

Internet Addiction in Adolescents

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Abstract

The internet is a global system of interconnected computer networks that has become an integral part of modern life. It is increasingly used by all people as one of the most important devices for access of information in the world. The excessive use of internet has grown as a psychological problem. Adolescence is the age which is most vulnerable to be effected by such psychological problem. Present study aimed to assess the level of internet use among teen age students. 200 students (100 M and 100 F) were taken from various schools of Varanasi city. Age range of the sample was from 15 to 19 years. Pathological Internet Use Scale by Asthana and Verma (2019) was used for data collection. Results revealed that internet usage by the sample was of normal level. Gender difference was not significant for five out of six dimensions as well as for overall scores. The only significant difference among boys and girls was observed on 'neglect of social life' dimension of the scale where boys scored higher in comparison to girls.

Introduction

The internet is a global system of interconnected computer networks that has become an integral part of modern life. It is increasingly used by all people as one of the most important devices for access of information in the world. It has become an increasingly popular notion that similar to other subjective rewarding activities,(e.g. substance use, shopping, gambling, running, using computer, working), the use of internet can also become the object of addiction.

The term "Internet addiction" was proposed by Dr. Ivan Goldberg in 1996 for pathological compulsive Internet use. The many names given to this phenomenon recognize the various ways in which it has been regarded - Internet addiction (Goldberg 1996),Internet dependency (Schere, 1997), Compulsive computer use (Black, et al 1999),Pathological Internet use (Davis 2001), Internet addiction disorder and Problematic Internet use (Caplan, 2003).Over the last couple of years, Internet addiction has been become a global concern to the public and can be classified as a health issue. Internet addiction is characterized by extreme overuse of the Internet, resulting in negative consequences in one's work, personal life, emotional health, or physical health (Byne et al,2009; Young, 2009,Kuss and Griffiths 2015). It is a problem that clinicians and researchers in several countries recognize, even eliciting government intervention in some cases (Zhang et

al, 2008). This phenomenon received enough attention that the Diagnostic and Statistical Manual-V (DSM-V) Development Committee recently considered (but ultimately decided to include in section 3 under conditions for further study) a variation of Internet addiction for inclusion in the DSM-V, ultimately deciding that more research was needed before formal inclusion was warranted (American Psychiatric Association).

Definition of Internet Addiction

The appropriate definition of Internet addiction has been debated. Some investigators have linked Internet addiction to addictive disorders, grouping it alongside alcohol and drug use disorders (Griffiths 1999). Others have linked Internet addiction to Obsessive-Compulsive disorder (Sussman 2005), or to the impulse control disorders (Shapira, et al 2000, Young 1998). Internet addiction means the over use of Internet to such extent that our everyday life collapses. At the end it leads to complete breakdown of our personal and social relationship, work and sleep routine as well as our mood and thinking capability. In the psychiatric literature, Black, et al (1999) described a series of 'compulsive Computer users', the only requirement of which was that subjects acknowledged "Compulsive Computer use that had contributed to personal distress or social, occupational, financial or legal consequences". Further refined the definition of 'Problematic Internet use' by enumerating operational criteria that emphasize cognitive and behavioral aspects of the disorder, as well as impairment characterized by subjective distress and interference in social or occupational functioning, mania and hypomania should be ruled out as causes of the disorder.

Beard (2005) simply takes a holistic view of the phenomenon, stating that it occurs when "an individual's psychological state, which includes both mental and emotional states, as well as their scholastic, occupational and social interactions, is impaired by the overuse of the medium". Examples of processes that people have compulsively used the Internet for include shopping, pornography, surfing media feeds, video-game-playing, social networking, and gambling. The Internet is simply a medium, though the role of the medium itself should not be underestimated. The Internet has many beneficial applications, but also provides unhindered, instantaneous access to countless potentially addictive processes.

Internet addiction is described as an impulse control disorder, which does not involve use of an intoxicating drug and is very similar to pathological gambling. Some Internet users may develop an emotional attachment to on-line friends and activities they create on their computer screens. Internet users may enjoy aspects of the Internet that allow them to meet, socialize, and exchange ideas through the use of chat rooms, social networking websites, or "virtual communities." Other Internet users spend endless hours researching topics of interest Online or "blogging".

Similar to other addictions, those suffering from Internet addiction use the virtual fantasy world to connect with real people through the Internet, as a substitution for real-life human connection, which they are unable to achieve normally.

Classification

According to Young et al (2000) Internet addiction is a broad term covering a wide variety of behaviours and impulse control problems. The five subtypes of Internet addiction are as follows:

1- Cybersex addiction- This occurs in individuals who are typically engaged in viewing, downloading and trading online pornography or are involved in adult fantasy role-play chat rooms.

2- Cyber- relationship addiction- Addiction to social networking, chat rooms, and messaging to the point where virtual, online friends become more important than real-life relationship with family and friends.

3- Net compulsions- This subtypes includes a broad category of behaviours, including online gambling, shopping or stock trading.

4- Information overload- The World Wide Web has created a new kind of compulsive behaviour that involves excessive web surfing and database searches. These individuals spend a disproportionate amount of time searching for, collecting and organizing information.

5- Computer addiction- Most computers come equipped with pre-programmed games and people become addicted to playing them at the cost of work performance or family obligations.

Young(2000)suggests that people typically become addicted to a particular application that acts as a trigger for excessive Internet use.

Young (1998) was among the first to use the term “Internet addiction.” She and other researchers adapted the diagnostic criteria of pathological gambling or impulse control disorders to diagnose Internet addiction (Griffiths, 2000; Young, 1998). Criteria according to these definitions include preoccupation with the Internet, increasing amounts of time on the Internet, unsuccessful attempts to quit, irritability when trying to cut back, staying online longer than intended, jeopardizing significant relationships to stay online, lying to cover up Internet use, and using the Internet as an escape from problems (Weinstein, 2010).

Firm diagnostic criteria have not yet been fully agreed upon by researchers, but Tao et al (2010) have suggested four components as essential to the diagnosis:

- (1) Excessive Internet use (especially when characterized by loss of time or neglecting
- (2) Withdrawal symptoms such as anger or depression when the Internet is inaccessible;
- (3) Tolerance, exemplified by the need for increased use of the Internet to relieve negative emotional symptoms; and
- (4) Negative consequences, such as arguments with friends or family, lying, poor school or work performance, social isolation, and fatigue.

Impact of Internet on India

According to Internet and Mobile Association of India (2013) there has been an explosive growth in the use of Internet not only in India, but also worldwide in the last decade. The

population of India was around 1.2 billion as of census 2012, of which the number of Internet users (both urban and rural) was around 205 million. In 2013, it was estimated to increase to 243 million by June 2014, and India was estimated to be the second-leading country after China which currently has the highest Internet user base of 300 million. Chandra, etal (2012) reported that the number of Internet users in India has grown five-fold since 2005. Mobile Internet usage is growing at the rate of nearly 85% per annum, with nearly 75% of non-voice usage being devoted to entertainment, where video and music streaming are major growth activities. According to a report there are 200 million face book users in India, other forms of internet users is excluded (Dainik Jagran, Apr. 10, 2018).

The understanding that the Internet use can be a disorder is still in its initial stages in India. There are limited numbers of studies estimating how common the issue of Internet addiction is in India(Goswami and Singh,2016). The present study aims to assess internet addiction among teenage students.

Sample:

Sample consisted of 200 adolescents (100 M and 100 F) studying in class 9th to 12th from various schools of Varanasi. The age range of the sample was from 15 to 19 years.

Tool:

Pathological Internet Use Scale by Asthana and Verma (2019) was used for collecting data in the present study. This scale consists of 30 items covering six dimensions namely salience, excessive use, neglect work, anticipation, lack of control, and neglect social life. Each item has six alternatives to respond to: Never, Seldom, Occasionally, Often, Mostly and Always. Scoring is done as 0,1,2,3,4,and 5 respectively for the above alternatives. Minimum and maximum scores on the scale are zero and 150. Higher scores on the scale are indicative of pathological internet use or higher internet addiction.

Results:

The obtained data were analyzed for assessment of internet usage level among students and also for significance of mean difference between boys and girls regarding use of internet. Findings are presented in following tables and graph. Table 1 represents the frequency of students under various levels of internet usage.

Table 1:Frequency of students under various levels of internet usage

Students	Level of Internet Usage				Total
	Normal level of internet usage	Mild level of internet addiction	Moderate level of internet addiction	Severe dependence on internet	
Boys	76	16	8	Nil	100
Girls	72	18	10	Nil	100
Total	148	34	18	Nil	200

Table 1 shows that in the sample of teen ager students taken in the present study, no one had severe dependence on internet. However, eighteen adolescents, eight boys and ten girls were found at moderate level of internet addiction and thirty four (sixteen boys and eighteen girls) were found at mild level of internet addiction. Most of the participants had normal level of internet usage.

Table 2: Gender difference in Internet Usage

Dimensions	Boys (N=100)		Girls (N=100)		t
	Mean	S.D.	Mean	S.D.	
Salience	11.23	7.18	8.83	6.73	1.85
Excessive use	8.84	5.81	5.94	7.35	1.85
Neglect work	4.22	3.40	2.94	3.26	1.68
Anticipation	4.61	3.90	3.21	3.62	1.63
Lack of control	4.19	2.59	3.75	3.45	1.13
Neglect social life	4.71	4.12	2.96	3.22	2.11*
Overall	37.81	22.85	27.19	24.85	1.91

*significant at .05 level

Table 2 reveals that there is no significant difference in means of various dimension as well as overall scores of pathological internet use scale except the dimension of neglect social life. On this dimension boys scored higher than girls, showing that boys more neglect their social life due to internet in comparison to girls. The same is presented through figure 1 and 2.

Figure 1: Gender difference in various dimensions of Internet Usage

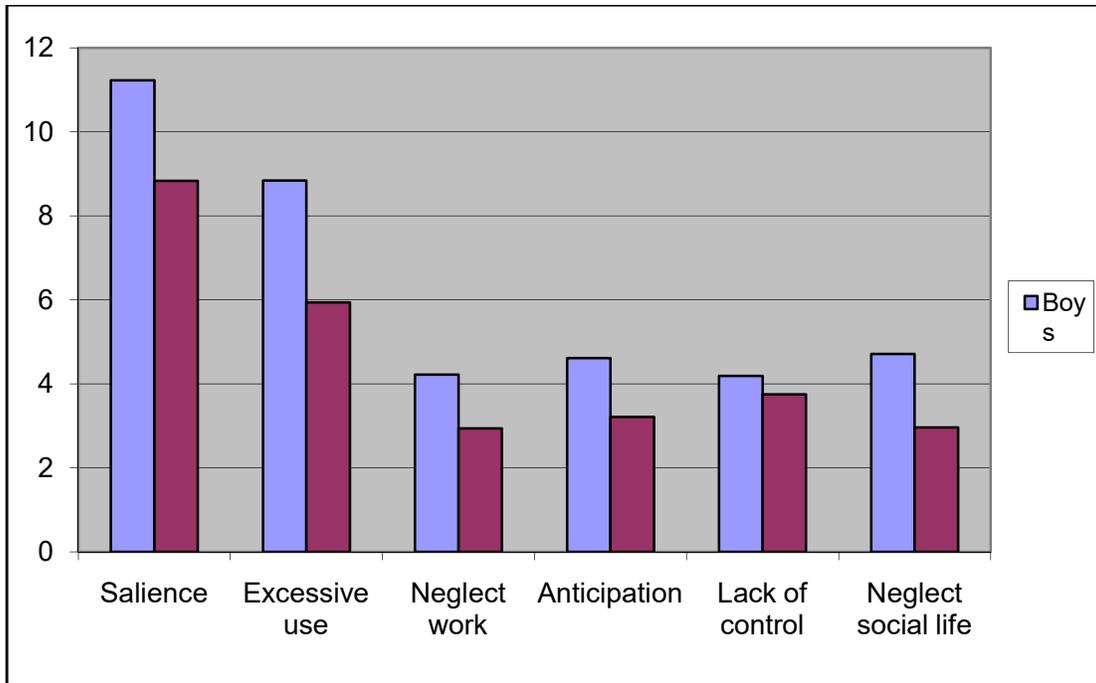
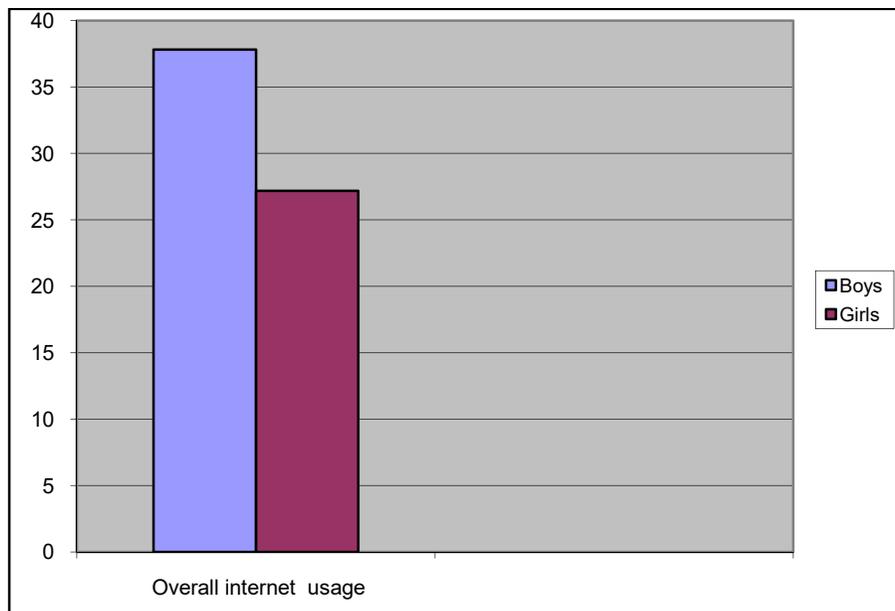


Figure 2: Gender difference in overall Internet Usage



Discussion: The excessive use of internet has grown as a psychological problem. A boon of technology has become a curse for being wrongly handled. Free internet facilities provided by several mobile companies, has promoted excessive use of internet leading towards addiction. We surprise whether services are free or we are free to spend more and more time on internet and tend to become addicted.

There are several studies conducted in India and abroad on internet addiction in adolescents. In Poland, Karacic and Oreskovic; and Rebisz and Sikora (2016) found 11% adolescents highly addicted to internet. They reported that 15-16 years, especially males were prone to the development of internet addiction, whereas aged 11-12 girls were least users of internet. In Japan, Kawabe and Oka (2016) reported 2% (2.1% M, 1.9% F) junior high school students were addicted and 21.7% (19.8% M, 23.6%F) were possibly addicted. In China the situation is most alarming. 24 million adolescents were determined as having internet addiction. Yaojun Shao et al (2018) in a meta- analysis of 26 researches published during 2006 and 2017 found 11% internet addiction in China. In Holland, Kuss and Mheen (2013) found 3.1% Dutch adolescents addicted to internet. In Turkey Sasmaz et al (2014) found 15.1% (20.4% boys and 9.3% girls) addicted to internet. Moreno et al (2013) reviewed 18 researches published up to 2010 to assess prevalence of internet addiction in adolescents and college students in United States. Eight studies reported prevalence of internet addiction from 0% to 26.3% while other ten studies did not report prevalence of internet addiction. In India, Nalwa and Anand (2004) considering mean \pm $\frac{1}{2}$ S.D. as criteria for inclusion in extreme group reported 18% school students dependent on internet, and Goel and Subramanyam (2013) reported 0.7% adolescents addicted to internet but in a recent study Kayastha, Gurung and Chawal (2018) had found only 0.5% adolescents addicted. The study was conducted on a sample of 200 students aged 12 to 16 years from Mangalore. Majority of students (70.5%) were normal users, 23% had mild addiction, 6% had moderate addiction and 0.5% had severe dependency on internet. Similar findings have been obtained by Rajeshwari et al (2017) on a sample of 200 adolescents from Bangalore. They found 49% students mild addicted, 28.5% moderately addicted and 0.5% severely addicted to internet. The findings of present study are in line with Rajeshwari et al (2017) and Kayastha et al (2018). Here internet addiction was found 0%. Majority of adolescent students (76%) were normal users, 17% were mildly addicted, and 9% were moderately addicted or prone to be addicted.

We can take a sigh of relief that Varanasi is relatively safe from this addiction. But it is time to raise our eyebrows and to be prepared for combating this growing problem of internet addiction. Adolescents increasingly use internet for communication, education, entertainment and other purposes in varying degrees. Given their vulnerable age, they may be prone to internet addiction. Also they have less ability to control their enthusiasm for internet activities which increases their vulnerability to internet addiction. It is crucial for us to investigate prevalence of internet addiction among students in order to provide epidemiological information to better understand and tackle the problem. The present study has been conducted on a sample of only 200 students however findings on a larger sample will help to generalize the outcomes.

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