

CASE REPORT

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## From Gaming to Gambling: A Case Series on The Behavioural And Clinical Trajectory of Adolescents Transitioning From Digital Games to Pathological Gambling

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### ABSTRACT

**Background:** The convergence of digital gaming and online gambling is increasingly recognised as a behavioural continuum, particularly among adolescents. Features such as loot boxes, fantasy sports betting, and gamified reward systems can act as gateways, facilitating a transition from recreational gaming to pathological gambling. This progression is often under-recognised in clinical settings, especially in low- and middle-income countries like India.

**Objective:** To illustrate the clinical and behavioural trajectory of adolescents transitioning from gaming to gambling, and to explore the role of neurodevelopmental vulnerabilities, digital access, and psychosocial contexts in this evolution.

**Method:** This case series presents three adolescents from a child and adolescent psychiatry clinic in India, each exhibiting a transition from online gaming to covert gambling. Detailed case histories were collected, including behavioural patterns, psychiatric assessments, and management plans. Standardised rating scales were used to screen for ADHD, emotional dysregulation, impulsivity, and conduct traits.

**Results:** All three adolescents displayed progression from gaming to real-money gambling via mobile applications or fantasy sports platforms. Case 1 involved a 14-year-old male with ADHD and conduct traits; Case 2, a 16-year-old female with emotional dysregulation and subthreshold attentional symptoms; and Case 3, a 15-year-old male with impulsive conduct traits and reactive anxiety. Each case demonstrated significant functional impairments, including academic decline, family conflict, and emotional distress. None had prior psychiatric consultations, underscoring gaps in early identification.

**Conclusion:** This series underscores a concerning trend of adolescents slipping from gaming into gambling, facilitated by impulsivity, emotional vulnerability, and an unregulated digital ecosystem. Clinical vigilance, early screening, digital literacy, and regulatory reform are essential to mitigate this emerging public health concern. Further research is needed to develop culturally appropriate tools and interventions in low-resource settings.

**Keywords:** Adolescents, Gaming Disorder, Gambling Disorder, Impulsivity, Behavioural Addiction, ADHD.

### INTRODUCTION

Adolescence is a critical developmental period marked by risk-taking, evolving identity, and increasing digital immersion. While online gaming is often perceived as a recreational activity, it may become maladaptive when it incorporates gambling-like reward mechanisms-such as loot boxes, in-game betting, and spin-the-wheel features<sup>(1)</sup>. These mechanisms activate reward pathways similar to those seen in pathological gambling and may act as behavioural gateways to real-money gambling<sup>(2)(3)</sup>.

Neurobiological studies have demonstrated that both gaming and gambling engage shared pathways related to dopamine release, impulsive decision-making, and maladaptive reward learning<sup>(4)</sup>. Psychosocial factors such as peer influence, novelty-seeking, and emotion regulation difficulties further modulate vulnerability, especially in adolescents navigating academic and familial pressures<sup>(5)</sup>. These overlaps raise concerns about a blurred boundary between digital gaming and gambling-particularly when monetary incentives are embedded in play.

India's expanding digital economy, widespread smartphone access, and loosely regulated online platforms have further blurred the lines between gaming and gambling. Although much of the existing literature addresses gaming disorder or gambling disorder in isolation, there is limited clinical evidence from low- and middle-income countries examining the transitional trajectory from gaming to gambling in adolescents. This case series seeks to address that gap by presenting three distinct adolescent cases from a child and adolescent psychiatry clinic in India.

### **Case 1: 14-year-old Male with ADHD and Conduct Traits**

#### **Case History**

A 14-year-old male studying in Class 9 at an English-medium CBSE school, residing in an urban, middle-income nuclear family, presented with a 10-month history of excessive mobile gaming and online gambling, accompanied by increasing irritability, defiance, and academic decline. He had a longstanding history of hyperactivity, inattention, and poor impulse control, first observed in early childhood. Teachers consistently reported classroom disruption, impulsive speech, and incomplete tasks. Although ADHD was suspected by a school counsellor at age nine, no formal assessment or intervention was pursued.

Over the preceding year, he developed a marked preoccupation with mobile games such as PUBG and BGMI, reportedly spending up to six hours per day on his device. Initially allowed to make in-app purchases through his mother's Google Pay account, he subsequently began conducting unauthorised transactions. During the IPL season, his behaviour escalated to real-money fantasy sports betting via Telegram groups and Paytm.

Behavioural disturbances intensified during this period, including physical aggression when denied phone access, school absenteeism, forgery of parental signatures, and theft of small amounts of money from home. Teachers and peers noted increased bullying and manipulation, further impairing his academic and social functioning.

There was no history of prior psychiatric consultation or medical illness.

#### **Family and Personal History**

- No psychiatric history in family; father described as emotionally distant
- Normal birth and development
- Frequent academic and behavioural complaints since primary school

#### **Examination and Screening**

- **Conners 3 (Parent and Teacher):** Clinically significant inattention and hyperactivity
- **Vanderbilt Scale:** Positive for ADHD-Combined Presentation and conduct traits
- **MSE:** Dishevelled, fidgety, irritable, preoccupied with gaming; impaired insight and judgment

#### **Diagnosis (DSM-5)**

1. Attention-Deficit/Hyperactivity Disorder - Combined Presentation
2. Gambling Disorder (Moderate)
3. Other Specified Disruptive Behaviour Disorder (with conduct features)

#### **Management Plan**

- Psychoeducation for parents and patient
- Initiated low-dose methylphenidate with monitoring
- Weekly behavioural therapy (impulse control, reinforcement strategies)
- Structured digital hygiene plan with restricted screen time
- Family therapy for behavioural boundaries and monitoring

### **Case 2: 16-year-old Female with Emotional Dysregulation and Subthreshold ADHD Traits**

#### **Case History**

A 16-year-old female studying in Class 11 at a state board school, residing in an urban, lower-middle-income family, presented with a six-month history of low mood, covert engagement with gambling applications, academic decline, and

emotional outbursts. Her difficulties began during the COVID-19 lockdown, when she started playing casual mobile games. Over time, she progressed to using “spin-the-wheel” style apps that offered cash prizes, and began making unauthorised in-app purchases via her mother’s e-wallet.

Despite expressing guilt, she continued the behaviour in secrecy. Over the preceding three months, she became socially withdrawn, exhibited school avoidance, and displayed heightened emotional reactivity. She reported compulsive checking of gambling apps, difficulty concentrating, and passive feelings of hopelessness, though she denied suicidal ideation.

Her school records revealed longstanding concerns regarding inattentiveness, daydreaming, and poor task persistence dating back to middle school, although no formal psychological evaluation had been conducted. There was no prior history of psychiatric illness.

She had a past medical history of mild iron-deficiency anaemia, which had been treated.

#### **Family and Personal History**

- Father described as authoritarian; no family psychiatric history
- Normal development
- Academically average; currently failing two subjects
- Emotionally sensitive, socially withdrawn

#### **Examination and Screening**

- **Adolescent Self-Report:** Elevated emotional dysregulation and impulsivity
- **Brief ADHD Rating:** Subthreshold inattentive symptoms
- **MSE:** Flat affect, low mood, ruminative thoughts of guilt, partial insight

#### **Diagnosis (DSM-5)**

1. Adjustment Disorder with Depressed Mood
2. Gambling Disorder (Mild, Online-based)
3. Attentional Difficulties (subthreshold for ADHD)
4. Emotion Dysregulation (trait-level)

#### **Management Plan**

- Supportive psychotherapy (DBT-informed emotion regulation)
- Psychoeducation and digital behaviour monitoring with parents
- Academic remediation via school liaison
- Monitoring for progression to full ADHD diagnosis

### **Case 3: 15-year-old Male with Impulsive Conduct Traits**

#### **Case History**

A 15-year-old male studying in Class 10 at an English-medium ICSE school, residing in a suburban, upper-middle-class family, presented with a three-month history of school refusal, covert online gambling, deceptive behaviour, and anxiety symptoms. He was introduced to fantasy sports betting by peers and began using a relative’s mobile number to place small-stake bets on cricket matches via the Dream11 platform. Early monetary wins reinforced the behaviour, leading to escalation of betting activity and eventual losses totalling approximately ₹12,000.

In an attempt to recover his losses, he borrowed money from classmates and concealed his actions through repeated lying. The behaviour came to light when a peer’s parent contacted school authorities. Following disclosure, he became tearful, anxious, and avoidant of school, reporting physical symptoms such as palpitations and abdominal discomfort, along with feelings of guilt and worthlessness.

His behavioural history included minor rule violations such as lying, skipping assignments, and manipulating peers, although he had never faced formal disciplinary action. No aggressive acts or substance use were reported. There was no history of prior psychiatric consultation or chronic medical illness.

#### **Family and Personal History**

- Paternal uncle with alcohol use disorder
- Parents described as permissive

- Average student, highly peer-reliant and sensation-seeking

### Examination and Screening

- **SDQ:** Borderline conduct and hyperactivity scores
- **Impulsivity and Risk Inventory:** Elevated impulsivity
- **MSE:** Constricted affect, anxious, self-critical, insight preserved

### Diagnosis (DSM-5)

1. Gambling Disorder (Moderate)
2. Other Specified Conduct Disorder (impulsive type)
3. Generalised Anxiety Disorder (Reactive)

### Management Plan

- Cognitive-behavioural therapy for gambling and anxiety
- Motivational interviewing for behavioural change
- Family-based interventions to reinforce limits
- Monitoring for conduct escalation or mood instability.

## DISCUSSION

This case series highlights distinct trajectories through which adolescents transition from online gaming to pathological gambling. In each case, the initial behaviour was embedded within socially accepted gaming platforms—such as PUBG, Candy Crush, and Dream11—before progressing to covert gambling with real monetary stakes. This progression supports the theory that gaming and gambling exist along a behavioural continuum, with gamified features acting as a potential gateway<sup>(6)</sup>.

Neurodevelopmental vulnerabilities were evident in all three cases. Case 1 involved clinically diagnosed ADHD and conduct traits. Case 2 exhibited emotional dysregulation and subthreshold attentional symptoms, while Case 3 showed impulsive conduct patterns and reactive anxiety. These findings are consistent with literature linking executive dysfunction and poor self-regulation with behavioural addictions<sup>(7)(3)</sup>.

Contextual factors unique to India—such as unregulated digital environments, widespread access to payment apps, and the glamorisation of gambling during sports events—further enabled these behaviours. Notably, none of the adolescents had previously received psychiatric care, indicating gaps in early detection and intervention.

The functional impairments were significant, including academic decline, strained family relationships, and emotional distress. In two cases, gambling served as a maladaptive coping mechanism. In the third, it triggered acute anxiety and school refusal upon discovery. These findings align with DSM-5 criteria for Gambling Disorder, including impaired control, preoccupation, and persistence despite negative consequences.

Together, these cases illustrate that the intersection of online gaming and gambling in adolescents is not merely a byproduct of excessive screen time but reflects a complex interplay of neurodevelopmental vulnerabilities, digital affordances, and sociocultural permissiveness. In the absence of early psychiatric screening and digital literacy education, at-risk adolescents may unknowingly traverse the continuum from gaming to gambling, accumulating psychological and functional harms along the way.

These findings underscore the need for integrative prevention strategies—spanning schools, families, clinicians, and policymakers—that can identify at-risk youth, regulate content, and promote safer digital environments. Further research is warranted to develop culturally adapted diagnostic tools and early intervention models specific to low- and middle-income contexts such as India, where digital access continues to outpace mental health literacy.

## ETHICAL CONSIDERATIONS

Written informed consent was obtained from the parents or legal guardians of all participants, and identifying details have been anonymised in accordance with ethical standards.

## CONFLICT OF INTEREST

No conflict of interest

## CONCLUSION

This case series illustrates how adolescent pathological gambling may emerge from digital gaming behaviours, particularly when compounded by neurodevelopmental vulnerabilities and minimal parental or institutional oversight. The covert nature of online gambling, ease of financial access, and lack of awareness among caregivers contribute to underdiagnosis and delayed intervention. Clinicians should be vigilant in assessing for gambling behaviours in adolescents presenting with impulsivity, conduct issues, or mood disturbances. A multi-pronged approach—encompassing digital literacy, early screening, school engagement, and regulatory reform—is essential to address this growing behavioural health concern.

## REFERENCES

1. Ferguson CJ, Coulson M, Barnett J. A meta-analysis of pathological gaming prevalence and comorbidity with mental health, academic and social problems. *J Psychiatr Res* [Internet]. 2011;45(12):1573–8.
2. Wood R, Williams R. A comparative profile of the Internet gambler: Demographic characteristics, game-play patterns, and problem gambling status. *New Media Soc*. 2011 Nov 1;13:1123–41.
3. Mark G. Problem gambling and gambling addiction are not the same. *J Addict Depend*. 2016;2(1):1–3.
4. Dong G, Potenza MN. A cognitive-behavioral model of Internet gaming disorder: Theoretical underpinnings and clinical implications. *J Psychiatr Res* [Internet]. 2014;58:7–11.
5. Griffiths M, Kuss D. Adolescent social media addiction (revisited). *Educ Heal*. 2017 Jan 1;35:49–52.
6. Wardle H, Reith G, Langham E, Rogers RD. Gambling and public health: We need policy action to prevent harm. *BMJ* [Internet]. 2019;365(May):1–5.
7. Ioannidis K, Hook R, Wickham K, Grant JE, Chamberlain SR. Impulsivity in Gambling Disorder and problem gambling : a meta-analysis. *Neuropsychopharmacology* [Internet]. 2019;(February).