



# Internet addiction as a comorbid condition among users with mild intellectual disability

## Abstract

**Background:** Internet use provides the user with intellectual disability an opportunity for socialisation, entertainment, and knowledge. User with mild intellectual disability use internet more frequently during free time as well as for entertainment. The present case study is on the use of internet among users with mild intellectual disability. The users approached for management of addictive behaviour. **Material and methods:** Clinical interview, the Internet Addiction Test, the Problematic Online Gaming Questionnaire, and the Pornography Addiction Screening Tool were administered in individual setting. **Results:** The users found to have addictive use of internet, pornography, and game. It was associated with disturbance in their life style. **Conclusions:** It has implications for screening the addictive use of technology and their management among users with mild intellectual disability.

**Keywords:** Socialisation. Knowledge. Addictive Behaviour. Life Style. Technology.

**Manoj Kumar Sharma<sup>1</sup>, BK Leeshma<sup>2</sup>, K Prasad<sup>3</sup>, Mh Ameer Hamza<sup>4</sup>, Ashwini Tadpatrikar<sup>5</sup>, Pranjali Chakraborty Thakur<sup>6</sup>, Priya Singh<sup>7</sup>**

<sup>1</sup>Department of Clinical Psychology, NIMHANS, Bangalore, Karnataka, India,

<sup>2</sup>Department of Clinical Psychology, NIMHANS, Bangalore, Karnataka, India,

<sup>3</sup>Department of Psychiatric Social work, Central Institute of Psychiatry, Kanke, Jharkhand, India, <sup>4</sup>Department of Psychiatric Social Work, NIMHANS, Bangalore, Karnataka, India, <sup>5</sup>SHUT Clinic, Department of Clinical Psychology, NIMHANS, Bangalore, Karnataka, India, <sup>6</sup>SHUT Clinic, Department of Clinical Psychology, NIMHANS, Bangalore, Karnataka, India, <sup>7</sup>SHUT Clinic, Department of Clinical Psychology, NIMHANS, Bangalore, Karnataka, India

**Correspondence:** Dr. Manoj Kr Sharma, Professor, SHUT clinic (Service for Healthy Use of Technology), Department of Clinical Psychology, NIMHANS, Bangalore-560029, Karnataka, India. shutclinic@gmail.com

**Received:** 5 February 2018

**Revised:** 20 January 2020

**Accepted:** 30 January 2020

**Epub:** 10 February 2020

**DOI:** 10.5958/2394-2061.2020.00011.7

## INTRODUCTION

Information and Communication Technologies (ICT) are enhancing the scope of people with disabilities to use available opportunities. It helps them to overcome the barriers in carrying out their activities. Young people (N=five) with mild to moderate intellectual disabilities were provided instrumental and psychological support in three months e-mentoring online programme. It contributed to the development of their interpersonal and social skills.[1] It enhanced their self-image and self-esteem. Internet use also improved their frequency and quality of social interaction. It also helped them to overcome the existing social barriers in the physical and social environment. Internet also provides the possibilities to decide which websites to visit and with whom to communicate. Internet was mainly used for social and romantic purposes.[2] It gives them safer social

networking environments for interaction.[3] They usually preferred to have access to social networking sites that allowed them for interactions with others.[4] It also contributes towards opening the scope for self-determination, learning, entertainment, self-expression, and socialisation.[1]

It has been seen that socially inactive people or those who are dissatisfied with their offline interaction tend to use internet more frequently.[1] Technology use is known to affect the psychosocial health (academic performance, social engagement, behavioural regulation, and health) of youth.[5] The cases with autism spectrum disorder also got the excessive use of screen-based activities.[6] Though professionals screen for other psychological problems among treatment-seeker with intellectual disability, they usually do not screen for use or excessive use of gadgets. Treatment-seekers may be manifesting the excessive use of technology to manage their

boredom/loneliness or free time. It led to dysfunctions in their lifestyle. The present case study highlights the need to psycho-educate this group to develop offline leisure activities. It will also sensitise the professionals for screening and psycho-educating the professionals in promotion of healthy use of technology.

The cases approached the SHUT clinic (Service for Healthy Use of Technology) for the issues related to usage of technology. It is India's first clinic to promote healthy use of technology. It is being managed by consultants from the Department of Clinical Psychology, National Institute of Mental Health & Neurosciences (NIMHANS), Bengaluru, Karnataka, India. The service was started at an outreach community centre (NIMHANS Centre of Well Being). At the centre, the treatment-seeker can take prior appointment for sessions. The SHUT clinic uses cognitive behavioural therapy, family interventions, group sessions, life style intervention, and yoga-based techniques for management of technology addiction. It also works on promotion of healthy use of technology.

The cases that require intensive psychological interventions or pharmacological treatment are referred to inpatient department of NIMHANS. Majority of treatment-seekers at NIMHANS are young adults. Generally, caregivers are the ones who initiate treatment for excessive user. At SHUT clinic, treatment is being sought for issues related to excessive use of online gaming, social media, music, watching daily soaps, you tube, and pornography. The prominent need to seek treatment is due to significant disturbances in the life style. The main dysfunctions are seen in the form of decreased or disturbed sleep, minimal social interaction, decline in academics, lack of communication with others, and psychological problems secondary to non-use of internet/gadgets. The SHUT clinic also receives e-mails and telephone enquiries from other parts of India. The clinic also brought out information material in the form of leaflets/posters and comics for raising awareness about technology addiction. The clinic is working on evolving assessment scales for identifying excessive use of internet, mobile phones and for assessing their readiness to change. The cases with mild intellectual disability approached for management of internet use.

## THE CASES

### Case 1

A 23-year-old male with diagnosis of mild intellectual disability (intelligence quotient [IQ]=64 assessed using Binet Kamat test[7]) presented with 11 years history of inappropriate sexual behaviour in context of family environment especially in the form of touching their body parts, excessive online gaming, and watching pornography for last six years. He got below average performance in academics and used to take less interest in outdoor activities. During early adolescence period, he started showing inappropriate sexual behaviour with the family members (in the form of touching the body parts). He persisted with the behaviours despite being punished for the same. He got the access to mobile phone and desktop computer at the age of 16 years. Subsequently, his usage became excessive especially for watching pornography. It led to frequent indulgence in masturbation. He used to access it on tablet and

desktop. He also developed the habit of dialing unfamiliar phone numbers and chatting/indulged in sexting behaviours with unknown people. He also developed the preference for playing game especially violent and racing games. He started using it on an average 14 hours a day. It led to dysfunctions in quality of sleep/initiation of sleep, having meals as well as his self-care. The psychological withdrawals were present in the form of irritability whenever advised to stop. There was no history of high-risk sexual behaviours and legal problems.

The user had the history of delayed speech and motor developmental milestones, and seizure. Compliance to antiepileptic medication was not adequate. He had the last seizure at the age of 22 years. Due to the presence of academic difficulties, he changed school seven to eight times. The family had high academic expectation from him. He attributed the excessive use of pornography/game to the presence of expressed emotions in the family due to disturbed life style and academic disturbance. The indulgence in these online activities used to relax him. Family arranged the marriage at the age of 21 years to address his pornography/gaming activity. Marital issues were present secondary to his excessive sexual urge.

The Internet Addiction Test (IAT)[8] revealed presence of severe use of internet (score of 82). The Problematic Online Gaming Questionnaire (POGQ)[9] revealed high score in the domains of preoccupation, overuse, interpersonal conflicts, and social isolation. The Pornography Addiction Screening Tool (PAST)[10] revealed score of 85 indicating addictive use of pornography. Clinical interview revealed the presence of craving, loss of control, compulsion to use, using it as coping strategies, and presence of life style affective disturbance indicated the presence of excessive use of technology.

Psychoeducation regarding the excessive use of technology and its dysfunction were given to enhance his motivation for enhancing positive life style, communication with others, reducing gaming behaviour and pornography use. Individual level behaviour therapy techniques were used for activity scheduling and also to deal within appropriate sexual expression towards others. Cognitive therapy-based techniques were demonstrated for anger management. Family members were psycho-educated about the intellectual ability of the users and vocational counselling for the same was provided. Follow-up at three months interval revealed decrease in online activities (score on IAT changed from 82 to 61 on follow-up) as well as inappropriate sexual expression towards others. Caregivers reported improvement in his daily activities.

### Case 2

A 14-year-old adolescent boy with borderline intelligence (IQ=78 assessed using Binet Kamat test[7]) presented with history of indulging in excessive online gaming, anger outburst, using abusive language towards the parents, and deterioration of academic performance for the last two years. He was playing games on an average of ten to 12 hours a day.

He started using parents' mobile phone from the age of 11. It was a single child family. Parents' academic expectations were high from him. He was finding it difficult to cope up with the studies. He started spending more time in doing online

activities. From the past two years, he started going irregularly to school. Due to availability of free time, his usage of online gaming increased. He used to play shooting games. His usage of game was on an average ten to 12 hours a day. Due to this, dysfunctions were seen in personal hygiene, sleep, appetite, and outdoor activities. Clinical assessment revealed presence of an urge to use, not being able losing online activities, life style disturbance (i.e. delay in initiation of sleep, decreased interaction with family members, decreased outdoor activity, etc.) due to excessive use of internet. The stopping or taking away the technology was associated with presence of irritability, anger outburst towards the parents, and self-harm behaviours. Parents' were over involved and submissive, especially mother toward the user. Parents were extremely worried about his gaming behaviour. It led to disturbance in the life style in the form of losing pleasurable activities.

IAT[8] yielded a score of 56 which suggested problematic internet use. POGQ[9] showed high scores in preoccupation, withdrawal, overuse, and interpersonal conflicts. Motivational interviewing had been used for reducing gaming and internet behaviour. Behaviour activation was done and contingency contract was made for restricted usage. User was asked to maintain a log of his usage pattern. Relaxation techniques in the form of deep breathing exercise were demonstrated to them. Family sessions were held to educate them addictive potential of internet as well as promotion of offline life style changes to have healthy use of internet among them. IAT showed reduction of scores from 56 to 42 as well as changes were seen for preoccupation, withdrawal, overuse, and interpersonal conflicts domains of POGQ.

## DISCUSSION

The present case study documents the excessive to addictive use of technology among users with mild to borderline intellectual disability. Users also develop self-harm behaviour secondary to cessation of internet use as well as life style disturbance secondary to excessive use of technology. The presence of access to internet provides ample opportunities for people with intellectual disability for self-expression.[10] Internet provides an opportunity for people with disabilities as well as give them the control for not disclosing their identity.[11] The excessive use is present among users with mild to moderate cognitive deficits.[3] The most common reasons for using internet were sending and receiving electronic mail and searching for information.[12] They frequently use internet in home and school setting.[4] 6.4% reported use of internet from places outside of their home. 56.4% reported infrequent use of internet.[13]

Fifty per cent of users with intellectual disability had an internet connection in their family home. Twenty five per cent of them had never used internet.[14] There is dearth of literature of potential of developing internet addiction among people with mild to moderate retardation and its association with psychosocial factors. Though users may develop excessive use to dependence on internet, there is a need to counsel them for enhancing their participation in offline activities as well as for development of their psychosocial skills. Though psychiatric classification system like the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) recognised internet gaming under research category,

the World Health Organization in the ICD-11 beta draft put gaming as mental health condition.[15,16] The present study implies role of psychosocial factors (free time, unstructured daily schedule, etc. and their role in technology use) as well as the need for screening of excessive use of internet among users with mild intellectual disabilities and development of psychoeducational module to promote healthy use of technology (self-expression, learning, and socialization, etc.) among people with mild disability.

## REFERENCES

1. Shpigelman CN, Reiter S, Weiss PL. E-mentoring for youth with special needs: preliminary results. *Cyberpsychol Behav.* 2008;11:196-200.
2. Guo B, Bricout JC, Huang J. A common open space or a digital divide? A social model perspective on the online disability community in China. *Disabil Soc.* 2005;20:49-66.
3. Löfgren-Mårtenson L. Love in cyberspace: Swedish young people with intellectual disabilities and the Internet. *Scand J Disabil Res.* 2008;10:125-38.
4. Holmes KM, O'Laughlin N. The experiences of people with learning disabilities on social networking sites. *Br J Learn Disabil.* 2014;42:1-5.
5. Alfredsson Ågren K, Hemmingsson H, Kjellberg A. Internet use among adolescents with intellectual disabilities at home and school. In: Abstract book : International Conference on Cerebral Palsy and other Childhood-onset Disabilities Stockholm 1-4 June 2016 [Internet]. 2016 [cited 2018 Feb 5]. Available from: <http://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-130890>
6. Shane HC, Albert PD. Electronic screen media for persons with autism spectrum disorders: results of a survey. *J Autism Dev Disord.* 2008;38:1499-508.
7. Kamat VV. Measuring intelligence of Indian children. 4th ed. London: Oxford University Press; 1967.
8. Young KS. Internet addiction: the emergence of a new clinical disorder. *CyberPsychol Behav.* 1998;1:237-44.
9. Demetrovics Z, Urbán R, Naggyörgy K, Farkas J, Griffiths MD, Pápay O, et al. The development of the Problematic Online Gaming Questionnaire (POGQ). *PLoS One.* 2012;7:e36417.
10. Bulkley M, Foote D. Pornography Addiction Screening Tool (PAST) [Internet]. 2013 [cited 2019 Apr 1]. Available from: <https://michaelwalsh.com/admin/resources/resources/pornography-addiction-screening-tool.pdf>
11. Hoppestad BS. Current perspective regarding adults with intellectual and developmental disabilities accessing computer technology. *Disabil Rehabil Assist Technol.* 2013;8:190-4.
12. Chadwick D, Wesson C, Fullwood C. Internet access by people with intellectual disabilities: inequalities and opportunities. *Future Internet.* 2013;5:376-97.
13. Kaye HS. Computer and internet use among people with disabilities. *Disability Statistics Report (13)*. Washington DC: U.S. Department of Education, National Institute on Disability and Rehabilitation Research; 2000.
14. Davies DK, Stock SE, Wehmeyer ML. Enhancing independent Internet access for individuals with mental retardation through the use of a specialized web browser: a pilot study. *Educ Train Dev Disabil.* 2001;36:107-13.
15. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Arlington, VA: American Psychiatric Association; 2013.
16. ICD-11 for Mortality and Morbidity Statistics. Gaming disorder [Internet]. 2018 Dec [cited 2018 Dec 18]. Available from: <https://icd.who.int/browse11/l-m/en#/http%3a%2f%2fid.who.int%2fid%2fentify%2f1448597234>

Sharma MK, Leeshma BK, Prasad K, Hamza MA, Tadpatrikar A, Thakur PC, Singh P. Internet addiction as a comorbid condition among users with mild intellectual disability. *Open J Psychiatry Allied Sci.* 2020;11:52-4. doi: 10.5958/2394-2061.2020.00011.7. Epub 2020 Feb 10.

Source of support: Nil. Declaration of interest: None.