EDITORIAL

Internet Addiction or Problematic Internet Use: Current Issues and Challenges in Conceptualization, Measurement and Treatment

Saad Naeem Zafar

There are now over three billion Internet users in the world.[1] This makes it about 40% of the world population. In 1995, only 1% of the world population was using the Internet. The first billion mark of the Internet users was achieved in 2005, the second billion in 2010 and the third billion was reached in 2014. Pakistan is no exception. There are currently over thirty four million Internet users in the country.[2] The number of smart phones that further facilitates Internet connectivity is expected to cross 40 million by the end of the current year.[3] This increased internet connectivity has changed many an aspect of personal, professional and social lives of Internet users. Consequently, the amount of time people spent online has been growing steadily. According to a recent study young people in the UK have started spending more time online than watching TV for the first time.[4]

The early researchers and adaptors of the Internet technology generally viewed the online social engagement, entertainment and discussion in a positive light because they believed that virtual communities provide emotional support and a platform for discussion and sharing information with relative ease and with less inhibition. However, the pervasive nature of Internet in daily lives has also led to excessive or uncontrollable use in extreme cases. The seminal studies by Goldberg [5] and Young [6] in 1996 are generally considered as the first efforts in developing the notion and conducting empirical research on the topic of Internet Addiction (IA) or Internet Addiction Disorder (IAD).

Over the years the scope of research on IA has been considerably widened but without any universal definition, assessment criteria or treatment methods. A comprehensive review of IA research in 2014 indicated association of a number of risk factors with IA.[7] These risk factors include sociodemographic, Internet use, psychological factors and co-morbid symptoms. The sociodemographic risk factors may comprise male gender, younger age and higher family income. The Internet use risk factors may include time spent online and using social or gaming applications. The psychological factors may be impulsivity, neuroticism and loneliness. Finally, the co-morbid symptoms may consist of depression, anxiety and psychopathology in general.

At the conceptual level the difference is whether the criterion is derived from pathological gambling, substance-related addictions or the number of problems experienced. Additionally, there seems to be a disagreement about the cut-off points used within each criterion. As far as the psychometric measures are concerned, Young's Internet Addiction Test [8] seems to be the most popular instrument used in the empirical studies but different cut-off points are used across studies making the comparison between studies difficult.[9] Other measures often cited include Computer Game Addiction Scale (AICA-S) [10], Compulsive Internet Use Scale (CIUS) [11] and Chen's Internet Addiction Scale.[12]

There is also now a focus on differential diagnosis and/or co-morbidity of Internet addiction. A more recent review in 2016[9] indicates that presence of co-morbidities in internet addiction in clinical context appears more prevalent than initially thought. Individuals seeking help often have symptoms of mood and anxiety, impulse control and addictive disorders. This suggests that IA treatment can be more effective when a holistic approach is taken that combines evidence-based treatments of any co-morbidities that may be present in an individual. Accordingly, the IA treatment approaches have been either based on psychopharmacotherapy, psychological therapy and combined therapy approaches.

Psychopharmacotherapy has shown an overall positive effect on IA symptoms and Internet use times. In a few studies antidepressant medication has been reported to be successful, indicating that mood disorders may be more prevalent with Internet addiction.[9] As regards to the psychological therapy, a combination of individual and group therapy approaches have also been used. Overall group therapy treatments have shown better results over individual therapy approach for both reduction in

Correspondence:
Prof. Saad Naeem Zafar
Dean Faculty of Computing
Riphah International University, Islamabad
E-mail: saad.zafar@riphah.edu.pk

Received: Jun 01, 2016; Accepted: Jun 02, 2016

time spent online and significantly higher self-esteem. Moreover, in case of adolescents, the most important factor to reduce internet addiction seems to be parent-child relationship.[13] Some studies have reported combined therapy treatments that have resulted in positive results in both post-treatment and follow-up measures. The study that stands out in this category of therapy is the significantly positive results in use of electro-acupuncture in combination with a psychological intervention[14] suggesting that this novel approach may be investigated further to establish its efficacy and effectiveness.

The Internet connectivity is relatively cheap and accessible in urban and semi-urban areas of Pakistan. With advent of 3G and 4G mobile networks available through Pakistan, the amount of time people spend online is expected to grow significantly. Physicians in Pakistan should explore the possible signs of Internet addiction or problematic internet use among the vulnerable segments of the society. The co-morbidity of Internet addiction with mood and anxiety disorders may also be explored when deciding a treatment approach. The role of family structures in Pakistan as support group may also be useful in group therapy sessions. It may be kept in mind that presence of co-morbidities complicates the treatment as it may be important to establish whether Internet addiction is the primary or secondary disorder.

As suggest in [9], research scholars in Pakistan are also recommended to validate the measures already in use and collaborate with international research community to develop a universally agreed-upon criterion for assessment and treatment. This will also pave the way for public policy debate and development of health care facilities in the country that provide early diagnosis and treatment to the affected individuals. The study reported in this journal on Internet addiction and its impact on academic performance is a head start for further research on the topic.

REFERENCES

1. "Internet Users in the World," Internet Live Stats, 2016. [Online]. Available: http://www.internetlivestats.com/internet-users/. [Accessed: 06-Jun-2016].
2. "Pakistan Internet Users," Live Internet Stats, 2016. [Online]. Available: http://www.internetlivestats.com/internet-users/pakistan/. [Accessed: 06-Jun-2016].
3. "Telecom sector: Pakistan to have 40 million smartphones by end of 2016," The Express Tribune, 2015. [Online]. Available: http://tribune.com.pk/story/953333/telecom-sectorpakistan-to-have-40-million-smartphones-by-end-of-2016/. [Accessed: 06-Jun-2016].
4. "Childwise Monitor Report 2015".
5. Goldberg I. "Internet addiction disorder," Retrieved November. 1996.
6. Young K. "Internet addiction: The emergence of a new clinical disorder," Cyber Psychology Behav. 1998.
7. Griffiths MD, Kuss DJ, Billieux J, Pontes HM. "The evolution of Internet addiction: A global perspective.," Addict. Behav. 2016; 53: 193-5.
8. Young KS, Caught in the Net. New York: Wiley, 1998.
9. Kuss DJ, Lopez-Fernandez O. "Internet addiction and problematic Internet use: A systematic review of clinical research.," World J. psychiatry. 2016; 6: 143-76.
10. Wölfling K, Müller K, Beutel M. "Diagnostic measures: Scale for the Assessment of Internet and Computer game Addiction (AICA-S)," Prev. diagnostics, Ther. Comput. game Addict. 2010; 26: 212-5.
11. Meerkerk G, Eijnden Van Den R. "The compulsive internet use scale (CIUS): some psychometric properties," Cyber Psychology 2009.
12. SH C, LC W, YJ S, HM W, PF Y. "Development of Chinese Internet Addiction Scale and its psychometric study," Chin J Psychol. 2003; 45: 279-94.
13. Yang X, Zhu L, Chen Q, Song P, Wang Z. "Parent marital conflict and Internet addiction among Chinese college students: The mediating role of father-child, motherchild, and peer attachment," Comput. Human Behav. 2016; 59: 221-9.
14. Zhu TM, Jin RJ, Zhong XM, Chen J, Li H. "[Effects of electroacupuncture combined with psychologic interference on anxiety state and serum NE content in the patient of internet addiction disorder].," Zhongguo zhen jiu= Chinese Acupunct. moxibustion. 2008; 28: 561-4.