



## DIGITAL GAMING ADDICTION AMONG ADOLESCENTS STUDENTS OF ST. COLUMBA'S COLLEGE, HAZARIBAGH.

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**ABSTRACT** Digital gaming addiction has become a growing concern among adolescents, with potential gender differences in prevalence, risk factors, and consequences. The aims of the study to provide an outcome of existing tools on digital gaming addiction among adolescents, focusing specifically on gender differences. By examining key tools, the study explores the prevalence of gaming addiction among male and female adolescents, gender-related risk factors, and the differential impact of gaming addiction on various domains of well-being. The findings highlight the importance of considering gender-specific factors in understanding and addressing digital gaming addiction among adolescents.

**KEYWORDS :** digital gaming addiction, adolescents, gender differences, prevalence, risk factors, consequences

### INTRODUCTION

Digital gaming has gained significant popularity among adolescents, with concerns arising regarding the potential adverse effects of excessive gaming and addiction. The study aims to provide an expanded overview of the current status on digital gaming addiction among adolescents, with a particular focus on gender differences. Understanding the unique experiences and challenges faced by male and female adolescents in relation to gaming addiction can inform targeted prevention and intervention efforts.

### Interventions For Digital Gaming Addiction

Addressing digital gaming addiction among adolescents requires a comprehensive approach involving prevention and treatment strategies. Prevention interventions aim to promote responsible gaming behaviour and educate adolescents, parents, and educators about the risks and benefits of gaming. Such interventions may include school-based programs, parental involvement, and public health campaigns. Treatment approaches range from individual therapies, such as cognitive-behavioural therapy and motivational interviewing, to family therapy and support groups. In severe cases, pharmacological interventions may be considered, although further research is needed to establish their efficacy (Griffiths & Meredith, 2009). However, the effectiveness of existing interventions remains limited, underscoring the necessity for further research and the development of evidence-based guidelines.

### Prevalence Of Digital Gaming Addiction

Numerous studies have examined the prevalence of digital gaming addiction among adolescents, revealing potential gender differences. While some studies have reported higher prevalence rates of gaming addiction among males, it is important to consider contextual and cultural factors that may influence these findings. For example, a study by Hussain and Griffiths (2009) found that the prevalence of gaming addiction was higher among males in the United Kingdom, while a study by Gentile et al. (2011) reported similar prevalence rates for males and females in the United States. Further research is needed to better understand the nuanced gender differences in gaming addiction prevalence across diverse populations.

### Gender-related Risk Factors

Gender-related risk factors play a significant role in the development of gaming addiction among adolescents. These risk factors encompass a range of factors, including socialization processes, gender-specific norms, and differences in gaming preferences and motivations. Males may be more susceptible to gaming addiction due to their engagement in competitive and immersive gaming, which may lead to higher levels of involvement and difficulty disengaging. On the other hand, females may be more influenced by social interaction and relationship-related factors in gaming, such as forming connections with online communities. Understanding these gender-specific risk factors can inform the development of tailored prevention strategies and interventions.

### Consequences Of Digital Gaming Addiction

Digital gaming addiction can have a significant impact on the well-being of adolescents across various domains. While research specifically examining gender differences in the consequences of gaming addiction is limited, some studies suggest that males may

experience more pronounced academic and social impairments. For instance, excessive gaming may negatively affect males' academic performance, social relationships, and engagement in other activities. Females, on the other hand, may be more susceptible to emotional and psychological difficulties resulting from gaming addiction. Further investigation is needed to explore the differential impact of gaming addiction on male and female adolescents across various domains of well-being.

Digital gaming addiction can have detrimental consequences on various domains of adolescent life. Academic impairment, such as decreased school performance and increased school absenteeism, has been linked to excessive gaming (Gentile et al., 2011). Excessive gaming also contributes to sedentary behavior and reduced engagement in physical activities, potentially leading to obesity and related health problems. Disrupted sleep patterns and irregular sleep schedules are common among adolescents with gaming addiction, leading to fatigue and daytime sleepiness. Moreover, excessive gaming has been associated with increased aggression, social isolation, and psychological distress, including symptoms of depression and anxiety (Griffiths & Meredith, 2009; Rehbein & Mößle, 2013). Long-term consequences may extend to the development or exacerbation of mental health disorders, such as attention-deficit hyperactivity disorder (ADHD) (Rehbein et al., 2015).

**Gender-Specific Interventions:** Interventions for digital gaming addiction among adolescents should consider gender-specific factors to enhance their effectiveness. Prevention efforts can involve promoting healthy gaming habits, providing gender-tailored education on responsible gaming, and addressing gender-related risk factors. For instance, interventions may focus on helping males develop alternative coping strategies for competitiveness and balancing gaming with other activities. For females, interventions may emphasize strategies for managing social connections and maintaining a healthy balance between online and offline life. Treatment approaches, such as cognitive-behavioural therapy and family therapy, can be adapted to address the unique needs and challenges faced by male and female adolescents in the context of gaming addiction.

### AIMS

The aims of the presents Study are:

1. Is there any digital gaming addiction in the adolescent student at the colleges in Hazaribagh.
2. In the absence of a valid digital gaming addiction scale, the present study works as a tool for the utility of the same.

### Hypothesis

On basis of above review of literature it is assumed that boys will be more addicted to digital gaming than girls.

### Tools

In the present study I have used the Game Addiction Scale (Jeroen S. Lemmens, Patti M. Valkenburg & Jochen Peter, 2009) which is a 21-item measure of addiction to electronic games. Jeroen et al. (2009) conducted extensive psychometric analyses to evaluate the reliability and validity of the GAS-A. These analyses included examining internal consistency, test-retest reliability, convergent validity, and

discriminant validity. The results demonstrated satisfactory psychometric properties, indicating that the GAS-A is a reliable and valid tool for assessing gaming addiction among adolescents. The GAS-A holds significant implications for research, clinical practice, and preventive interventions targeted at gaming addiction among adolescents. It enables researchers to gather accurate data on the prevalence, risk factors, and consequences associated with gaming addiction in this specific population. Clinicians can utilize the GAS-A to identify at-risk individuals, inform treatment plans, and monitor progress. Additionally, the GAS-A can guide the development of educational programs and prevention strategies to promote responsible gaming habits and address the potential negative effects of gaming addiction. The authors created 21 items representing seven Diagnostic and Statistical Manual of Mental Disorders (DSM)-based criteria for game addiction that have been identified in earlier research. Three items for each of the following criteria were constructed.

The Gaming Addiction Scale for Adolescents (GAS-A) consists of seven criteria that assess different dimensions of gaming addiction.

These criteria are used to evaluate the severity of gaming addiction among adolescents. The seven criteria in the GAS-A are as follows:

1. Preoccupation: This criterion measures the extent to which an individual is preoccupied with gaming. It assesses the amount of time and mental energy dedicated to gaming, as well as thoughts and fantasies about gaming activities.
2. Withdrawal: This criterion examines the presence of withdrawal symptoms when not engaged in gaming. It evaluates the psychological and emotional experiences that occur when gaming is discontinued or restricted, such as restlessness, irritability, or a strong desire to engage in gaming.
3. Tolerance: This criterion assesses the need for increasing amounts of gaming to achieve the desired level of excitement or satisfaction. It examines whether individuals progressively spend more time gaming or engage in gaming with higher intensity to maintain the same level of enjoyment.
4. Escape from reality: This criterion focuses on using gaming as a means to escape from real-life problems, stress, or negative emotions. It assesses whether individuals use gaming as a coping mechanism to avoid facing or addressing challenges in their lives.
5. Conflict: This criterion examines the occurrence of conflicts or problems resulting from excessive gaming. It assesses the negative impact of gaming on various life domains, such as relationships, academic performance, or occupational functioning.
6. Loss of control: This criterion evaluates the perceived loss of control over gaming behavior. It assesses the extent to which individuals feel unable to regulate or limit their gaming activities, despite negative consequences or attempts to cut back.
7. Negative consequences: This criterion focuses on the negative consequences associated with gaming. It assesses the adverse effects of excessive gaming, such as social isolation, neglect of responsibilities, or physical health issues.

These seven criteria collectively provide a comprehensive assessment of gaming addiction among adolescents, covering different aspects of behavior, thoughts, and consequences associated with excessive gaming. Each criterion is typically measured using multiple items or questions, and the responses are scored to determine the severity or presence of gaming addiction based on established thresholds or cutoff points.

The test consists of 21 items questionnaire related to above previously identified criteria. Three for each seven above criteria, According to Young (1998) if the criteria met during the last six months addiction is present.

**Scoring**

The scoring of the Gaming Addiction Scale for Adolescents (GAS-A) developed by Jeroen et al. (2009) involves calculating scores for each subscale and obtaining a total score. The scale consists of multiple subscales that assess different dimensions of gaming addiction, including preoccupation, excessive use, withdrawal symptoms, loss of control, and negative consequences. There are two approaches for determining addiction.

Monothetic approach: according to this approach if all the seven criteria are to be present, there is a game addiction, a criterion will be met if in five-point continuum scale from 1 to 5 (never, rarely,

sometimes often and very often) one is scores more than 3.

Polythetic approach: in this approach an addiction will be present when out of seven four criteria is positive.

Here is a general outline of the scoring process for the GAS-A:

1. Preoccupation subscale: Sum the scores of the items related to preoccupation with gaming. Higher scores indicate a higher level of preoccupation with gaming.
2. Excessive use subscale: Sum the scores of the items related to excessive use of gaming. Higher scores indicate a higher level of excessive gaming behavior.
3. Withdrawal symptoms subscale: Sum the scores of the items related to withdrawal symptoms experienced when not gaming. Higher scores indicate a higher level of withdrawal symptoms associated with gaming.
4. Loss of control subscale: Sum the scores of the items related to loss of control over gaming behavior. Higher scores indicate a higher level of perceived loss of control.
5. Negative consequences subscale: Sum the scores of the items related to negative consequences of gaming. Higher scores indicate a higher level of negative impacts resulting from gaming.
6. Total score: Calculate the total score by summing the scores of all the subscales. The total score provides an overall measure of gaming addiction, with higher scores indicating a higher likelihood of gaming addiction.

**Sample**

I have applied the above 21-item scale using digital form to collect data for college students at St. Columba's College, Hazaribagh. The College is very old and reputed in the district and accredited by UGC and has been affiliated to the Vinoba Bhave University, Hazaribagh, Jharkhand, India since 1992.

**Data**

In the present study I have applied the scale on adolescent age between 15 to 21 and above, out of total 112 respondents Girls were N=45 (40.17%) and boys were N=67 (59.82%). Data is collected also for Name, Age, Gender, mother's occupation, place, and date to know the cultural and economic status of sample. Sample students are from urban area and almost all mothers are home maker. I have collected the data during their summer vacation of 2023.

Table 1: Results

Polythetic Scoring	At score of 3 and above	At score of 4 and above	Monothetic Scoring
Male Addicted	41(70%)	17(25.37%)	13(19.40%)
Female Addicted	22(48.89%)	7(15.56%)	2(4.44%)

Table 2: Age Distribution

Age	15-16	17-18	19-20	21 =<	Total
Male	1	16	27	23	67
Female	0	8	23	14	45

Table 3: Anova: Single Factor

SUMMARY						
Groups	Count	Sum	Average	Variance		
Male Score	67	2870	42.8358209	227.2908186		
Female Score	45	1629	36.2	135.0727273		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1185.383	1	1185.382756	6.225632642	0.014077	3.927394
Within Groups	20944.39	110	190.4035821			
Total	22129.78	111				

**DISCUSSION**

The ANOVA (Table 3) of male and female total score is suggested that there is not all the population means are equal as P-value is less than 0.05 level, and F Statistic is greater than F critical which shows that the difference between two groups is exist. It means females are less addicted than males which is also indicated at the results in table numbers 2 to 4.

In the current study I have used 3(sometimes) and above score to meet

an item to be positive in monothetic and also examine 3 and above and 4(often) and above score in polythetic approach.

According to our data, the percentage of addicted boy adolescent is around 20%, but it could be as high as 70%, and in the case of girls around 2% and could be high as 50% depending on the method used to determine addiction.

In the polythetic method when I considered a score of 4 and above it was 25% in boys and 17% in girls which was considerably high compared to monothetic method of scoring.

The polythetic format requires addicts to meet half or more of the proposed criteria, while the monothetic format requires meeting all of the criteria. Although the DSM uses a polythetic format for diagnosing pathological gamblers, there are two reasons why a monothetic approach may provide a better estimate of addicted students. Firstly, the polythetic format may lead to an overestimation of addicted students. Researchers have reported high numbers of addicted players using this format; 16% (Griffiths 1997), 20% (Griffiths & Hunt, 1998), and 39% (Charlton & Danforth, 2007). When Charlton and Danforth (2007) applied a monothetic format to their sample, they found that only 1.8% of their respondents could be categorized as addicted, which is similar to the estimated percentage of pathological gamblers (Walker & Dickerson, 1996). Secondly, several researchers have stated that negative life consequences are crucial in distinguishing addiction from habits (e.g., LaRose, Lin, & Eastin, 2003; Orford, 1985). The criteria conflict, withdrawal, and problems indicate negative life consequences and pathological tendencies (Seay & Kraut, 2007). Since the monothetic format requires meeting all criteria for game addiction, it automatically includes endorsement of criteria for negative life consequences, allowing for a more accurate distinction between habitual behaviour and addiction.

Regardless of the method used to determine the number of addicts, these self-reported outcomes should only be considered as an indication of the prevalence of game addiction at present.

## CONCLUSION

Digital gaming addiction is a significant issue among adolescents, and understanding gender differences is crucial for effective prevention and intervention. While research on gender differences in gaming addiction is still evolving, current evidence suggests that there may be disparities in prevalence, risk factors, and consequences between male and female adolescents. Further research is needed to gain a deeper understanding of these gender differences and their implications for intervention. By considering gender-specific factors, professionals, educators, and policymakers can develop targeted strategies to address digital gaming addiction and promote healthier gaming behaviours among adolescents.

## Findings

1. There exists gaming addictions among the College Students and needs to be treated.
2. Boys are more addicted than girls thus need attention in this area.

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