

# MENTAL HEALTH COMMUNITY TO BRACE FOR A NEWER GAMING ADDICTION

**KHADEEJA ISHTIAQ**

Department of Psychiatry, Madinah Teaching Hospital, Faisalabad, Pakistan.



Submitted: June 12, 2024

Accepted: December 07, 2024

CORRESPONDENCE: **DR KHADEEJA ISHTIAQ**E-mail: [khadeejaishtiaq1@gmail.com](mailto:khadeejaishtiaq1@gmail.com)**ABSTRACT**

Internet Gaming Disorder (IGD) is being widely recognised as a behavioural addiction with serious mental health implications, especially among youth. While gaming offers entertainment and social connection, its excessive use can lead to significant impairment in emotional, social, academic, and occupational functioning. This article explores the complex neurobiological, psychological, and social mechanisms contributing to IGD, highlights its symptoms, and examines global prevalence patterns with a focus on Pakistani youth. It discusses evidence-based interventions, emerging screening tools and the ethical considerations of diagnosis and research. By addressing research gaps and promoting culturally sensitive approaches, this article aims to support clinicians, educators, and policymakers in understanding and managing IGD.

**KEYWORDS**

Adolescent Psychiatry; Behaviour, Addictive; Cognitive Behavioural Therapy; Internet Addiction Disorder; Mental Health.

**INTRODUCTION**

In the mental health community, there is a growing concern over addiction related to gaming. Video game addiction is when individuals repetitively use electronic devices like personal computers, mobile phones, gaming devices, and TVs to play games mostly over the Internet with other people. This trend is resulting in many negative consequences in various aspects of life such including personal, social, behavioural, educational, and occupational dysfunction.

The Diagnostic and Statistical Manual for Mental Disorders (DSM-5TR) by American Psychiatric Association has defined addiction to gaming as Internet Gaming Disorder (IGD) and it is separated in the section suggested with conditions for further research. According to DSM-5-TR, the conditions must cause "noticeable and significant impairment or distress of a person's life in multiple areas. IGD does not include general use of the internet.<sup>1</sup>

**Recognising The Symptoms**

The symptoms of Internet gaming disorder are similar to those of substance abuse include preoccupation, withdrawal symptoms, tolerance needing more gaming time to satisfy urges, unable to minimise gaming time, skipping other social and physical activities due to gaming, continuing to game despite disruption in life, deceiving others especially near ones about gaming time, and taking refuge in gaming world to relieve stress. A person can be diagnosed with IGD if the patient has experienced five or more symptoms in a single year.

**Neurobiological And Psychological Mechanisms**

Similar to other addictive behaviours, the development of IGD is influenced by multiple biological, psychological, and social factors, including: i) related to the game itself, such as game design, reward system, etc. ii) neurobiological and psychological predisposition of the individual playing, and iii) social and environmental factors, like family dynamics, peer

influence, and accessibility of gaming platforms.<sup>2</sup> For example, people experiencing low self-esteem may seek validation through gaming, leading to obsessive behaviours. Combination of personality traits like neuroticism, impulsive behaviour, and aggression are significant predictors of internet gaming disorder.<sup>3,4</sup>

**Prevalence And Risk Factors**

In the studies done for the last two decades, the prevalence is around 4.7%. Worldwide prevalence rate is between 0.7% to 25.5%.<sup>5</sup> Geography is also an important determinant of prevalence. Research data show that males and people of a young age are more likely to suffer from IGD. Additionally, IGD is associated with poorer mental health outcomes, such as anxiety, depression and stress, as well as decreased sleep quality and interpersonal relationship problems.<sup>6,7,8</sup> In Pakistan, a study reported an alarming IGD prevalence of 58.9% among youth, indicating an urgent need for awareness, screening, and intervention.<sup>9</sup>

**Evidence-based Strategies For Management**

The most effective treatment for Internet addiction and IGD is the Cognitive-Behavioural Therapy (CBT). The CBT for online addiction combines classical CBT techniques with specific Internet-related issues. CBT-IA (cognitive behavioural therapy–Internet addiction) works mainly in three different areas: behaviour modification, cognitive restructuring, and reducing the harm.

In addition to CBT, other therapies like mindfulness meditation and reality therapy have also been found to improve the symptomatology of IGD.<sup>10</sup> A 2022 study highlighted the role of gaming motivations like escapism and competition in contributing to IGD. It found that individuals who use gaming to avoid real-world challenges or engage in competitive gaming for validation are at a higher risk of developing IGD.<sup>11</sup>

### Screening And Diagnostic Tools For IGD

As a part of routine assessment, doctor and primary care providers should always ask both the parent and child about the amount of time spent on social media for early diagnosis and intervention. Always assess other areas of interest and leisure activities that exist beyond the use of electronic media. An assessment of IGD should always include screening for other illnesses, such as behavioural issues, depression, anxiety, OCD (obsessive compulsive disorder), and ADHD (attention deficit hyperactivity disorder). The validated diagnostic tools for IGD include:

- **Internet Gaming Disorder Test (IGD-20):** The very first test to check IGD was termed as Internet Gaming Disorder Test (IGD-20). This diagnostic has 20 specific questions, all aimed at determining the extent of the problems caused by gaming and the symptoms gamers are experiencing.<sup>12</sup>
- **Internet Gaming Disorder Scale–Short Form (IGDS9-SF):** It is a rapid test to assess for addiction to video games. IGDS9-SF is based on the American Psychiatric Association's guidelines, and evidence shows that it is useful in identifying IGD. This scale has been translated into different languages like Chinese, Spanish, German, Czech, and more.<sup>13</sup>
- **Game Disorder Test (GDT):** This brief structured assessment instrument was developed based on the World Health Organisation's ICD-11 diagnostic framework to assess GD among adults. GDT assesses all three key ICD-11 diagnostic criteria and substantial impairments due to gaming disorder.<sup>14</sup>

### Intervention Strategies

It is crucial to develop structured recovery programs for individuals with IGD tailored to their internet use habits and screen technology usage. Recovery success should be objectively measured through reduced online hours, digital dieting, and abstinence from problematic online applications such as specific online games like it is done in some of the other disorder. This approach is referred to as digital nutrition by some authors.

### Ethical Considerations For Research

Given that IGD research primarily involves adolescents and young adults, it is paramount to uphold ethical standards. Researchers must ensure informed consent, particularly for minors, while safeguarding participants' data and maintaining cultural sensitivity. Ethical protocols should also address potential risks associated with diagnosing and labelling individuals with IGD, which might lead to social stigma or unintended consequences.

### Addressing Research Gaps

Existing IGD research relies heavily on cross-sectional designs and self-reported measures, which may not accurately capture long-term behavioural trends or causal relationships. Furthermore, the inconsistent use of diagnostic criteria across studies complicates global prevalence comparisons and challenges efforts to develop standardised interventions. Methodological limitations in IGD studies, such as reliance on

self-reported data and lack of longitudinal designs, challenge the generalisability of findings. Cultural and regional variations also underscore the need for more inclusive research. Addressing these gaps requires a more inclusive research approach, employing longitudinal designs and culturally adaptive diagnostic frameworks to ensure findings are both reliable and globally relevant.

### CONCLUSION

With the increasing use of internet and proliferation of digital gaming, IGD is emerging as a significant public health concern, necessitating effective prevention and early intervention strategies, which include: awareness programmes targeting parents, teachers and school system are essential to mitigate the risks associated with it; regulated and responsible gaming policies at schools and workplaces, and early intervention by mental health professionals to mitigate long-term consequences. Thus, by fostering balanced digital habits, promoting age-appropriate gaming, and implementing evidence-based interventions, mental well-being can be safeguarded and the societal impact of Internet Gaming Disorder may be also reduced.

### REFERENCES

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Arlington, VA: American Psychiatric Publishing; 2013.
2. Müller KW, Wölfling K, Dreier M. Risks of developing Internet addictive behaviors: Scope and extent of Internet sites used. *International Journal of Child and Adolescent Health*. 2013; 6(4):399-409.
3. Männikkö N, Ruotsalainen H, Miettunen J, Pontes HM, Kääriäinen M. Problematic gaming behaviour and health-related outcomes: A systematic review and meta-analysis. *J Health Psychol*. 2020;25(1):67-81. doi:10.1177/1359105317740414
4. Gervasi AM, La Marca L, Costanzo A, Pace U, Guglielmucci F, Schimmenti, A. Personality and Internet gaming disorder: a systematic review of recent literature. *Current Addiction Reports*. 2017; 4:293–307. doi: <https://doi.org/10.1007/s40429-017-0159-6>
5. Mihara S, Higuchi S. Cross-sectional and longitudinal epidemiological studies of Internet gaming disorder: A systematic review of the literature. *Psychiatry Clin Neurosci*. 2017; 71(7):425-444. doi:10.1111/pcn.12532
6. Feng W, Ramo DE, Chan SR, Bourgeois JA. Internet gaming disorder: Trends in prevalence 1998-2016. *Addict Behav*. 2017;75:17-24. doi:10.1016/j.addbeh.2017.06.010
7. Wittek CT, Finserås TR, Pallesen S, et al. Prevalence and Predictors of Video Game Addiction: A Study Based on a National Representative Sample of Gamers. *Int J Ment Health Addict*. 2016;14(5):672-686. doi:10.1007/s11469-015-9592-8
8. Fam JY. Prevalence of internet gaming disorder in adolescents: A meta-analysis across three decades. *Scand J Psychol*. 2018;59(5):524-531. doi:10.1111/sjop.12459
9. Khalid A, Mukhtar N. Internet Gaming Disorder and Mental Health in Pakistani youth: A Path Analysis with Impulsivity and Emotional Intelligence. *Research Square [Preprint]*. 2022 [cited 1st June 2024]. doi: <https://doi.org/10.21203/rs.3.rs-2296407/v1>

10. Yao YW, Chen PR, Li CR, Hare TA, Li S, Zhang JT, et al. Combined reality therapy and mindfulness meditation decrease intertemporal decisional impulsivity in young adults with internet gaming disorder. *Computers in Human Behavior*. 2017;68:210-216.  
Doi: <https://doi.org/10.1016/j.chb.2016.11.038>
11. Wang HY, Cheng C. The Associations Between Gaming Motivation and Internet Gaming Disorder: Systematic Review and Meta-analysis. *JMIR Ment Health*. 2022;9(2):e23700. doi:10.2196/23700
12. Pontes HM, Király O, Demetrovics Z, Griffiths MD. The conceptualisation and measurement of DSM-5 Internet Gaming Disorder: the development of the IGD-20 Test. *PLoS One*. 2014; 9 ( 1 0 ) : e 1 1 0 1 3 7 .  
doi:10.1371/journal.pone.0110137
13. Pontes HM, Griffiths MD. Measuring DSM-5 internet gaming disorder: Development and validation of a short psychometric scale. *Computers in Human Behavior*. 2015; 45:137-143.  
Doi: <https://doi.org/10.1016/j.chb.2014.12.006>
14. Pontes HM, Schivinski B, Sindermann C, et al. Measurement and Conceptualization of Gaming Disorder According to the World Health Organization Framework: the Development of the Gaming Disorder Test. *Int J Ment Health Addiction*. 2021; 19, 508–528.  
doi: <https://doi.org/10.1007/s11469-019-00088-z>

#### COPYRIGHT

Copyright ©2024 JPSS. Published by Pakistan Psychiatric Society. Re-use permitted under CC BY-NC. <http://creativecommons.org/licenses/by-nc/4.0/> This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

