

A Brief Review on Anxiety and Violence in Adolescents: Role of Online Gaming

Ms. Minal Prajapati¹, Sanket Rathwa²

¹Assistant Professor, Parul Institute of Nursing, Parul University, Vadodara, Gujarat, India

²Nursing Student, Parul Institute of Nursing, Parul University, Vadodara, Gujarat, India

Abstract—Introduction: Adolescence is a critical developmental period during which excessive engagement in online gaming has become increasingly prevalent. While online gaming offers entertainment and cognitive stimulation, uncontrolled use has been associated with adverse psychological outcomes, particularly anxiety and violent behavior. Growing concerns regarding Internet Gaming Disorder highlight the need to examine its impact on adolescent mental health. **Methods:** A narrative review of literature was conducted using published national and international studies related to online gaming, anxiety, aggression, and behavioral problems among adolescents. Literature was collected from peer-reviewed journals, books, reports, and electronic databases. Studies focusing on prevalence, contributing factors, psychological effects, and behavioral outcomes of online gaming were included and critically analyzed. **Results:** The review revealed a high prevalence of online gaming addiction among adolescents, with higher vulnerability observed among males. Excessive gaming was consistently associated with increased anxiety, social withdrawal, irritability, poor academic performance, and aggressive behavior. Contributing factors included prolonged screen time, exposure to violent gaming content, poor family support, emotional dysregulation, loneliness, and inadequate parental supervision. Adolescents with gaming addiction demonstrated higher levels of anxiety and violent tendencies compared to non-addicted peers. **Discussion:** Online gaming addiction significantly influences adolescents' emotional and behavioral functioning. The findings indicate a strong relationship between excessive gaming, anxiety disorders, and aggressive behavior. Early identification, parental involvement, and mental health interventions are essential to prevent long-term psychological consequences. Mental health professionals, especially nurses, play a vital role in screening, education, and preventive strategies to promote healthy gaming behaviors.

Index Terms—Adolescents, Online Gaming, Anxiety, Violence, Gaming Addiction, Mental Health

I. INTRODUCTION

Adolescence is a sensitive and transitional period characterized by rapid physical, emotional, and psychological development. During this stage, individuals are more vulnerable to external influences, including digital media and online activities. Online gaming has become one of the most popular leisure activities among adolescents due to easy access to smartphones, computers, and internet connectivity.

Although moderate gaming may enhance cognitive skills and social interaction, excessive engagement has been linked with negative psychological outcomes. The World Health Organization has recognized Internet Gaming Disorder as a behavioral addiction characterized by impaired control over gaming, increased priority given to gaming, and continuation despite negative consequences. Excessive gaming has been associated with anxiety, aggression, social withdrawal, academic problems, and behavioral disturbances among adolescents. Therefore, understanding the impact of online gaming on anxiety and violence is essential for early prevention and intervention.

II. NEED FOR THE STUDY

Adolescents spend a substantial portion of their daily time engaging in online gaming, often exceeding healthy limits. Studies indicate that many adolescents devote 20–30 hours per week to gaming, with some exceeding 5–6 hours per day. Such excessive engagement has been associated with poor academic

performance, family conflicts, social isolation, sleep disturbances, anxiety, and aggression.

Despite increasing awareness, online gaming addiction remains under-recognized in clinical and educational settings. Adolescents with gaming addiction are at greater risk of emotional dysregulation, violent behavior, and long-term psychosocial consequences. Therefore, a comprehensive review of existing literature is essential to understand the magnitude of the problem and guide preventive and therapeutic interventions.

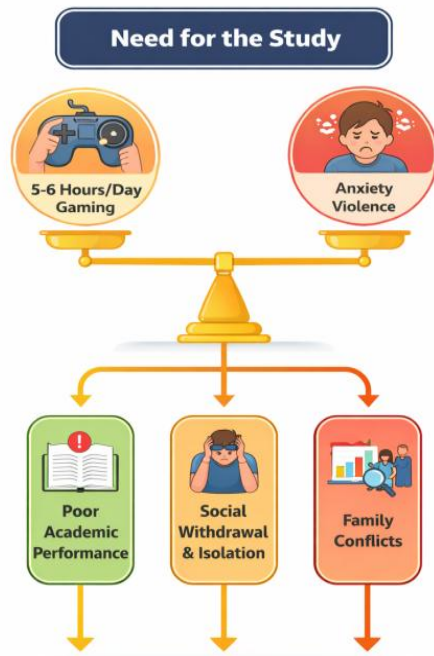


Fig. 1 Need of study for presenting study

II. REVIEW OF LITERATURE

Studies across different countries report varying prevalence rates of online gaming addiction among adolescents, ranging from 3% to more than 30%. Male adolescents are consistently reported to be at higher risk compared to females. Research indicates that adolescents who spend prolonged hours gaming are more likely to experience anxiety symptoms, emotional instability, and aggressive behavior.

Exposure to violent video game content has been associated with increased aggression, reduced empathy, and desensitization to violence. Several studies highlight that adolescents with poor parental supervision, family conflicts, loneliness, and academic stress are more vulnerable to gaming

addiction. Psychological factors such as impulsivity, poor coping skills, and emotional dysregulation further contribute to excessive gaming behavior.

1. Prevalence of Online Gaming Addiction among Adolescents

Studies across different countries report varying prevalence rates of online gaming addiction ranging from 3% to over 30%. Research conducted among school and college students indicates that males are more susceptible than females. Higher prevalence has been noted among adolescents with psychiatric comorbidities such as anxiety, depression, ADHD, and conduct disorders. Smartphone-based gaming has further increased accessibility, contributing to higher addiction rates.

2. Factors Contributing to Online Gaming Addiction

Multiple factors contribute to gaming addiction among adolescents, including:

- Male gender
- Poor parental supervision
- Family dysfunction
- Academic stress
- Loneliness and social isolation
- Poor emotional regulation
- Exposure to violent game content
- Night-time gaming and prolonged screen time
- Psychological factors such as impulsivity, sensation-seeking behavior, and low self-esteem further increase vulnerability.

3. Impact of Online Gaming on Anxiety

Numerous studies demonstrate a significant association between excessive gaming and anxiety disorders. Adolescents addicted to online gaming often experience social anxiety, generalized anxiety, irritability, restlessness, and withdrawal symptoms when unable to play. Gaming is frequently used as a maladaptive coping mechanism to escape real-life stressors, which paradoxically worsens anxiety over time.

4. Impact of Online Gaming on Violence and Aggressive Behavior

Exposure to violent video games has been linked with increased aggressive thoughts, emotional desensitization, and reduced empathy. Adolescents with gaming addiction may exhibit verbal aggression, physical aggression, and oppositional behavior,

particularly when access to gaming is restricted. Neurobiological studies suggest altered dopamine regulation and impaired impulse control in excessive gamers, contributing to violent tendencies.

III. METHODOLOGY

A narrative review design was adopted for the present study. Literature related to online gaming, anxiety, aggression, and behavioral problems among adolescents was collected from national and international peer-reviewed journals, textbooks, reports, and electronic databases. Studies focusing on prevalence, contributing factors, psychological impact, and behavioral outcomes of online gaming were included. Relevant articles were critically reviewed and synthesized to identify key findings and trends.



Fig. 2 Flow chart of methodology

IV. RESULTS

The review revealed a high prevalence of online gaming addiction among adolescents, with a higher incidence observed among males. Excessive gaming was consistently associated with anxiety, irritability, social withdrawal, sleep disturbances, poor academic performance, and aggressive behavior. Contributing factors included prolonged screen time, exposure to violent gaming content, lack of parental supervision, poor family support, loneliness, and emotional dysregulation. Adolescents addicted to online gaming demonstrated significantly higher levels of anxiety and violent tendencies compared to non-addicted peers.

V. DISCUSSION

The findings of this review indicate a strong association between excessive online gaming and adverse mental health outcomes among adolescents. Online gaming is often used as a coping mechanism to escape stress and emotional difficulties, which may temporarily reduce distress but ultimately worsens anxiety and behavioral problems. Exposure to violent gaming content further increases the risk of aggressive behavior. Early identification of gaming addiction and timely intervention are essential to prevent long-term psychological consequences.

IMPLICATIONS FOR NURSING PRACTICE

Mental health nurses play a vital role in early identification, prevention, and management of gaming-related behavioral problems. School and community-based mental health programs should focus on:

- Early screening for gaming addiction
- Parental education and counseling
- Promoting healthy digital habits
- Stress management and coping skills training
- Psychoeducation on anxiety and aggression

VI. CONCLUSION

Online gaming addiction is an emerging public mental health concern among adolescents. Excessive and uncontrolled gaming is strongly associated with anxiety and violent behavior. Preventive strategies such as parental supervision, psychoeducation,

promotion of healthy digital habits, and early mental health interventions are crucial. Mental health nurses play a key role in screening, counseling, and educating adolescents and families to promote balanced and healthy gaming behaviors.

VII. ACKNOWLEDGMENT

The author expresses sincere gratitude to all researchers and scholars whose work contributed to the development of this review article.

REFERENCES

- [1] Apsche, J. A., Bass, C. K., & DiMeo, L. (2011). Mode Deactivation Therapy (MDT) Comprehensive meta-analysis. *The International Journal of Behavioral Consultation and Therapy* Pages 46-53.
- [2] 2. Abdolkhaleghi M, Davachi A, Sahbaie F, Mahmoudi M.(2013). Surveying the association between computer-video games and aggression in male students of guidance schools in Tehran. *Med Sci J Islamic Azad Univ Tehran Med Branch*. Pages 141–145.
- [3] 3. Achenbach TM, Howell CT, Quay HC, Conners CK. (2020) National survey of problems and competencies among four- to sixteen-year-olds: parents' reports for normative and clinical samples.
- [4] 4. Ahmadi K, et.al, (2014). conducted a nationwide descriptive study on factors of internet addiction Pages 467-72.
- [5] 5. Allahverdipour H, Bazargan M (2010). Correlates of video games playing among adolescents in an Islamic country.
- [6] 6. Amini K, Amini A, Pharm D, Yaghoobi M, Amini D.(2017). High School Students Playing Computer Games. *Developmental Psychology* Pages- 189–98.
- [7] 7. Anderson, C. A. & Dill, K. E. (2000). Video games and aggressive thoughts, feelings, and behavior in the laboratory and in life. *Journal of Personality and Social Psychology* Pages - 772–790.
- [8] 8. Anderson, C. A. (2004). Focused on the violent nature of video games for increasing the aggressive behavior in children.
- [9] 9. Andrews & Murphy, Kim et al. (2008). scientific interest in the effects video games have on individuals has also increased. Pages 50-72.
- [10] 10. Apsche, J. A., Bass, C. K., & Houston, M.-A. (2006). effects of addiction to computer games on physical and mental health of students Pages- 544-552.
- [11] 11. Augustrica K, Adama A (2020). Effect of Online Gaming Addiction on Violent Behavior of High School Students in Sorong City.
- [12] 12. Avila G, Santos E (2020). Internet addiction in students from an educational institution in Southern Brazil: prevalence and associated factors. Pages -302-310.
- [13] 13. Aynur A, Özdemir A (2020). The effect of Internet addiction on sleep quality in adolescents. Pages -221-228.
- [14] 14. Babita kayastha, et al. (2018) A descriptive study was conducted at Mangalore on High School students to assess the level of Internet Addiction. Pages- 1403-1406.
- [15] 15. Baggio S , Dupuis M , Studer J,et al (2015). Reframing video gaming and internet use addiction.
- [16] 16. Berridge, K., and Kringelbach, M. (2011). Psychology of adolescents if they are continually accessed and ultimately make they addicted to online games.
- [17] 17. Beutel, M. E., Hoch, C., Wölfling, K. & Müller, K. W. (2011). Prevention efforts must be established that target adolescents who have their first experiences with addictive substances, Pages 77–90.
- [18] 18. Bonnaire C, Phan O(2017). investigate the use and most particularly the representations of the risks associated with the use of video games in young adolescents. Pages-133.
- [19] 19. Buctot DB, Kim N, Kim JJ,2020 Factors associated with smart phone addiction prevalence and its predictive capacity for health-related quality of life among Filipino adolescents. *Child Youth*.
- [20] 20. Buctot DB, Kim N, Kim JJ.(2020) Factors associated with smartphone addiction prevalence and its predictive capacity for health-related quality of life among Filipino adolescents.
- [21] 21. Buseo V, Santamaria J (2018). Internet Gaming Disorder in Adolescents: Personality,

- Psychopathology and Evaluation of a Psychological Intervention Combined With Parent Psycho education. Pages 787-789.
- [22]22. Cameraman L, Richer A (2020). Conducted Study to examine how risk level of video games, measured by maturity and violence level.
- [23]23. Carnagey, N. L., Anderson, C. A., & Bushman, B. A. (2006). Focusing on consequences of short-term video game play. *Journal of Experimental Social Psychology*. Pages 489-496.
- [24]24. Cash D,Rae C (2010). Filipino families to afford video game software and hardware at legitimate prices leads them to turn to unlicensed goods.
- [25]25. Changho Lee&Ocktae Kim (2017). *Eurasian Journal of Educational Research* The 41Pattern of Relationship between Attachment Styles, Gaming Addiction and Empathetic Tendency among Adolescents.
- [26]26. Chen I, Lee Z (2020). The Influence of Parenting Style and Time Management Tendency on Internet Gaming Disorder among Adolescents.
- [27]27. Chen K,Oliffe J(2018). Internet Gaming Disorder: An Emergent Health Issue for Men. Pages 1151-1159.
- [28]28. Cheng Dai, Zixue Tai (2019). Statistical Report on Internet Development in China.
- [29]29. Cheng Dai, Zixue Tai (2021). Smartphone Use and Psychological Well-Being Among College Students in China: A Qualitative Assessment. Pages 1163-1182.
- [30]30. Chin-Siang Ang et al (2018) shows that shyness has been consistently linked to Internet addiction in youth. Pages 25-35.
- [31]31. Chiou w (2018). Induced attitude change on online gaming among adolescents: an application of the less-leads-to-more effect. Pages212-216.
- [32]32. Chiu, S., Lee, J., & Huang, D. (2004). Video game addiction in children and teenagers in Taiwan. *Cyber Psychology & Behavior*,Pages 571–581.
- [33]33. Choi C,Hums M (2018). Impact of the Family Environment on Juvenile Mental Health: eSports Online Game Addiction and Delinquency.
- [34]34. Choo et al. reported a prevalence of among Singaporean youth found a similar rate of 9.9% among Spanish.
- [35]35. Dalamaria T, pinto w et al (2021). Internet addiction among adolescents in a western brazilian amazonian city.
- [36]36. Danilo B. Buctot et al (2020) studied on Factors associated with smart phone addiction prevalence. Pages 17-26.
- [37]37. Davies, Chiu et al (2005). Internet gaming addiction: Current perspectives. *Psychol Res Behav Manag*. Pages-125-137.
- [38]38. Derevensky J, Hayman V (2019). Study was conducted to behavioral addictions is a relatively new concept in psychiatry.
- [39]39. Diraden A,Shorabi M (2015). Problematic internet use/computer gaming among US college students: Prevalence and correlates with mental health symptoms. Page- 1136.
- [40]40. Dong, G., & Potenza, M. N. (2014). Psychological disorders and depression in these groups. *Journal of Psychiatric Research*, Pages 7-11. Pages747-760.
- [41]41. Greenfield D (2018). Treatment Considerations in Internet and Video Game Addiction: A Qualitative Discussion. Page 327-344.
- [42]42. Dymond S,Manus T (2020). Online activities which, if done in person, would normally be considered Troublesome.
- [43]43. Evren B,Dalbudak E,et al (2019). The impact of depression, anxiety, neuroticism, and severity of Internet addiction symptoms on the relationship between probable ADHD and severity of insomnia among young adults. Pages 726-731.
- [44]44. Evren C,Ozen S,(2017). The relationship of social anxiety disorder symptoms with probable attention deficit hyperactivity disorder in Turkish university students; impact of negative affect and personality traits of neuroticism and extraversion. Pages 158-163.
- [45]45. Evren C, Evren B (2019). Relationships of Internet addiction and Internet gaming disorder symptom severities with probable attention deficit/hyperactivity disorder, aggression and negative affect among university students. Pages 413-421.
- [46]46. Fam JY, Scand J Psychol. (2018).

Prevalence of internet gaming disorder in adolescents: A meta-analysis across three decades Page 524-531

- [47]47. Ferreira F , Bambini B,et al (2021). Predictors of gaming disorder in children and adolescents: a school-based study. Pages 289-292.