



(REVIEW ARTICLE)



## Internet gaming disorder and its varied impacts on adolescent age group

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### Abstract

This comprehensive review article examines the multifaceted impacts of Internet gaming disorder (IGD) or gaming addiction on individuals, with a particular focus on adolescents and young adults. It begins by defining IGD based on criteria from the American Psychiatric Association and the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). The review highlights the global prevalence of IGD among adolescents, emphasizing the need for further research and intervention strategies to address this growing concern. It delves into the psychological impacts, including depression, anxiety, cognitive impairments, social isolation, and poor impulse control. The behavioral impacts encompass irritability, academic problems, social withdrawal, financial issues, poor time management, and neglect of responsibilities. Additionally, the review discusses the familial and parental impacts, such as strained family relationships, insecure attachments, family environment disruption, conflicts, and weakened family bonds. The physical health impacts are explored, including sedentary behaviors, sleep disturbances, musculoskeletal problems, dietary issues, and eye strain. Overall, this review underscores the complex and far-reaching consequences of IGD, highlighting the urgency of addressing this issue to promote the well-being of affected individuals.

**Keywords:** Internet gaming disorder; Gaming addiction; Problematic gaming; Psychological impact; Family; Parental impacts; Impacts of IGD

### 1. Introduction

Internet gaming disorder (IGD), also known as gaming addiction, is a recognized mental health condition with well-established criteria. According to the American Psychiatric Association (APA), IGD is characterized by "persistent and recurrent use of the internet to engage in games, often with other players, leading to clinically significant impairment or distress" [1]. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) provides specific criteria for diagnosing IGD, including preoccupation with gaming, withdrawal symptoms, unsuccessful attempts to control or reduce gaming, loss of interest in other activities, continued excessive gaming despite negative consequences, and lying to others about the extent of one's gaming activities [2].

IGD is a growing concern, particularly among the adolescent age group. Numerous research studies have explored its prevalence, indicating that it can range from 1.7% to 27.5% in different populations, reflecting the global variation in gaming addiction rates [3][4][5]. These studies underscore the significance of IGD as a mental health issue that affects a substantial portion of adolescents, emphasizing the need for further research and intervention strategies to address this problem. With the constant increase in the prevalence of Internet Gaming disorder, the impacts of the same has widespread presence in various aspects of human population especially in children and adolescent and young adult age groups. In the consecutive sub headings lets discuss the profound impacts of internet gaming disorder.

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## **2. Psychological Impacts**

Gaming addiction, also known as internet gaming disorder, has been linked to a number of psychological effects on people, many of which have serious negative repercussions. Excessive gaming has been linked to higher levels of depression and anxiety, according to research [6]. It can also interfere with sleep cycles, which can result in insomnia and other issues associated with sleep [7]. In addition, a history of gaming addiction has been connected to cognitive impairments, including a shorter attention span and subpar academic performance, which can have long-term effects on individuals; particularly students [8]. Another psychological effect is social isolation, which results in feelings of loneliness and social difficulties when people retreat from interpersonal relationships and real-world social interactions [9]. Additionally, because people with gaming addiction frequently put gaming above other obligations, they may have poor impulse control, which could have negative financial and legal repercussions [10]. Lastly, studies have demonstrated a substantial correlation between gaming addiction and lowered levels of self-worth and self-esteem. This is because people who become addicted to gaming may become dependent on the virtual world for approval and recognition, which can negatively affect their psychological health altogether [11].

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## **3. Behavioural Impacts**

Internet gaming disorder, particularly among adolescents, has been linked to various behavioral impacts that can significantly affect their daily lives and overall well-being. Extensive research has indicated that adolescents with gaming addiction often exhibit increased levels of irritability and aggression, leading to conflicts within their families and social circles [12]. Additionally, excessive gaming can lead to academic problems, such as lower grades and reduced school engagement, hindering their educational progress [13]. Social withdrawal is another common behavioral impact, as adolescents may prefer online interactions over face-to-face interactions, leading to a lack of real-world social skills and relationships [14]. Furthermore, gaming addiction can disrupt sleep patterns, leading to irregular sleep schedules and daytime sleepiness, impacting their physical and mental health [15]. Financial issues can also arise, as adolescents may spend significant amounts of money on in-game purchases, leading to financial strain on themselves and their families [16]. Poor time management and neglect of responsibilities are also observed, with gaming taking precedence over chores, homework, and other obligations, leading to neglect of crucial aspects of their lives [17].

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## **4. Familial or Parental Impacts**

Internet gaming disorder, especially among adolescents, can have a profound impact on familial and parental dynamics, affecting family relationships, parent-child attachments, family environments, family conflicts, and family bonds. Research has highlighted that adolescents with gaming addiction often experience strained family relationships, with increased tension, arguments, and a breakdown in communication between parents and their children [18]. Furthermore, these adolescents may exhibit insecure attachment styles with their parents, as they often turn to online gaming for emotional fulfillment and support, undermining their emotional bonds within the family [19]. The family environment can be disrupted, as excessive gaming may lead to a neglect of family responsibilities, routines, and interactions, resulting in a less cohesive and supportive family structure [20]. Family conflicts often arise due to the time adolescents spend gaming, leading to disagreements over screen time limits and a lack of shared family activities [21]. Moreover, family bonds can weaken as adolescents prioritize online gaming over spending time with their family, diminishing the sense of closeness and unity within the household [22]. These familial and parental impacts emphasize the need for understanding and addressing the multifaceted consequences of gaming addiction on the family unit.

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## **5. Physical Health Impacts**

Internet gaming disorder (IGD) or gaming addiction can have notable physical health impacts on adolescents. Research has shown that prolonged gaming sessions can lead to sedentary behavior, contributing to an increased risk of obesity and related health issues [23]. These individuals often exhibit irregular sleep patterns and disrupted circadian rhythms, leading to sleep disturbances and daytime fatigue [24]. Furthermore, excessive gaming may result in musculoskeletal problems, such as neck and back pain, as well as wrist and hand injuries due to repetitive movements [25]. Poor dietary habits and irregular meal schedules are often observed among adolescents with gaming addiction, potentially leading to nutritional deficiencies [26]. Eye strain and digital eye fatigue are also common physical consequences due to prolonged screen time and inadequate eye care [27]. It is essential to address these physical health impacts to promote the overall well-being of adolescents affected by IGD.

## 6. Discussion

We have examined the many facets of Internet gaming disorder (IGD) or gaming addiction in this thorough analysis, providing insight into its recognised criteria and prevalence in adolescents and young adults. IGD's psychological effects, which include social isolation, melancholy, anxiety, and cognitive decline, create a worrisome picture of the toll the disease has on its users' mental health. Behaviours that upset everyday life and family dynamics, like violence, poor impulse control, social disengagement, and scholastic issues, exacerbate these psychological repercussions even more. Furthermore, IGD's effects on families and parents highlight the stress it puts on ties, family contexts, relationships, and attachments—underscoring the critical need for support networks. The physical health implications of excessive gaming on adolescents' general well-being are extensive and include sedentary behaviour, sleep disorders, musculoskeletal issues, and nutritional inadequacies. When taken as a whole, this review offers a comprehensive understanding of the significant effects of IGD and issues a call to action for families, medical professionals, and researchers. Solving this increasing issue requires a multimodal strategy that includes the impacted persons as well as their close support networks. In order to better understand and lessen the effects of IGD and, eventually, provide healthier and more balanced lives for the younger population struggling with this mental health issue, it is imperative to create efficient intervention strategies, raise awareness, and carry out additional research.

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## 7. Conclusion

Finally, this comprehensive analysis shows how Internet gaming disorder (IGD) affects adolescents and young adults' psychological, behavioural, familial, parental, and physical health. Documented criteria and global prevalence make handling this developing concern in critical way. Gaming addiction impacts mental health, family relationships, and physical health, according to the research investigations. This research calls for effective intervention strategies, awareness, and ongoing research. By understanding the complex effects of IGD, society may work towards holistic solutions that improves overall quality of life of adolescents and young adults in different aspects of life.

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## Compliance with ethical standards

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

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