

Digital Addiction and impact on Mental Health of youth

Susmita Halder

Associate Professor, Department of Psychology, St. Xavier's University, Kolkata. India

Corresponding author: Susmita Halder

Email – susmitahalder@gmail.com

Background

In this new virtue in changing meaning of life, the concept of digitalization has been spread all over the human existence [1]. The need for digitalization has been increased in last 10 years. Dependency over digital media and digital gadgets has become necessary for everyone. Digitalization is the process of transforming analogue information in to digital information. It helps to digitize information globally accessible. Digitalization is capturing and storing life in form of virtual world. Digital world is assisting to exchange global information between multiple devices over the world and it is increasing the chances of globalization. Over the world different organizations and industries are developing around new and unique ways of application technologically. Hence, the use of digital devices is increasing and involving human beings of all ages in most capable ways, but the digital usage is most prominent among the children and adolescents [2]. Children and adolescents are comfortable and usually spend most time on the digital media because of their study, classes, gaming, shopping, watching movies, using social media and interaction through chatting. Involvement in these activities is used to reduce situational stress and anxiety but also elevate emotional dysregulation or depressive symptoms.

Digital addiction and mental health

The principal components of digital addiction involve the affective and cognitive preoccupation and reliance on online life and internet, neglecting own work life and presence of poor self control along with social problems. Over involvement of digital world often leads to addiction, which is coined as digital addiction. Digital addiction is defined by ASAM as well as APA [3] as: primary, chronic disease of brain of brain reward, motivation, memory, and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. Popular media often covers up news stories talk about the narcissism connected with heavy make use of social networks and explain an addiction that young people be in this world with today. Some specialized help resources are compliant patients for self-diagnosed addictions to technology. Technology addiction: also called process addiction or “nonsubstance-related addiction” is a frequent compulsion by a person to fit into place in some specific commotion, despite harmful consequences, as estimated by the person's, mental state, or social life. Digital addiction can be divided into three broad categories: phone addiction, internet addiction, social media addiction; which can be further divided into gaming addiction, information overload, net compulsion, cyber sexual addiction, cyber relationship addiction, binge watching addiction and online shopping addiction.

As seeing the increased dependence on digital devices, it seems to observe a generation of youth suffering from technological or digital addictions. It amplified the concern and risk factors associated with the digital addictions which considerably deteriorating the mental health of child and adolescent. The prevalence rate of digital addiction is also augmenting daily. In different countries of the world, it has been estimated the ranging from 2.6% of northern and western Europe to 10.9 in the middle east. The form digital addiction which is most prevalent is internet addiction among young population. Internet addiction is one of the most primitivescrutinizedkind of information technology addiction and the indication are concern with the Internet and tolerance. Studies indicate that the global prevalence of this disorder is in the order of six percent [4]. In 1996, the American Psychological Association (APA) first measured adding Internet addiction as a psychiatric disorder, but decided on it, for the most part because there are no substances engaged [5]. Adolescents with Internet addiction are more stressed out than normal adolescents [6-7]. Until now,

researchers have paying attention on the power mechanism of stress on Internet addiction. Smartphone addiction has conventionally increasing attention since the popularization of smartphones approximately the worldwide. Facebook addiction is an occurrence that has come into view over the past decade [8]. There is still no conformity to date on how social networking should be definite; hence, most studies have paying attention on the use of addiction to individual social networking sites since the advancement and validation of the Bergen Facebook Addiction Scale (BFAS).

Biological basis of digital addiction can be explained by the same addiction cycle which applies for other addiction behavior. Addiction cycle starts with an emotional trigger which is followed by the impulse or craving to perform the ritualistic behaviour and the ritualistic behaviour causes guilt or negative apprehension which parallelly triggers the emotional reactions. Cycle of digital addiction covers three components which includes the trigger, action, and reward. The behavioral manifestation of digital addiction includes academic avoidance, preoccupation with the content of internet or digital media, decreased face to face interactions, increased irritability and anger outbursts, being alone, fear of being isolated from the group, avoiding interactions with parents and excessive online spending. These behaviors are primarily manifested because of pre-existing mental health concerns, role of parents: neglects or violence, very easy availability of digital devices, peer influences and excessive smart phone dependency during covid-19 pandemic [9-11].

Adverse impact can be seen among the child and adolescents due to excessive rise in digital addiction. Deteriorated academic performance is mostly reported in this case. Involvement in digital media is distracting them from studies and relatively decreasing the interest in studies and which is leading to academic deterioration [12]. Excessive digital preoccupation is manifesting difficulties in concentration, and cognitive and attentional bias can also be noticed with reward dependency and difficulties in set shifting, planning and problem solving. Multifactorial deficits are implying the increase in worries and anxiety to missing out things, irritable mood, loneliness, low self esteem and emotional dysregulation. Poor peer relationships, conflicts and maladjustment has become very much prominent [13]. Engaging in sexual adversities and conflictual relationship with parents can also be seen. Gaming and gambling addiction often lead to legal considerations as well. Illegal hacking or cyber bullying or cyber crime or cyber sexual activities can also be documented as juvenile delinquency [14].

Studies show that, pre-existing personality or temperament problems [15], presence of mood disorders- mild to moderate depressive episodes, negative apprehensions, suicidal risks, substance abuse or any other psychiatric disorders can elevate the risk of digital addictions. Brain areas which are involved in digital addiction are mesolimbic system, amygdala and hippocampus. Decreased dopamine and serotonin satiation increase the reward sensitivity, impulsivity and diminish the inhibition. Psychosocial factors which facilitate digital addiction are the feelings of being lonely, low self esteem, worthlessness, fear of being alone, need for constant approval, goal instability, stress vulnerability, cognitive distortions and sensation seeking personality [16].

COVID-19 pandemic has persuaded the use of technology during the crisis period and it raised the potential problem behaviors and additional behavioral addictions may arise pertaining towards teenage population. Due to lack of parental support, less peer interaction, weakened associations with family members has been flooded over the teenage population.

Psychosocial Intervention

Technology addiction treatment varies per person and capability. Since the disorder is the reason by various apprehensions like learning issues, reward deficiencies, and impulsivity, it can be demanding to take care of. Early identifications can be done through behavioural changes, mood dysregulation and functioning deterioration. Behavioural manifestations should be understand and co-morbid conditions should be screened. Awareness program can be done through social media or campaigning programmes should be conducted Awareness regarding mental health, school awareness programmes, mass awareness programmes For people who use technology to run off from negative thoughts like lack of social or family support, cognitive behavioral therapy is an admirable treatment alternative for technology addiction. Patients can learn to restructuring the thought the way they use and view the negatives of technology or digital addiction while in therapy [17]. CBT is proven to be an effectual treatment for various disorders like anxiety,

depression, and addiction. Motivational enhancement therapy (MET) is an appearance of counseling therapy formed to assist patients battling substance use or behavioral disorders[18]. The focal point of MET is to conquer any ambivalence jamming the accomplishment of goals and hastily inspiring internal change. It is a shared and non-confrontational endeavor often used with other management like CBT or pharmacotherapy. During therapy, mental health professionals put into practice motivational consultation to help patients recognize their feelings for the duration of and right before technology use. All the way through this technique, individuals can determine how they reduce or give good reason for their compulsive technology make use of. Exposure therapy is an outward appearance of psychotherapy used to facilitate people deal with their fears. During treatment, individuals keep away from using technology for increasing quantity of time in safe surroundings. After several disclosure sessions, patients slowly break the pattern of fear activating their compulsive technology use.

CONCLUSION

In recent age of digitalization, the importance of devices is becoming evident, explicitly in pandemic situation dependence on digital forum has been inevitable. Technology facilitates the formal education & encourages the learning situation. The differentiation of use and overuse of digital media should be followed by caregivers. Associated inconveniences must be identified and intervened.

REFERENCES

1. Brennen JS, Kreiss D. Digitalization. The international encyclopedia of communication theory and philosophy. 2016;1-11.
2. Mertala P. Paradoxes of participation in the digitalization of education: A narrative account. *Learning, Media and Technology* 2020;45(2):179-92.
3. Peper E, Harvey R. Digital addiction: Increased loneliness, anxiety, and depression. *NeuroRegulation* 2018; 5(1):3.
4. Cheng Y, Li X, Lou C, Sonenstein FL, Kalamar A, Jejeebhoy S, Ojengbede O. The association between social support and mental health among vulnerable adolescents in five cities: findings from the study of the well-being of adolescents in vulnerable environments. *J Adolesc Health* 2014;55(6):S31-8.
5. Gerhart N. Technology Addiction: How Social Network Sites Impact Our Lives. *Informing Science* 2017;20.
6. Wu XS, Zhang ZH, Zhao F, Wang WJ, Li Y F, Bi L, Sun YH. Prevalence of Internet addiction and its association with social support and other related factors among adolescents in China. *J Adolesc* 2016;52:103-11.
7. Odacı H, Çikrikci Ö. Differences in problematic Internet use based on depression, anxiety, and stress levels. *Addicta: Turkish J Addictions* 2016;4:41-61.
8. Perrin A. Social media usage. *Pew research center* 2015;125:52-68.
9. Gupta T, Swami MK, Nebhinani N. Risk of digital addiction among children and adolescents during COVID-19 pandemic: Concerns, caution, and way out. *J Indian Assoc Child Adolesc Ment Health* 2020;16(3):199-208.
10. Christakis DA. Pediatrics and COVID-19. *JAMA* 2020;324(12):1147-8.
11. Mohta R, Halder S, Mahato A. Behavioral Addiction: An overview and Challenges. *J Liberal Arts Sci* 2020;1(1)6–18.
12. Samaha M, Hawi NS. Relationships among smartphone addiction, stress, academic performance, and satisfaction with life. *Comp Hum Behav* 2016;57:321-5.
13. Ambad SNA, Kalimin KM, Yusof KMA. The effect of internet addiction on student's emotional and academic performance. *E-Academia Journal* 2017;6(1).
14. Choi C, Hums MA, Bum CH. Impact of the family environment on juvenile mental health: eSports online game addiction and delinquency. *Int J Environ Res Pub Health* 2018;15(12):2850.
15. Al-Nawaiseh, SJ. Personality Patterns and their relationship to digital Addiction Among Upper Basic Stage Students in Southern Mazar District. *Rev Int Geograph Educ Online* 2021;11(6):954-69.
16. Young KS. Cognitive behavior therapy with Internet addicts: treatment outcomes and implications. *Cyberpsychol Behav* 2007;10(5):671-9.
17. Bozoglan B. Multifaceted approach to digital addiction and its treatment. *IGI Global*; 2019.

18. Manwong M, Lohsoonthorn V, Booranasuksakul T, Chaikoolvatana A. Effects of a group activity-based motivational enhancement therapy program on social media addictive behaviors among junior high school students in Thailand: a cluster randomized trial. *Psychol Res Behav Manage* 2018;11:329.

Acknowledgements – Nil

Conflict of Interest – Nil

Funding – Nil