injurious to health causing eye-sight weakness, disturb sleep and other different disorders. Female and male internet dependants rate themselves with significantly higher symptomatic aspects of eating disorders. A relationship between internet dependence and eating disorders appears to exist (Tao, 2009).

Internet addiction leads to different social, psychological and physical disorders. The people addicted to internet face physical side effects like sleep disturbance, back strain, eye strain, etc. Such persons also experiences family, academic and social problems (ASAM, 2012). One of the worst affect of internet addiction is anxiety, stress and depression. Increase in using internet makes some problems that one of them is internet anxiety (Nima, 2012). There exists a positive and significant correlation between the level of anxiety and internet addiction (Nima, 2012). Problematic internet use may serve to worsen to social fears and avoidance to face the social interactions (Lee &Stapinski, 2012).Adolescents with internet addiction showed reduce functional connectivity spanning distributed network(Hong, 2013). There is also found a significant relationship between anxiety and depression in childhood with internet addiction in adolescent. Clinicians should consider anxiety during childhood to prevent internet addiction (Cho & shin, 2013). The study shows that anxiety significantly predicts internet addiction. Another factor is that of gender difference. The prevalence of internet addiction in boy students is more than girl students (Jalalinejad, 2012). Internet addiction also effects social relation and social well beings. It makes person more introvert and away from family and society (Cardak, 2009). Using the internet can lead to lower attention span and make it more difficult to read in the traditional sense (Nicholascarr, 2010). Social networking could be potentially harmful to the people (Evgeny, 2009). Social network are the true downfall for people who use the internet (Andre, 2012). In accordance with development of substance-related disorders, behavioral addictions, such as internet use disorders and pathological gambling are regarded as repetitive excessive behavior which increasingly turns into an automatic action which is difficult to control intentionally (Wolflang, 2013).

Excessive use of internet also effects the academic achievements of students. Students addicted to internet are more involved in it than their studies. So they have poor academic performance (Christos, 2007). There should be a campaign to inform parents, teachers and state officials about the danger of internet (young, 2004). Some researchers advocates totally opposite effects of internet addiction on man's mental and physical health. Online wellbeing interventions can effectively enhance wellbeing and can help to reduce anxiety and depression symptoms (Bolier, 2013). It is argued that "chat" users who are socially fearful may be using the internet as a form of low risk social approach and an opportunity to rehearse social behavior and communication skills, which may help them to improve interaction with offline, face to face, social environment(Campbell, 2006). The present research is also aimed at investigation of relationship between internet addiction and anxiety level among students and also the gender based differences of internet addiction.

3. Objective

To find out the relationship between internet addiction and anxiety level among university students.
Internet addiction: excessive and problematic computer use that interferes with daily life.
Anxiety: An unpleasant state of mind causing nervous behavior

4. Research questions

1. How far students are addicted to internet?
2. What is the relationship between internet addiction and anxiety level among students?
3. Is the rate of internet addiction and its relation with anxiety different for male and female students?

5. Methodology

The population of present study includes students of Masters' programs (2012 -2014) in University of Sargodha. Sample was selected by implying cluster sampling method. For study, 300 students were selected equally from 6 different departments of university of Sargodha.

6. Assessment Tools

6.1)   Internet Addiction Scale

Internet addiction scale which contains 20 questions, one of most popular questionnaire for internet addiction, was used to investigate internet addiction among male, female students of university. The 1998 version of the abovementioned questionnaire was used in this study. Kronbach's Alfa coefficient was found to be greater than 0.9 by Yoo and colleagues similar to the findings of Whang and colleagues. In Iran Qasemzadeh calculated the value of this scale to be 0.883. Cronbach's computed of this questionnaire was 0.889 by Frangos . This questionnaire is scored on a 5-point scale ranging from 1 to 5. The marking for this questionnaire ranges from 20-100, the higher the marks are the greater dependence on the internet is. It is evaluated as:

20 to 49 --------------------------normal internet users
50 to 69--addicted internet users
70 to 100--------- ---severely addicted internet users

6.2)   Beck Anxiety Inventory

The Beck Anxiety Inventory (BAI) is a questionnaire of twenty-one items implied to measure anxiety among participants. A 1999 review on anxiety scales indicated that the BAI was the third most used research instrument of anxiety, other two are; STAI and the Fear Survey Schedule. Each question has a set of four possible answers. These are; not at all (0), mildly (1), moderately (2), severely (3). The BAI has a maximum score of 63.

0 to 7----------------------low anxiety
8 to 15------------------------------mild anxiety
16 to 25--moderate anxiety
26 to 63---.high anxiety

Data was analyzed by statistic tests such as mean, standard deviation, *t* test, co-relation and regression analysis.

7.   Research Findings

In this study following results were found:

Table 1: Frequency and percentage of students (n=300)

Gender	*F*	*%*
Male	150	50
Female	150	50

Table 1 shows frequency and percentage of students with respect to gender. Female students *(f=150, 50%)* are equal in number as compare to male students *(f=150, 50%)*

Table 2: **Frequency of normal, addicted and severely addicted users (n = 300)**

Users	F	%
Normal	190	63.33
Addicted	102	34
Severely addicted	8	2.7

The results show that 34 % (102) of student are having problematic internet addiction, and are endangered to become severely addicted to net ultimately. In present sample 2.7 (8) are indicted to be having sever addiction to internet.

Table3: Mean, Standard Deviation and t values for Male and Female Students on internet addiction and anxiety (n=300)

Variables	Male(n=150)		Female(n=150)		95%CI				
	M	SD	M	SD	t(298)	P	LL	UL	Chon's d
Internet addiction	48.42	11.75	38.73	11.71	7.16	.000	7.03	12.36	0.17
anxiety	38.27	8.54	36.71	10.46	1.41	.158	-.610	3.73	0.52

Table 2 shows mean standard deviation and *t*-values for male and female students on internet addiction and anxiety. Results indicate significant mean on internet addiction *[t (298) =7.16, p< .001]*. Finding also indicates that students anxiety has non-significant mean value *[t (298) =1.41, p>.05]*. The mean value of internet addiction in the male students (*M*=48.42, p<.001) is greater than that of female students (*M=38.73, p<.001*). It also indicates that mean value of anxiety in male students (*M=38.27, p>.05)* is greater than female students *(M=36.71, p>.05).* Non significant result of anxiety shows that gender differences of having anxiety are not too much and so non significant.

Table 4: Descriptive statistic, Alpha reliability and Pearson correlation among internet addiction and anxiety (n=300).

Variable	M	SD	A	γ
Internet addiction	48.42	11.74	.857	.308*
Anxiety	38.73	11.71	.853	-

*Note. *p<.001*
Table 3 shows descriptive statistics, Alpha reliability coefficients and Pearson correlation among internet addiction and anxiety. Result indicates internet addiction has a mild positive correlation with anxiety *(γ= .308, p<.001).*

Table 5: Linear Regression analysis showing the effect of internet addiction on anxiety (n=300)

Variables	B	SEB	B
Internet addiction	.233	.092	.308
R^2	.095		
F	1.04*		

*p<.001

Linear Regression analysis is computed with internet addiction as predictor variable and anxiety as outcome variable. The R^2 value *.095* indicates that *9.5%* variance in the dependent variable can be accounted for, by the predictors *{F (2, 297) = 1.04 p <.001}*. The findings are significant.

Conclusion

The finding of this study showed that there is a significant difference in mean value of internet addiction *{t(2, 298) =7.16, p<.01}* in male and female students of University. It shows that students are addicted to internet. Findings showed that 34 % of students are having problematic internet addiction. These students are in great danger of becoming adverse and sever internet user and which will, then definitely, affect them negatively both physically and mentally. The presence of 2.7 % severely addicted internet user, obviously, pointed out the continuous increasing number of the students reaching at the worst point of internet addiction; sever addiction. Results of the present study also indicate that there is also a significant mean value of anxiety *{t (2,298) = 1.41, p<.01}.* Findings show that students of University of Sargodha are having significant internet addiction as well as anxiety.

Second inquiry of our research was to investigate the relationship between internet and anxiety among male and female students. The study showed that there is positive but mild   (γ= .308, p<.001) co-relation between internet addiction and anxiety. This result shows that excessive use of internet makes students addicted to it and consequently causes anxiety and stress among users. The more one is addicted to it the more one is psychologically depressed. Our present research concurred with the previous researches such as Nima 2012, Lee & Stapinski 2012 and Hong 2013, Jalalinejad 2012, Cho 2013, Kim 2013, etc. in this aspect of positive correlation between internet addiction and anxiety.

And it is in contrast with the previous researches, advocating internet as supporting tool in enhancing social contact and confidence to face things, such as that of Bolier 2013 and Campbell 2006 etc.

Another important objective of this study was gender differences regarding internet addiction and anxiety level. The prevalence of internet addiction in male students (*M=48.42, p< .001*) is greater than female students (*M*=38.73, p< .001). It indicates that male students are more addicted to internet than female students and it may be because of comparatively easy excess to internet of male students than female students. The results are significant showing difference of internet addiction regarding gender. This result is also accord with previous researches on internet addiction, showing higher addiction rate in male students than female students, such as that of (Jalalinejad 2012). In the same way the anxiety level in male students (M= 38.27, p > .05) is greater than female students (M= 36.71, p> .05). It means that male students are suffering from higher mental and psychological depression, stress, and anxiety and this is because they are more addicted to internet as compare to female students but difference is not large and so results are not significant.

So it is indicated in the present research that students of Masters Program in university are using internet more than their need and so are addicted to it. Consequently they are having higher anxiety level. Different dimensions of internet such as facebook, online chatting, games and entertainment sites are so captivating for students that they make them addicted to it and finally psychological depressed.

As the limitations of this study is concerned, there were only two variables counted in this research. Excessive use of internet not only causes anxiety but it also has many other vices. Like mental disorders, it is negatively affecting physical health, such as low eye sight, disturbed indigestion etc. Another bad impact of internet addiction is low academic achievements. Social inactiveness is also one of the result of internet addiction .So it is recommended that future studies may involve more variable such as users' social and economic circumstances, internet availability, causes of internet addiction etc. Furthermore, parents, teachers and other authorities should have a check and balance over internet use by students, so that they may be saved from the destructions caused by internet addiction. Moreover, seminars and media can play an important role in making people aware of causes and effects of internet addiction and anxiety.

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