

# Evaluating Interventions Based On CBT, Technology Integration, Psychoeducation, And Family Support For The Management Of Adolescent Internet Gaming Disorder

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## Abstract

Internet Gaming Disorder (IGD) has negative effects on adolescents, particularly impacting their family and social relationships, and is potentially associated with comorbid psychological and health issues. The primary goal is to assess the effectiveness of psychotherapeutic interventions in mitigating IGD. A systematic review was conducted within the past five years, utilizing databases such as Scopus, ProQuest, SAGE, and Springer, resulting in the selection of 23 empirical articles using PRISMA that focus on interventions of IGD. This comprehensive analysis aims to identify effective strategies for addressing IGD among adolescents, with an emphasis on the interplay of technology, cognitive-behavioral therapy, psychosocial support, and family dynamics. Psychotherapeutic interventions, particularly cognitive-behavioral therapy (CBT), have been effective in reducing IGD symptoms. Additionally, incorporating psychoeducation, technology and involving family in the treatment process showed considerable improvements in managing IGD. The study advocates for the development of combination of recent interventions to create effective treatment strategies. Long-term therapies with regular follow-ups and early intervention are also effective in managing IGD. Other demographic variables such as gender, living arrangement, game genre can be considered in future studies.

**Keywords:** psychotherapeutic interventions, internet gaming disorder (IGD), adolescents

## INTRODUCTION

The inclusion of IGD as an official diagnosis in the 11th Revision of the International Classification of Diseases (ICD-11) and the criteria outlined by the DSM-5 highlights the growing recognition of IGD as a significant mental health concern. IGD is characterized by persistent use of the internet to play games, often leading to clinically significant impairment or distress. It involves a lack of self-control, prioritizing gaming over other activities, and continuing to play despite harmful effects. The repercussions of problematic gaming extend to diminished psychological well-being, subpar academic performance, and various psychosocial challenges. With the rapid increase in internet usage, particularly among adolescents, understanding the prevalence and associated factors of IGD in specific cultural contexts, such as India, becomes crucial for effective prevention and intervention (Yadav, 2020; Wang, Li & Yu, 2022; Van Rooij et al., 2014).

Recent studies shed light on the prevalence and risk factors associated with IGD in adolescents, emphasizing the need for targeted interventions. Notably, an investigation among 400 high school students in India uncovered a prevalence rate of 3.5%, with a higher incidence among male students (Undavalli et al., 2014). Such gender disparities align with global trends, highlighting the specific vulnerability of male youths to IGD (Teng et al., 2020). The multifaceted impact of IGD, including its association with academic challenges, mental health issues, and social implications, underscores the urgency of effective interventions. As India witnesses an upward trajectory in internet gaming, interventions tailored to cultural nuances and demographic characteristics become imperative. Thus, a systematic review focusing on recent studies post-2018 aims to evaluate the efficacy of psychotherapeutic interventions for IGD.

**Table 1.** Inclusion and exclusion criteria with PICOS

	Inclusion	Exclusion
Population	Adolescents	Children, adults, young adults

Intervention	Psychotherapeutic interventions	Medicinal treatment
Subtype	Cross-sectional study longitudinal studies	Systematic or literature reviews
Publication Type	Peer-reviewed original studies non-peer reviewed studies	Not published articles and books
Publication year	2018–2023	Pre 2018
Language	English	Non-English Language

In this context, the present systematic review concentrates on the efficacy of psychotherapeutic interventions for IGD, considering the unique challenges posed by the rapid growth of internet gaming. By synthesizing findings from recent studies, the review aims to provide a comprehensive understanding of the effectiveness of psychotherapeutic approaches in addressing IGD among adolescents. The nuanced exploration of cultural factors, prevalence rates, and associated psychosocial aspects will contribute valuable insights to the field, guiding future initiatives for prevention and intervention.

Internet Gaming Disorder is much more common and not necessarily related to the general population's awareness, it seems unclear how Internet Gaming Disorder is being addressed and managed in adolescents, despite common presentations to teachers. We therefore aimed to identify whether any evidence-based interventions exist for use with adolescents who have not accessed healthcare services; to assess the quality of the evidence and identify gaps for future research. This review encompasses two specific research questions:

1. What evidence exists for direct interventions with adolescents to reduce or prevent Internet Gaming Disorder or improve other outcomes, including reduction in psychological distress, improved mental health, improved emotional regulation, problem-solving, and coping skills among adolescents?
2. What is the feasibility and effectiveness of interventions addressing Internet Gaming Disorder with adolescents in various settings?

## RESEARCH METHOD

A systematic review was conducted to synthesize relevant literature on the efficacy of psychotherapeutic interventions for IGD. The assessment of study quality employed criteria from the Centre for Reviews and Dissemination, the Joanna Briggs Institute, and the PRISMA checklist. In establishing inclusion and exclusion criteria, the Population, Intervention, Comparison, Outcome, and Study Design (PICOS) approach was employed which is mentioned in table 1. The review focused on studies involving different psychotherapeutic interventions in internet gaming disorder. Only studies with robust research designs were included, ensuring a comprehensive and reliable overview of the current literature on this topic. The protocol for this systematic review was registered with the International Prospective Register of Systematic Reviews (PROSPERO; Registration No: CRD420251118184).

### *Search strategy and inclusion criteria for systematic reviews*

The initial phase of this study involved a comprehensive literature search using prominent electronic databases, namely SCOPUS, PROQUEST, SAGE, and SpringerLink. To ensure a thorough exploration of relevant studies, the reference lists of identified papers were also scrutinized to uncover additional articles. In adherence to the inclusion criteria, selected studies had to be written in English and published within the preceding five years (2018–2023). Both quantitative and qualitative research designs were considered, and the study participants had to be adolescents. The search terms employed for this exploration encompassed key terms such as "game addiction," "video game," "internet gaming disorder," "therapy," "impact," "determinant," "component," "intervention," "influence," and "effect." The specified inclusion and exclusion criteria, delineated in Table 1, were pivotal in the selection process, guiding the identification of relevant articles obtained through the systematic search methodology. This meticulous approach was undertaken to ensure the inclusion of studies that met specific criteria, contributing to the robustness and reliability of the literature review.

### Study selection

A meticulous examination of the entire body of texts was conducted, taking into account factors such as publication year and database source. The population under scrutiny, specifically adolescents, was subjected to a thorough investigation, with a focus on identifying key elements influencing online game disorder. To ensure a comprehensive assessment, authors independently scrutinized the complete contents, abstracts, and titles of the identified articles. The inclusion or exclusion of potential articles in the review was determined through a rigorous evaluation process. Criteria for inclusion encompassed relevance to the subject matter, the overall quality of the research, the strength of evidence presented, and adherence to the specified criteria outlined in the study parameters. Any disagreements that arose during this process were amicably resolved through thoughtful discussion. This methodical approach ensured a robust and rigorous assessment of the selected studies, contributing to the reliability and validity of the synthesized evidence in the review.

### Data extraction

Data from included studies were extracted into a pro forma developed for this review (see Table 2). The following information was extracted: author/year/country of publication; study design; study aims; sample sizes and findings.

**TABLE 2.** Summary of studies

Study (Author & Year)	Aim	Study Design	Sample Size	Outcome and Findings
Pakpour et al. (2022)	Introduce a mobile app-based educational intervention, HAPPYTEEN, designed to treat Internet Gaming Disorder (IGD) among Iranian adolescents.	Randomized controlled trial	206 high-school adolescents aged 13 to 18 years	The app-based intervention, based on TTM and CBT principles, spans eight sessions over two months, resulting in a moderate reduction in symptoms of IGD.
Nordh et al. (2021)	Investigate the efficacy of therapist-guided internet-delivered cognitive-behavioral therapy (ICBT) for Social Anxiety Disorder (SAD) in youths.	Single-masked, randomized clinical trial	103 Children and adolescents 10 to 17 years of age	ICBT demonstrates superiority over internet-delivered supportive therapy (ISUPPORT) in reducing the severity of SAD symptoms.
Wang, Li & Yu (2022)	Introduce a novel strategy targeting reward sensitivity and rash impulsiveness simultaneously in treating IGD.	Cluster randomized clinical trial	100	The intervention results in significantly lower IGD scores compared to single-factor interventions.
Lindenberg, Kindt & Szász (2022)	Demonstrate the effectiveness of a CBT-based intervention in reducing symptom severity and procrastination among at-risk adolescents related to IGD.	Randomized controlled trial	80	The CBT-based intervention leads to significant improvements in symptom severity and procrastination.
Pornnoppadol et al. (2020)	Investigate the efficacy of various psychosocial interventions for IGD among adolescents, including S-TRC, PMT-G, and basic psychoeducation.	Quasi-experimental study	120	Both S-TRC and PMT-G interventions prove effective and superior to basic psychoeducation alone in addressing IGD.
Zhang et al. (2020)	Explore the effects of group counseling grounded in interpersonal activities for college students with computer gaming addiction.	Experimental study	27	Significant reductions in CGAI scores, BDI, SAS, and negative cognition in social settings are observed in the experimental group compared to the control group.
Godean et al. (2023)	To examine the effects of a mindfulness-informed conflict transformation intervention on teachers' and students' approach toward engaging with discussions on controversial issues in the classroom on behaviour improvement	Cluster-randomized controlled trial	400 students from four Arab Israeli schools	Teachers in the experimental condition showed significantly higher levels of mindfulness in conflict, motivation to engage students in discussions, and democratic conduct in such discussions compared to the control group.
Li et al. (2019)	Develop the Game Over Intervention (GOI), a parent-based program designed to prevent problematic gaming.	Randomized controlled trial	362	Tentative evidence for the effectiveness of GOI in mitigating gaming-related problems is observed, including a reduction in gaming time and symptoms of gaming disorder.
Sun et al. (2020)	To evaluate the effect and neurophysiological mechanism of physical exercise intervention combined with cognitive behavioral therapy (CBT) on mood and frontal alpha asymmetry in the treatment of Internet gaming disorder (IGD).	Randomized controlled trial (RCT)	50 male adolescents with IGD (CBT + PE group: n = 25; CBT-only group: n = 25)	Both groups showed a significant reduction in Beck Depression Inventory and Young Internet Addiction Scale scores, indicating a decrease in depression. However, the reduction was more pronounced in the CBT + PE group. Additionally, an increase in frontal alpha asymmetry values, indicating left prefrontal activation, was more pronounced in the CBT + PE group compared to the CBT-only

***Outcome measures***

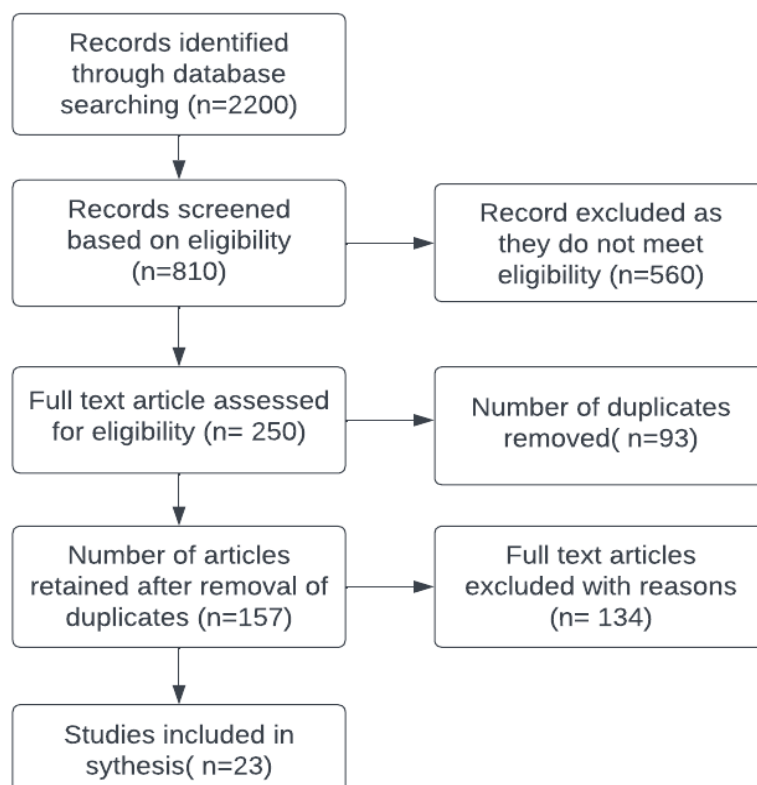
Study emphasis in the outputs aligns specifically with the realm of online gaming disorder, with a dedicated focus on articles delving into psychotherapeutic interventions for this disorder. The criteria set for our review direct attention to studies that explore and assess the efficacy of psychotherapeutic approaches in addressing online gaming disorder. Rigorous evaluation and selection of articles are guided by their relevance to this particular field, ensuring a targeted and comprehensive exploration of psychotherapeutic interventions for individuals grappling with online gaming disorder.

**RESULTS AND DISCUSSION**

The initial search generated 2200 publications, of which 560 were removed for not meeting eligibility criteria (Figure 1), and 93 duplicates were also removed. A total of 137 papers underwent full-text review, resulting in the exclusion of 134 papers. Reasons for exclusion included the absence of an IGD outcome measure, lack of peer-review, absence of an intervention, or the study not being based in an educational setting. Ultimately, 23 papers were identified and included in the final review.

***Study characteristics***

From the obtained search results, the characteristics of the identified articles were compiled, and a total of twenty-three articles met the inclusion criteria for the review, as illustrated in Figure 1. The evidence gleaned from these articles supports the positive impact of therapeutic interventions on mitigating Internet Gaming Disorder within the timeframe of 2018 to 2023. The presentation of the existing articles follows the PRISMA flow, offering a clear depiction of the systematic review process and the selected studies that contribute to understanding the efficacy of therapeutic interventions in addressing Internet Gaming Disorder.

***Psychotherapeutic interventions******Technology Based Intervention***

In a comprehensive exploration of innovative interventions for adolescent mental health, two distinct studies offer promising approaches. The first study by (Pakpour et al., 2022) introduces a mobile app-

based educational intervention, HAPPYTEEN, designed to treat Internet Gaming Disorder (IGD) among Iranian adolescents. Employing a transtheoretical model (TTM) and cognitive-behavioural therapy (CBT), the intervention spans eight sessions over two months, aiming to address IGD symptoms. Meanwhile, (Nordh et al., 2021) conducted a single-masked, randomized clinical trial focusing on therapist-guided internet-delivered cognitive behavioral therapy (ICBT) for Social Anxiety Disorder (SAD) in youths which is a contributing factor in gaming disorder. The study demonstrates the superiority of ICBT over an active comparator, internet-delivered supportive therapy (ISUPPORT), in reducing the severity of SAD symptoms, indicating its efficacy. Both studies underscore the potential of technology-driven interventions, emphasizing the importance of tailored approaches in addressing specific mental health challenges among adolescents.

#### *Cognitive Behaviour Therapy*

In a comprehensive examination of IGD studies have showcased diverse approaches to address its multifaceted nature. (Wang, Li & Yu, 2022) introduced a novel strategy by targeting reward sensitivity and rash impulsiveness simultaneously, resulting in significantly lower IGD scores compared to single-factor interventions. (Lindenberg, Kindt & Szász, 2022; André, Frida et al., 2022; Gonzalez, et al., 2019) contributed valuable insights through a cluster randomized clinical trial, demonstrating the effectiveness of a CBT-based intervention in reducing symptom severity and procrastination among at-risk adolescents related to IGD. The study underscored the potential of CBT interventions to yield multifaceted benefits. Additionally, (Wölfling, 2019) explored the efficacy of Short-term Treatment for Internet and Computer Game Addiction (STICA), reporting higher remission rates and emphasizing the need for further investigation into its long-term efficacy.

(Szász et al., 2020; Zheng et al., 2022) showed sustained improvements with early CBT interventions. (Sharma et al., 2022) offered insights into multimodal psychotherapeutic interventions, showcasing significant reductions in IGD symptoms and improvements in the quality of life. (Li, W., Garland, & Howard, 2018) continued the exploration into preventive measures with the protection intervention, effectively reducing IGD symptom severity and procrastination among at-risk adolescents. These studies collectively emphasize the importance of tailored, multifaceted interventions for both treatment and prevention of IGD.

In parallel, investigations into mindfulness-based interventions with CBT W. (Li, Garland & Howard, 2018; Sharma et al., 2022) and cultural (Kochuchakkalackal & Reyas, 2022) provide additional dimensions to the intervention landscape. The studies collectively suggest the potential of mindfulness-oriented recovery enhancement and culturally adapted interventions in addressing cognitive mechanisms associated with IGD. Furthermore, the efficacy of cognitive-behavioural therapy (CBT) in treating impulsivity, anxiety, and social avoidance (Han et al., 2020) and the potential of group-based interventions (Alavi et al., 2021) highlight the versatility of approaches. (Zamanian et al., 2020) added to the spectrum by demonstrating the long-term effects of a manual-based CBT treatment, indicating the potential of brief interventions in achieving medium to large effects over an extended period. Together, these studies contribute to understanding of IGD interventions and its effectiveness in reducing the symptoms of IGD and associated risk factors.

#### *Psychoeducational and Counselling*

In an exploration of psychosocial interventions for Internet Gaming Disorder (IGD) among adolescents, (Pornnoppadol et al., 2020) conducted a quasi-experimental study involving four treatment groups. These groups included the 7-day Siriraj Therapeutic Residential Camp (S-TRC) alone, 8-week Parent Management Training for Game Addiction (PMT-G) alone, a combination of S-TRC and PMT-G, and basic psychoeducation as a control. The severity of IGD was measured using the Game Addiction Screening Test (GAST), with statistically significant mean differences among groups at 1-, 3-, and 6 months post-intervention. Both S-TRC and PMT-G interventions proved effective and superior to basic psychoeducation alone, showcasing promise in addressing IGD.

On a related note, (Zhang et al., 2020) investigated the effects of group counselling, grounded in interpersonal activities, for college students with computer gaming addiction in China. Seventeen students with computer game addiction participated in the experimental group, while 10 students served as the control group. Results indicated a significant reduction in Computer Gaming Addiction Invention

(CGAI) scores in the experimental group compared to the control group. Additionally, the experimental group exhibited lower scores on the Beck Depression Inventory (BDI), Self-Rating Anxiety Scale (SAS), and negative cognition in social settings, along with higher scores on the Rosenberg Self-Esteem Scale (SES). These findings highlight the positive impact of interpersonal group counselling on alleviating gaming addiction and associated psychosocial factors among college students.

#### *Family-based Intervention*

One study (Li et al., 2019) addressed the growing concern of gaming disorder by developing the Game Over Intervention (GOI), a parent-based program designed to prevent problematic gaming based on ecological systems theory and self-determination theory. Randomized controlled trial involved parents of upper primary school students, with the intervention group (163 participants) and the control group (199 participants). Results showed a general reduction in children's gaming time, exposure to violent video games, and symptoms of gaming disorder over the three months, providing tentative evidence for the effectiveness of the GOI in mitigating gaming-related problems. Meanwhile, (Szász et al., 2020; Torres et al., 2018) investigated the impact of family therapy on adolescents with online game addiction from dysfunctional families. Family therapy intervention led to changes in brain activation patterns, indicating increased activity in the caudate nucleus in response to affection stimuli. (Nielsen et al., 2021; Eisert et al., 2023; Aziz et al., 2022) shows the improvement in perceived family cohesion was associated with reduced online game playing time, emphasizing the significance of family dynamics in the treatment of problematic online game playing.

Several studies, (Zhang, et al., 2019; Zamanian et al., 2020; Manoj,2023) highlight the need for investigating the long-term efficacy of interventions. Sustaining positive outcomes over time is crucial for ensuring enduring mental health benefits. Future research should incorporate extended follow-up periods to assess the persistence of intervention effects and factors contributing to relapse or sustained improvement.

## DISCUSSION

Addressing Internet Gaming Disorder (IGD) among adolescents necessitates a multifaceted approach, as evidenced by various interventions ranging from technology-based solutions to cognitive-behavioral therapy (CBT), psychoeducational and counselling strategies, and family-based interventions. Each approach has its unique strengths, effectiveness, and potential long-term impact, highlighting the importance of combined interventions for different contexts and individual needs.

The studies by (Pakpour et al., 2022) and (Nordh et al., 2021) highlight the potential of technology-driven approaches in addressing Internet Gaming Disorder (IGD). (Pakpour et al., 2022) introduced HAPPYTEEN, a mobile app-based intervention using the transtheoretical model (TTM) and CBT to tackle IGD symptoms, leveraging smartphone prevalence among adolescents. However, its cultural specificity and short intervention duration may limit generalizability and long-term efficacy. (Nordh et al., 2021) focused on therapist-guided internet-delivered CBT (ICBT) for Social Anxiety Disorder (SAD), often associated with IGD, showing its superiority over supportive therapy in a randomized clinical trial. Yet, scalability challenges due to resource intensity and internet access reliability remain.

CBT-based interventions show promise in IGD treatment. (Wang, Li, & Yu, 2022) targeted reward sensitivity and impulsiveness, achieving lower IGD scores than single-factor approaches. (Lindenberg, Kindt, & Szász, 2022) demonstrated CBT's effectiveness in reducing symptom severity and procrastination via a cluster randomized trial. (Wölfling, 2019) reported higher remission rates with Short-term Treatment for Internet and Computer Game Addiction (STICA), emphasizing the need for long-term efficacy investigations. (Szász et al., 2020) and (Zheng et al., 2022) found sustained benefits with early CBT interventions, while (Sharma et al., 2022) highlighted multimodal approaches' benefits in improving quality of life and reducing IGD symptoms. (Li, Garland, & Howard, 2018) focused on preventive measures, showing protection interventions' effectiveness in at-risk adolescents.

Psychoeducational and counselling interventions also prove effective. (Pornnoppadol et al., 2020) found both Siriraj Therapeutic Residential Camp (S-TRC) and Parent Management Training for Game Addiction (PMT-G) more effective than basic psychoeducation. (Zhang et al., 2020) demonstrated group counselling's benefits for college students with gaming addiction, reducing severity and associated

psychosocial issues. Family-based interventions address gaming behavior within its ecological context. (Li et al., 2019) developed Game Over Intervention (GOI), a parent-based program reducing gaming time and disorder symptoms. (Szász et al., 2020) and (Torres et al., 2018) highlighted family therapy's impact on brain activation patterns and gaming behavior. (Nielsen et al., 2021), (Eisert et al., 2023), and (Aziz et al., 2022) underscored family cohesion's role in reducing online gaming time.

CBT stands out for treating IGD and related risk factors effectively, including impulsivity and social avoidance. Technology-based interventions, though scalable, need validation for long-term efficacy and face resource and cultural applicability challenges. Integrating psychoeducational and counselling approaches could enhance their impact, while family-based interventions highlight familial support's critical role.

A multifaceted approach is crucial for effectively addressing IGD among adolescents. Future research should focus on long-term efficacy, scalability, and integrating therapeutic strategies to develop sustainable solutions for IGD and its associated challenges.

#### *Strengths and Limitations of the Study*

This is the systematic review which focus on the effectiveness of interventions in last 5 years to improve outcomes for adolescents with Internet Gaming Disorder (IGD) in schools, colleges, and universities. Methodological strengths of the review include reproducible searches of both education and health literature, double screening of 10% of the title and abstracts, double screening of full texts, double data extraction with expert input, and forward citation chasing.

We only included peer-reviewed quantitative studies but noted during the title and abstract screening stage that many book chapters and unpublished theses addressed IGD interventions in schools. We may have discarded some potentially effective interventions that might warrant further investigation, although given the weakness of the peer-reviewed literature, the inclusion of grey literature seemed unlikely to add anything but confusion to the findings. The few interventions identified lack an empirical basis, making it challenging to use the results to reliably inform practice. Research in this field is impeded by differing perceptions of the position of IGD in relation to other behavioral addictions and mental health issues, which might explain why existing school-based interventions often focus on broader mental health outcomes rather than specifically on IGD. Given the high prevalence of IGD among adolescents and the fact that IGD often co-occurs with other psychological issues (e.g., anxiety, depression), it is unfortunate these studies did not include a measure of IGD-specific symptoms.

#### *Implications for future research*

The systematic evaluation of interventions for Internet Gaming Disorder (IGD) among adolescents highlights critical areas for future research and development. Firstly, standardized definitions of outcomes and validated measurement tools are crucial for ensuring consistency across studies. This standardization would not only facilitate clearer comparisons of intervention effectiveness but also enable the accumulation of robust evidence essential for advancing treatment strategies.

Involving adolescents directly in the design and implementation of interventions is equally essential. Adolescents often prefer peer support over adult guidance, making their active participation pivotal for intervention relevance and engagement. Understanding and integrating students' perspectives can enhance the effectiveness of interventions by tailoring them to meet their specific needs and preferences. Moreover, adopting graduated responses that involve collaborative efforts among peers, teachers, and mental health professionals holds promise. This approach allows for comprehensive support systems that address the multifaceted nature of IGD, from social and academic contexts to mental health considerations.

Longitudinal studies are indispensable for assessing the sustained impact of interventions over time. They provide insights into the long-term effectiveness and durability of treatment outcomes, shedding light on factors that influence recovery or relapse among adolescents with IGD. Integrating technological solutions into interventions is another promising avenue. Technology can be leveraged for delivery and enhancement of therapeutic strategies, such as through mobile apps or online platforms. These tools not only increase accessibility but also provide personalized and interactive support that complements traditional therapeutic approaches.

Finally, combining Cognitive-Behavioural Therapy (CBT), technology-based interventions, family interventions, and psychoeducation forms a comprehensive approach to addressing IGD among adolescents. CBT equips individuals with coping mechanisms and behavioral strategies to manage gaming impulses and related issues. Family interventions foster supportive environments and improve familial dynamics, crucial for long-term recovery. Psychoeducation educates both adolescents and their families about IGD, promoting awareness and early intervention. By addressing these research priorities and integrating multifaceted approaches, future studies can advance our understanding and treatment of IGD, ultimately improving outcomes for adolescents grappling with this emerging mental health challenge.

## CONCLUSION

Recent interventions for Internet Gaming Disorder (IGD) in adolescents encompass the utilization of digital technology, Cognitive Behavioural Therapy (CBT), family therapy, psychoeducation, and counselling. Among these, CBT interventions stand out as the most widely employed and demonstrate higher effectiveness compared to other interventions. Family dynamics also play a crucial role in the intervention process. The integration of technology, such as the use of apps, proves beneficial for students, offering a means of monitoring and facilitating follow-ups. Studies consistently emphasize the necessity of a combined therapeutic approach and the importance of long-term follow-up to enhance the overall effectiveness of interventions. Additionally, early-stage intervention has been shown to be effective in mitigating the impact of Internet Gaming Disorder in adolescents. Future interventions should also consider other demographic variables such as gender, living arrangements, and choice of game to gain a more comprehensive understanding of the disorder.

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