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# COGNITIVE BEHAVIORAL THERAPY (CBT) APPROACH IN ADOLESCENTS WITH ONLINE GAME ADDICTION

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#### **ABSTRACT**

Online games are popular entertainment in all circles, especially among teenagers. Game addiction is excessive and repetitive gaming activities that can result in impulse disorders, anxiety, social problems, and the inability to control gaming activities. Online game addiction needs to be overcome, one of which is by providing Cognitive Behavioral Therapy (CBT). Cognitive Behavioral Therapy is a psychotherapy that integrates two approaches: cognitive therapy and behavioral therapy. This study aims to find out the role of Cognitive Behavioral Therapy as the right choice to help adolescents who are addicted to online games. The research method used is in the form of a literature review. Researchers analyzed some previous research journals related to Cognitive Behavioral Therapy and online game addiction. The results of the study show that Cognitive Behavioral Therapy is an effective method to reduce online game addiction in adolescents. Cognitive Behavioral Therapy can help adolescents learn to restrain and control excessive cravings to play games so that they can reduce impulsivity disorders, anxiety, and social problems. Adolescents who are addicted to online games can benefit from the help of counselors in identifying, understanding, and changing unhealthy mindsets and behaviors so that they can improve their quality of life by doing more beneficial positive activities.

**KEYWORDS** Cognitive Behavioral Therapy (CBT), Online game addiction



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#### **INTRODUCTION**

The rapid development of the times has brought significant changes in human life, especially through the presence of digital internet technology that has changed the way we communicate, work, learn, and access information. According to Shabnoor Siddiqui and Tajinder Singh in 2016, in recent decades, the internet has evolved from a simple communication technology to a multifunctional platform that allows unlimited access to a wide range of information and services, including entertainment. Online gaming is a form of digital entertainment that has experienced rapid development and has become an

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important part of daily life for many individuals around the world, especially teenagers and young people. Easy access, a wide variety of games, and the ability to connect with other players around the world make online gaming very popular and attractive to many people. Based on data from Newzoo (Global Games Market Report) in 2018 the number of online game users in the world was 2.3 billion, and online game users in the Asia Pacific region amounted to 1.2 billion or 50% of the total population of online game users in the world, while in Indonesia itself the number of online game users reaching 82 million people, even Indonesia is currently ranked 17th in the world with revenue through online games. The popularity of online games cannot be separated from the ability of technology to provide an immersive and interactive gaming experience. Many games are now equipped with high-quality graphics, complex storylines, and interactive elements such as chat and game systems that require cooperation or competition between players. These aspects have made online gaming a very attractive form of entertainment, especially for the younger generation who are used to digital devices (Mais et al., 2020; Siddiqui & Singh, 2016).

The rapid growth of this online game also has a variety of impacts, both positive and negative, that affect various aspects of the lives of its users. On the one hand, online games can improve certain skills, such as hand-eye coordination, strategic thinking, and teamwork abilities, especially in games that require collaboration to achieve goals. On the other hand, there are also concerns about the negative impact of online games, such as the risk of addiction or addiction to online games (Hadisaputra, 2022).

A study by Yee in the USA, Canada, with the study subjects of 3,166 people who played online games, 50% of whom were online game addicts. Research by Grusser, Thalmann, and Griffiths in Germany stated that as many as 7,069 online game players with an average age of 21.1 years, and 11.9% of them met the criteria of online game addicts. Then research by Gentile, et. Al. in Singapore, stated that of the 3,034 students who played online games, 7.6 - 9.9% were addicted to online games (Rahman et al., 2022).

A condition known as "online gaming addiction" occurs when a person becomes overly dependent on playing video games online. Clinical psychology, psychiatry, and public health all strongly support the notion that internet addiction is a recognized condition. In 2013, the American Psychiatric Association included internet use disorders, including addiction to online gaming, as a condition that needs more research in Part III of the most recent Diagnostic and Statistical Manual (DSM-5). In 2018, the World Health Organization added online gaming addiction to the International Classification of Diseases (ICD-11) as a mental illness. While there are differences between the ICD and DSM systems regarding the clinical criteria for online gaming addiction, both systems agree that the disease shares traits with gambling disorders, such as functional impairment, loss of control, and a preference for games over other activities (Saputri et al., 2024).

According to a 2019 study by Norialdy, teens are more likely to be addicted to internet games. Several epidemiological studies have then revealed that the prevalence of online gaming disorders exceeds 1% of the general population, with substantially higher estimates among adolescents (Haagsma et al., 2012; Muller et al., 2015; Przybylski et al., 2016; Rehbein et al., 2015). Adolescents who are hooked on internet gaming spend a significant amount of their time playing games instead of engaging in other activities. Based on the data obtained, teenagers spend more than 2 hours a day, or for a week, spending more than 14 hours just playing online games; some even spend 55 hours per week. The average time spent playing online games for teenagers is 20 to 25 hours per week (Saputri et al., 2024).

Online game addiction has three levels, namely (1) Mild addiction, namely playing online games with a duration of >30 minutes per day, playing online games more often, and being lazy to do other activities; (2) Moderate addiction, which is the duration of

playing online games close to three or four hours a day, game players become difficult to concentrate, sleepy, and easily emotional in various ways; (3) Severe addiction, where games are used as the main focus in life, the duration of playing is up to five hours so that they do not interact with other people or are socially disconnected from society. At this stage, players are willing to spend a lot of money just to play online games (Rahman et al., 2022).

This dependence can make it difficult for players to control their playing time, which ultimately interferes with various aspects of daily life, such as social relationships, academic or work achievement, physical health, and mental well-being. Meanwhile, from a psychological point of view, various scenes that appear in online games, such as fights, murders, adult scenes, and other criminal acts, can indirectly affect the psychology of adolescents. Adolescents can experience confusion and unawareness regarding the life around them. This can encourage teenagers to do unusual actions like those in the gaming world. Teenagers who are already at the stage of not being aware of their surroundings can suffer from mental disorders due to the influence of online games, which can be characterized by being emotionally irritable and tending to say inappropriate words or dirty words (Saputri et al., 2024).

Cognitive behavioral therapy (CBT) is one successful strategy for breaking an addiction to online gaming. The goal of cognitive behavioral therapy (CBT), a type of psychotherapy, is to recognize and alter dysfunctional or harmful thought processes as well as actions. Based on the notion that ideas, emotions, and behaviors are interrelated, cognitive behavioral therapy (CBT) aims to help people alter unpleasant or illogical thought patterns to improve their feelings and behaviors. With the help of CBT, individuals are expected to develop better control over the urge to play games and learn to manage emotional triggers that reinforce addiction (Saputri et al., 2024)

#### RESEARCH METHOD

This study employed a literature review as its methodology. Reading and analyzing books, journals, and other published publications about research topics to produce writing about them is what constitutes a literature review. Researchers used ten papers about online game addiction and cognitive behavioral therapy (CBT) in this investigation. The data are compiled, analyzed, and concluded so that conclusions are reached regarding the related discussions.

#### RESULTS AND DISCUSSION

The data analysis used is a simplified approach. With this data analysis method, the researcher compiles each article and then simplifies each finding. Scientific article search through the Google Scholar channel. There are keywords in finding articles, namely addiction or addiction to online games, adolescents, Cognitive Behavioral Therapy, and online game addiction. Data analysis is carried out manually by reading the entire content of the article to find the design method and results (research results obtained).

No.	Heading	Writer	Year	Method	Result
1.	Cognitive-	Stevens	2019	Quantitative	Based on the
	Behavioral	MWR, King			findings, CBT is an
	Therapy for	DL, Dorstyn			effective short-term
	Internet	D			intervention to reduce
	Gaming				Internet Gaming
	Disorder: A				Disorder, but the
	Systematic				long-term benefits are

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	Review and Meta-analysis				still unclear, so more research is needed to determine the long-term effects.
2.	Effectiveness of Cognitive Behavioral Therapy—Based Intervention in Preventing Gaming Disorder and Unspecified Internet Use Disorder in Adolescents A Cluster Randomized Clinical Trial	Lindenberg K, Kindt S, Janocha CS	2022	Quantitative	The findings demonstrated that, over a year, the cognitive behavioral therapy (CBT) intervention for teenagers in the control group successfully decreased the symptoms of both gaming disorder and non-specific internet use problem. Nevertheless, the intervention did not affect the prevalence of internet use disorders or unidentified gaming disruptions.
3.	A Cognitive-Behavioral Model of Internet Gaming Disorder: Theoretical Underpinnings and Clinical Implications	Dong G, Potenza MN	2014	Theoretical underpinnings and clinical implications	Internet Gaming Disorder has many similarities with drug addiction, including high impulsivity, cognitive impairment, and attention bias. CBT is one of the few therapies that is empirically supported and proven effective in addressing a wide range of substance abuse disorders. However, unlike cognitive behavioral therapy for drug addiction, there has been no research that formally tests the effectiveness of cognitive behavioral therapy for Internet Gaming Disorder

4.	Implementation of Behavior Counseling with Self-Control Techniques to Overcome Students' Online Game Addiction at SMK Muhammadiyah Karanganyar, Pekalongan Regency.	Kurniasih P	2022	Qualitative	Providing behavioral counseling for self-control techniques with stimuli in the form of videos is felt appropriate to address online gaming addiction in students, as well as the impact of emerging maladaptive behaviours consequences of online gaming addiction.
5.	The Cognitive Psychology of Internet Gaming Disorder	King DL, Delfabbro PH	2014	Quantitative	Although often compared to problem gambling, Internet Gaming Disorder has a cognitive profile.  The cognitive factors identified may help with the conceptual refinement of Internet Gaming Disorder, although these factors also require further evaluation by studies using general and clinical population
6.	Treatments for Internet Gaming Disorder and Internet Addiction: A Systematic Review	Zajac K, Ginley MK, Chang R, et. al	2017	Systematic Review	reatments for emergency rooms and internet addiction is a new but growing area of research with ample room to develop. Several treatment modalities have been evaluated, including treatment, CBT, family-based treatment, and a range of other eclectic approaches.

7.	Efficacy of Cognitive Behavioural Therapy for Internet Gaming Disorder.	Han J, Seo Y, Hwang H, et. al	2020	Quantitative	CBT programs may be more effective than supportive therapy when it comes to improving Internet Gaming Disorder symptoms by controlling anxiety, impulsivity, and social avoidance
8.	Internet and Video Game Addictions: A Cognitive Behavioral Approach	Lemos MIRA, Abreu CN, Sougey EB	2014	Literatur Review	Of the 13 articles, 9 of them showed results that CBT was effective for therapy in people with internet and online gaming addiction; the results were equivalent to the treatment of other psychopathologies associated with impulse control disorders.
9.	Effects of Group Counseling Programs, Cognitive Behavioral Therapy, and Sports Intervention on Internet Addiction in East Asia: A Systematic Review and Meta-Analysis	Liu J, Nie J, Wang Y	2017	Systematic Review and Meta-analysis	CBT results in positive changes in depression, anxiety, aggressiveness, somatization, social insecurity, phobias, paranoid ideas, and psychoticism. For sports, interventions have a significant effect on Internet Addiction and psychopathological symptoms. Sports interventions, in particular, can improve withdrawals.
10.	Cognitive Behaviour Therapy (CBT) Lowers Online Game Addiction Rates in Adolescents.	Tambunan HR., Kumboyono, Lestari R	2023	Quantitative	The results of the study showed that there was a difference in the level of online game addiction between the treatment and control groups. The administration of CBT to adolescents

has been statistically proven to reduce the rate of online game addiction, so that adolescents can improve their quality of life by doing positive activities that are beneficial to adolescents

Based on a literature review conducted by researchers, most studies show that CBT has a positive effect in reducing symptoms of online gaming addiction, especially in terms of improving self-control, reducing playing duration, and managing stress more adaptively. These studies emphasize that CBT helps individuals, especially adolescents, in identifying negative mindsets related to gaming and developing healthier coping strategies.

Even though the majority of the articles demonstrate how CBT might lessen online gaming addiction, CBT is an effective short-term strategy to minimize addiction problems in online gaming in teenagers, according to a 2019 study by Stevens et al. (2019). However, the long-term advantages are yet unknown, thus, additional research is required to ascertain the long-term impacts. In a similar vein, a 2022 study by Lindenberg et al. (2022). demonstrated that the 12-month intervention of cognitive behavioral therapy (CBT) for adolescents in the control group successfully decreased the symptoms of gaming disorder and non-specific internet use disorder. Nevertheless, the intervention did not affect the prevalence of internet use disorders or unidentified gaming disruptions.

#### **Discussion**

The rapid growth of the internet has had a significant impact on society, both positively and negatively. Several literatures that have been researched show that currently the internet has become one of the most popular means of entertainment, with online games as one of the most prominent forms of digital entertainment, especially among teenagers. The number of online gaming entertainment users today is influenced by various factors that support each other. One of the main factors is the development of technology that allows the creation of games with increasingly high and more attractive graphics quality. This is in line with research by Tone et al. (2014), which stated that the factors that make players interested in online games are very meticulous game design, beautiful images, and interesting game music or rhythm. These things then make many teenagers addicted to online games.

Online gaming addiction is included in the DSM-5 due to growing evidence that online gaming addiction can have a significant impact on mental health, including disruptions in social, academic, and occupational functioning. The DSM-5 committee assessed that excessive game use patterns can lead to symptoms and behaviors similar to other addictions, such as disturbances in impulse control, compulsive use, and play patterns that interfere with daily activities. Online gaming addiction has many similarities with drug addiction, including high impulsivity, cognitive impairment, and attention bias. According to research by Dong and Potenza, (2014), CBT is one of the few therapies that is empirically supported and proven effective in addressing a wide range of substance abuse disorders. However, unlike cognitive behavioral therapy for drug addiction, there have been no studies that formally test the effectiveness of cognitive behavioral therapy for Internet Gaming Disorder or online gaming addiction.

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Teens who are addicted to online games show compulsive behavior in playing games to the point of neglecting daily activities, such as school, homework, social activities, and even physical needs, such as sleeping and eating. Online gaming addiction in teens is often associated with psychological, social, and developmental factors that are still in the process of brain development, making them more susceptible to addictive behaviors. Research by Kurniasih (2022) obtained results that the provision of behavioral counseling (CBT) self-control techniques with stimuli in the form of videos is considered appropriate to overcome online game addiction in students and the impact of maladaptive behavior that arises due to online game addiction.

Research on the effectiveness of Cognitive Behavioral Therapy (CBT) on online gaming addiction does show meaningful results, but it still has some limitations. Most studies have focused only on the short-term effects of CBT, while its impact on online gaming addiction in the long term has not been studied in depth. It remains unclear whether the changes achieved through CBT can last long without ongoing support. In addition, the research focuses on certain age groups or demographics, such as adolescents or young adults in one region. Research with a more culturally and socially diverse sample group is needed so that the results are more generalist and can be applied globally. More research is needed to address these shortcomings so that the effectiveness of CBT in overcoming online gaming addiction can be better understood and applied with more optimal results.

#### **CONCLUSION**

Based on the literature analysis conducted, it can be concluded that Cognitive Behavioral Therapy (CBT) is a popular and commonly used method to overcome addiction problems. Research shows that CBT is considered effective in reducing online gaming addiction in adolescents. With a structured approach, CBT helps teens recognize and change the mindsets and behaviors that contribute to addiction, so they can develop skills to manage playtime and improve overall mental well-being. Online gaming addiction or excessive use of games is increasingly common in different countries, especially among children and adolescents. Many reports mention that this harms social relationships, academic performance, and physical health.

This study is hoped to add insight for researchers and readers about the effectiveness of Cognitive Behavioral Therapy (CBT) in dealing with online game addiction, and the results of this study are expected to be a reference for future researchers and mental health professionals in designing more effective and appropriate interventions. More research is needed to address these shortcomings so that the effectiveness of CBT in overcoming online gaming addiction can be better understood and applied with more optimal results.

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