

## DISSUASION AND EDUCATION: PREVENTING AND TREATING INTERNET GAME ADDICTION FOR ADOLESCENTS

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**Abstract.** Internet game addiction among adolescents has become a global issue that affects their mental, physical, and social health. The background to this problem involves the increasing access to technology and the popularity of online games, which often leads to excessive use and addictive behavior. This article aims to explore the role of dissuasion and education as effective strategies in preventing and treating internet game addiction among adolescents. The approach used in writing this article is a literature study, which includes an analysis of various academic sources, research reports, and relevant case studies. The results of this study suggest that dissuasion, through family communication and information campaigns, can reduce the risk of addiction by increasing awareness about the dangers of internet gaming. Meanwhile, education, through formal and informal education, as well as life skills training and active individual roles, can provide the knowledge and skills needed for adolescents to manage time and use technology wisely. The combination of dissuasion and educational strategies supported by a conducive family and school environment shows great potential in preventing and treating internet game addiction.

**Keywords:** *dissuasion, education, internet gaming, addiction*

### Introduction

Online games are currently a phenomenon experienced in people's lives. Children, teenagers, and adults seem interested in this new technology game. For teenagers, online games are one of the most popular activities, offering attractive entertainment and relaxing effects, providing time tolerance to play them. Easy access, opportunities to interact in the community, tiered challenges, curiosity to complete missions, and the rewards given are the main attractions for teenagers to play online games. In the digital world, online games have become integral to teenagers' lives. This phenomenon has spread across the globe and become a global activity. The spread of online game activities is supported by internet development, which has recently shown its progress. The development of the internet is also increasingly strengthened by the support of various game platforms. Online games can be accessed via computers (PCs) and game consoles (game-playing tools); the most popular is smartphones. Currently, teenagers' access to online games is very easy, and because of that, these games do not recognize the time and place to play them. So anyone can operate it, from children and teenagers to adults. This condition is recognized as having positive and negative sides simultaneously. For teenagers, this condition is one of the challenges during their efforts to organize their lives - searching for identity.

Teenagers are people in the age range of 12-18 years who are in a transition period from childhood to adulthood (Hurlock, 1980). During this period, teenagers experience many changes, both physical and psychological, that affect their individual and social

conditions. In addition, in cognitive development, teenagers have experienced development in thinking, increasingly rationally, logical, and abstract, much better than in childhood. Teenagers are also increasingly autonomous in making decisions that depend on the interaction of aspects of their development. Many external experiences experienced by teenagers allow them to be influenced by social life. In this case, the era of internet development - the ease of someone accessing information has an impact on the lives of teenagers. Today's teenagers are digital natives; they have grown up with the sophistication of technology (Tapscott, 2013). So, they are a generation that was born and grew up with an understanding of how technology influences their lives. One of the activities caused by the internet that impacts teenagers' lives is online games. Online games are game activities that are on a network-cyberspace, which are designed in such a way as to attract someone's interest in playing them. Several players can play online games on the internet at the same time. These games are pretty diverse, ranging from daily human activities, simulations of professions and work experiences, sports games designed to look real, games of skill, adventure, battles in the arena, etc. All forms of these games are presented on a screen that can be accessed through the game platform. Each game has different rules, is designed to have tiered levels and at each level presents a different experience. If someone can pass one level, he will go up to the next level.

The impact of different experiences and increasing levels of play causes players to be carried away deeper to continue to be involved in the game. This is what is called addiction to the game. A gamer will experience salience (Lemmens et al., 2009), which is a condition where someone makes games a very important and meaningful activity in life; dominating thoughts, modifying feelings, and influencing behavior. Addictive behavior towards this game activity is currently a phenomenon and has the potential to affect the daily activities of adolescents. Adolescents are seen as more frequent and vulnerable to online game addiction than adults. Interest in new interesting things and the influence of the instability of adolescent psychological conditions are suspected of being the cause of adolescents falling into online game addiction behavior (Jordan and Andersen, 2017). The addictive condition experienced by adolescents has its own risks in the process of finding identity towards adulthood. Many worrying conditions occur in adolescents when they are unable to manage online game activities. In the context of education, decreased academic achievement, stress in learning, indisciplinary actions, emotional instability in class are negative impacts of online game addiction. In the social behavior of adolescents who experience negative addiction to online games, it can be shown from deviant behavior such as stealing, withdrawing from the community and so on. Behavior towards online game addiction can have a negative impact on adolescent activities. Therefore, management of these activities is very necessary. There are two efforts that can at least be made to prevent and handle online game addiction, namely through dissuasion and education.

The study of dissuasion and education as a mechanism for preventing and treating online gaming addiction among adolescents is increasingly relevant in today's digital era. Online gaming addiction has emerged as a significant public health problem, especially among adolescents, who are vulnerable to the immersive and often compulsive nature of online gaming. Dissuasion, in the context of online gaming addiction, refers to strategies used to prevent adolescents from engaging in excessive gaming behavior. In general, these strategies can include parental guidance, school-based interventions, and community awareness programs that highlight the negative

consequences of gaming addiction. However, in a narrower context, dissuasion is a prevention activity carried out through verbal forms in the form of prohibitive sentences, rejection gestures, instilling fear and is often associated with the deterrent effect of the law. This includes persuasion, coercion, debate, or forms of intimidation. It is understood that dissuasion can be used to prevent individuals from self-destructive behavior. In the context of prevention, for example, such dissuasive actions aim to create an environment where adolescents are informed about the risks associated with excessive gaming, thus encouraging them to make healthier choices. For example, Novrialdy emphasized the importance of school counselors in implementing prevention efforts, such as seminars and educational modules on the dangers of online gaming addiction (Novrialdy, 2019). On the other hand, education serves as a proactive approach to equip adolescents with the knowledge and skills necessary to manage their gaming habits effectively. Education focuses on building a cognitive base that allows one to self-manage, recognize, and address their gaming behavior before it escalates into addiction. This educational framework can involve teaching adolescents about the potential health impacts of prolonged gaming, including physical health issues, psychological effects, and academic consequences. By fostering awareness and critical thinking, educational initiatives can empower adolescents to engage in healthier gaming practices.

There are not many reference sources that examine dissuasion and education in preventing and treating online game addiction. Novrialdi, for example, only mentions a little about efforts to prevent online game addiction, which mentions dissuasion (Novrialdy, 2019). Then related to the effectiveness of its use, for example, the writing of Xu and Yuan (Xu and Yuan, 2008), dissuasion can be used as a solution to prevent game addiction. This is based on their findings, which state that diversion and parental supervision are significant factors in preventing addiction, not dissuasion. In preventing self-harm, dissuasion is also carried out by parents in China (Wang et al., 2022) by criticizing and also reconciling, or they also carry out forms of neglect, conflict avoidance, and increased control. Meanwhile, education aims to build a good cognitive foundation that can be managed independently. Education for school-age adolescents is intended to gain good knowledge and understanding at school; this effort can prevent addiction effectively and efficiently (Ghuman and Griffiths, 2012; Wells et al., 2003). education can form good self-regulation and self-control. Good self-regulation supported by high self-control can prevent teenagers from internet addiction. This finding provides important input for parents and schools to be able to provide interventions in the form of interventions to teenagers related to the importance of good self-regulation and self-control (Buntaran et al., 2024).

The combination of dissuasion and education creates a comprehensive strategy to prevent and treat online game addiction. This paper explores in depth how these two things prevent and treat online game addiction. On the one hand, dissuasion is an activity closely related to the coercive approach. On the other hand, education provides a more proactive model, enabling individuals to reflect on themselves and change themselves through self-autonomy. Dealing with internet game addiction among adolescents requires a multifaceted approach that combines dissuasion and education. Dissuasion and education are two forms of behavior that can be quickly done by people close to online game addicts. Due to this ease, the author is interested in studying how these two behaviors work.

### ***Defining internet game addiction***

The massive development of the internet has influenced the diversity of various online services. One of them is the existence of an online game platform. Games that used to be physical activities that featured two players or in groups have transformed into activities that can be done virtually and behind the scenes. Realistic games require their place or arena, limited by time and the physical presence of players. However, online games break down the barriers of arena, time, and the real presence of players. It does not require a large place, a special place, or a certain arena; it does not require its own time either on or off the field and can be run without the presence of physical contact between players. All can be done in the palm of your hand, folding the place, done at anytime and anywhere, and it does not need to be physically present; it can be controlled behind the scenes. Online games are a product of human imagination born from realistic experiences and great human ideas. It is poured into a virtual form that resembles the conditions and circumstances of the original game. Computerization capabilities supported by internet access spurred the imaginative spirit of humans, ultimately giving birth to modern creativity. Computerization capabilities became the essential capital for the development of online games. The great idea of the form of online games is the result of human intelligence, which is evidence that the development of computerization, supported by the advancement of the internet, has become a new activity model. In this case, online games are human products that can influence human behavior, ultimately forming civilization.

Recently, in approximately two decades, many scientists have discussed the themes of online addiction. One of the study focuses in this regard is the problem of Internet Gaming Addiction (IGA) (Kuss et al., 2014). Internet Gaming Addiction is increasingly recognized as a significant behavioral health problem, especially among adolescents and young adults. This addiction is characterized by excessive or compulsive use of internet-based games, which results in a negative impact on daily functioning and emotional well-being (Xie et al., 2023; Park et al., 2018). The book *The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)* recognizes IGA as a condition requiring further study, highlighting its potential to cause significant impairment in social, occupational, or other important functions (Tsumura et al., 2018). Research shows that the potential for online gaming addiction is much higher than other internet activities, such as surfing the internet or playing offline games (Kuss et al., 2013). This increased risk is due to various factors, including the immersive nature of online gaming, the opportunities for social interaction in these games, and the psychological rewards they provide (Van Rooij et al., 2010). For example, studies have shown that individuals who frequently play online games report higher levels of irritability, sleep disturbances, and emotion dysregulation compared to non-addicted gamers (Wang et al., 2014; Wei et al., 2012). Furthermore, the prevalence of mental health problems such as depression, anxiety, and suicidal ideation is significantly increased among those with IGA (Xie et al., 2023; Dieter et al., 2017).

The mechanisms underlying IGA are complex and multifaceted. Personality traits such as neuroticism and low conscientiousness have been associated with a higher likelihood of developing gaming addiction (Zhang et al., 2023; Choi et al., 2021). Additionally, environmental factors, including social isolation and stress, may exacerbate the risk of addiction (Kim et al., 2022). The interaction between these factors suggests that interventions aimed at improving emotion regulation and social skills may benefit those at risk for IGA (Kim et al., 2022). Furthermore, the impact of IGA extends

beyond individual health, affecting social relationships and academic or occupational performance. Adolescents with IGA often exhibit poorer academic outcomes and increased social withdrawal, which may perpetuate the cycle of isolation and further gaming (Quancai et al., 2023; Van Rooij et al., 2010). Thus, addressing IGA requires a comprehensive approach that includes psychological support, community involvement, and, if necessary, medical intervention (Kim et al., 2022; Tas, 2017). Meanwhile, in terms of psychology, online game addiction is a condition of dependence in which individuals are unable to function without certain activities. Individuals feel unable to carry out activities without playing games. This shows their psychological dependence on gaming activities. Psychological dependence theory provides a comprehensive framework for analyzing IGA by focusing on cognitive, emotional, and social factors that contribute to compulsive gaming behavior. This theory states that individuals can develop psychological dependence on games as a means to fulfill unmet psychological needs, such as the need for social connection, achievement, and self-esteem (Zhang et al., 2023). The immersive and interactive nature of online games can create an environment where these needs are more easily fulfilled than in real life, leading to increased engagement and potential addiction (Paulus et al., 2018).

One of the key aspects of psychological dependency theory is the role of unmet psychological needs in driving addictive behavior. Research shows that when individuals experience frustration with their basic psychological needs, they are more likely to seek satisfaction through online gaming (Zhang et al., 2023). For example, adolescents facing harsh parenting or social isolation may turn to gaming as a coping mechanism, finding solace in the virtual relationships and accomplishments that online gaming provides (Zhang et al., 2023; Kuss, 2013). These compensatory behaviors can lead to a cycle in which individuals become increasingly dependent on gaming for emotional satisfaction, further reinforcing their addiction (Kuss, 2013). Additionally, the cognitive-behavioral model of addiction suggests that maladaptive thought patterns and beliefs may perpetuate gaming addiction. For example, individuals may develop cognitive biases that prioritize gaming over other life responsibilities, leading to neglect of academic, social, or work tasks (Mohammad et al., 2023; Chia and Zhang, 2020). These cognitive distortions may be exacerbated by the immediate rewards provided by gaming, such as achievement and social recognition, which often outweigh the delayed gratification associated with real-life responsibilities (Milani et al., 2018). Cognitive biases play a significant role in the development and maintenance of IGA. Individuals may develop distorted beliefs about the benefits of gaming, such as the perception that gaming is a primary source of happiness or social interaction (Kuss et al., 2014). These cognitive distortions may lead to neglect of real-life responsibilities and relationships, as players prioritize their online experiences over offline engagement (Kuss, 2013). The immediate rewards provided by gaming, such as achievement and social recognition, can further reinforce these maladaptive beliefs, creating a feedback loop that perpetuates the addiction (Kuss et al., 2014).

The emotional regulation aspect of psychological dependency theory is also important in understanding IGA. Many individuals with IGA report using gaming as a means to escape negative emotions or stressors in their lives (Quancai et al., 2023; Kuss, 2013). This reliance on gaming as a coping strategy may lead to a decline in emotional regulation skills, making it increasingly difficult for individuals to manage their emotions without using gaming (Quancai et al., 2023; Kuss, 2013). Consequently, the more individuals use gaming to cope with stress, the more dependent they may

become on it, leading to a cycle of addiction that is difficult to break (Quancai et al., 2023). Additionally, the social dynamics of online gaming contribute to the psychological dependence observed in IGA. Online games often provide a platform for social interaction, allowing players to form connections and communities that may not exist in their offline lives (Zhang et al., 2023; Kuss, 2013). This social aspect can be particularly appealing to individuals experiencing loneliness or social anxiety, as gaming offers a less intimidating environment for social engagement. However, this reliance on virtual relationships can further isolate individuals from real-life social interactions, exacerbating their gaming dependence.

Online games are a new activity that has emerged due to the sophistication of communication technology (internet), which can change daily life activities. Excessive or compulsive gaming activities can cause individuals to fall into negative behavior, such as emotional instability, social withdrawal, and cognitive behavioral changes that, if not immediately managed, will cause harm to survivors. Addictive behavior refers to how an individual's inability to reject cognitive-behavioral work leads to the urge to fulfill psychological needs. This means that when an individual's psychological urges require unstoppable gaming activities, the individual is powerless to control the urge.

### ***Understanding dissuasion and education concept on adolescent behavior problems***

Understanding the concepts of dissuasion and education in dealing with adolescent behavioral problems is essential to developing effective interventions. Dissuasion refers to strategies to prevent unwanted behaviors, while education focuses on informing adolescents about the risks associated with those behaviors. Both approaches are important in reducing problems such as substance abuse, online gaming addiction, and other risky behaviors that are common among adolescents. Dissuasion is a concept that encompasses strategies that aim to prevent undesirable behavior by instilling fear of negative consequences or punishments associated with the act. This approach is often used in various contexts, including law enforcement, public health, and social behavior modification. Dissuasion is the extent to which an individual perceives that others are trying to discourage them from playing online games through coercion, argument, persuasion, intimidation, or coercion (Xu and Yuan, 2008). The effectiveness of dissuasion depends mainly on the perceived likelihood of punishment and the severity of the consequences that individuals associate with their potential actions.

In criminology, dissuasion is often associated with the deterrent effects of legal sanctions. discuss how certain offenders may resist dissuasion, especially when criminal behavior becomes habitual. They refer to Pogarsky's definition of "incurable offenders," who are characterized as being insensitive to deterrent cues, suggesting that habitual offenders may not respond effectively to deterrent measures (Maimon et al., 2014). This highlights an important aspect of dissuasion: its effectiveness can vary widely across populations and contexts. Furthermore, the principle of dissuasion is based on the assumption of rationality among individuals, who are expected to weigh the consequences of their actions against the risk of being caught and punished. However, in cases such as drunk driving, an individual's intoxication may impair their ability to make rational decisions, thereby reducing the effectiveness of deterrent measures (Kemel, 2013). This suggests that while dissuasion can be a powerful tool, its application must consider the psychological and situational factors influencing behavior.

In public health, prevention strategies are often used to reduce risky behaviors, such as smoking or drug use. For example, highlight the need to prevent predatory journals in

academic publishing, which can compromise the integrity of research (Leducq et al., 2023). This reflects a broader application of prevention, where the goal is to prevent harmful practices through awareness and education, thereby influencing behavior at a systemic level. In short, dissuasion is a multifaceted concept that serves as an important mechanism for behavior modification across multiple domains. Its effectiveness depends on the perceived risks and consequences associated with a particular action, as well as the psychological state of the individuals involved. Understanding the nuances of dissuasion can inform more effective strategies for behavior change in legal and public health contexts. The concept of dissuasion in the context of adolescent behavioral problems is essentially rooted in the idea of preventing undesirable behavior through strategies that emphasize the consequences of those actions. Research suggests that prevention can be effectively implemented through educational programs informing adolescents of the potential consequences of their actions. For example, school-based prevention programs that focus on substance abuse have shown that educational approaches are more effective than prevention strategies alone (Tze et al., 2012). These programs not only provide knowledge about the risks associated with substance use but also foster critical thinking skills that enable adolescents to make informed decisions. By understanding the potential negative outcomes, adolescents are more likely to resist peer pressure and avoid risky behaviors.

In addition, parental involvement is critical in the dissuasion process. Research has shown that a supportive parenting style, which encourages open communication about risks and consequences, can significantly reduce the likelihood of adolescents engaging in risky behaviors (Marhayati et al., 2023). In contrast, coercive or overly controlling parenting can lead to negative self-concepts among adolescents, which can increase their vulnerability to risky behaviors (Marhayati et al., 2023). Thus, fostering an environment where adolescents feel safe to discuss their concerns and experiences may increase the effectiveness of prevention strategies. Community-based interventions also play a critical role in prevention. Programs that combine health education with accessible reproductive health services are effective in reducing teen pregnancy rates by providing teens with the information they need to make safe choices (Obach et al., 2019; Kassa et al., 2018). These interventions not only educate teens about the risks associated with unprotected sex but also empower them to seek help and resources when needed. The use of technology in prevention strategies has gained attention. Mobile health interventions that promote safer sex practices have been identified as an effective tool for reaching adolescents, especially in contexts where traditional communication may be stigmatized (Cornelius and Appiah, 2016). These interventions can provide expedient access to information and resources, thereby reducing barriers to seeking help and increasing the overall effectiveness of prevention efforts. The concept of prevention in addressing adolescent behavioral problems encompasses a multifaceted approach that includes educational programs, parental engagement, community interventions, and the use of technology. By effectively communicating the risks and consequences of certain behaviors, stakeholders can empower adolescents to make healthier choices and reduce the prevalence of risky behaviors.

Meanwhile, education addressing adolescent behavioral issues focuses on providing adolescents with the knowledge, skills, and resources needed to make informed decisions about their health and well-being. This approach is fundamental in areas such as sexual and reproductive health, substance abuse prevention, and general health behavior. Effective educational interventions can empower adolescents to adopt

healthier lifestyles and reduce the incidence of risky behaviors. One of the key components of educational interventions is the involvement of parents and guardians. Research shows that parental guidance significantly influences adolescents' sexual health behaviors. For example, interventions that educate parents about sexual health can improve communication between parents and adolescents, thereby fostering a supportive environment where adolescents feel comfortable discussing sensitive topics (Sutan and Mahat, 2017). This collaborative approach not only improves parenting skills but also ensures that adolescents receive consistent messages about healthy behaviors, ultimately leading to reduced risky sexual behaviors (Sutan and Mahat, 2017). Additionally, school-based educational programs have been shown to be effective in promoting healthy behaviors among adolescents. For example, comprehensive sexual and reproductive health education in schools has been shown to improve adolescents' knowledge, attitudes, and behaviors related to sexual health (Fety et al., 2023; Leekuan et al., 2022). Such programs often incorporate interactive methods, including technology-based learning, that can engage adolescents more effectively than traditional teaching methods (Fety et al., 2023). The use of mobile applications and online platforms allows for flexible learning opportunities that suit today's adolescent preferences, making health education more accessible and relevant (Leekuan et al., 2022).

Peer education is another effective strategy within the education framework. Programs that utilize peer educators to disseminate information about health risks and healthy behaviors have shown positive results in changing adolescent attitudes and behaviors (Menna et al., 2015). By leveraging peer influence, these programs can create a support network that encourages healthy choices and reduces the stigma associated with discussing health issues. Furthermore, integrating creative methods, such as theater-based interventions, has shown promise in improving adolescents' understanding of health topics. These methods can engage adolescents emotionally and cognitively, leading to better retention of information and a greater likelihood of behavioral change (Mohandespour et al., 2023). innovative approaches can make health learning more relevant and impactful, fostering a health awareness culture among adolescents.

### ***How dissuasion work?***

Dissuasion in the context of Internet Game Addiction prevention refers to the process of preventing or persuading individuals, in this case adolescents, to reduce their involvement in online gaming. Several studies have explored this concept, highlighting its potential effectiveness and complexity. Dissuasion also refers to an individual's efforts to prevent others from deviant behavior through words that shape knowledge about how someone can avoid a deviant act or stop doing it. In a narrow sense, dissuasion can be understood as a prohibition sentence, an invitation to avoid, either through persuasive words or forms of coercion. Dissuasion is a message that will be transmitted to the target - in this case, internet game addicts- and how this message is constructed as a foundation to prevent someone from getting involved in the game further. The constructed messages may have a "hard and rigid" impact; the message is binding and seems directive. The message here becomes a rule that is coercive and must be obeyed. Xu (Xu and Yuan, 2008) in his writing, this dissuasion is a perception built to change someone through coercion, denial of arguments, persuasion or forms of intimidation. In this context, the perception expressed by Xu is a message built to

influence someone by forming new knowledge that opposes old knowledge. In psychological terms, messages have a significant influence in influencing a person's perspective. The concept of messages that can influence psychological conditions in changing adolescent behavior is essential to understanding how targeted communication can promote healthier lifestyles and reduce risky behavior. Messages that influence behavior are a reasonably reliable tool. For example, in the case of adolescent weight control, message interventions can be carried out to monitor and supervise obese adolescents (Jensen et al., 2019). However, a balance between direction and motivation is needed to avoid perceptions of coercion and create an autonomous attitude that needs to be built (Woolford et al., 2011).

In addition, framing messages plays a significant role in influencing adolescent behavior. Messages need to be well-framed to achieve benefits that can increase knowledge and motivation among adolescents, although the direct impact on behavior change can vary (Fetter et al., 2019). This is consistent with a meta-analysis, which found that the framing of health messages significantly influenced attitudes and intentions, suggesting that carefully crafted messages can lead to positive behavioral outcomes (Gallagher and Updegraff, 2012). The nuances of message framing are particularly relevant in adolescent health, where perceptions of risks and benefits can shape decision-making processes. Message framing becomes something interesting in the context of dissuasion. Xu said that dissuasion is an effort created to provide prohibitions in the form of challenging sentences and contrary to unwanted behavior. This means that to produce prohibition words, it is necessary to start by creating a concept of prohibition words. This concept is used to frame the desired message. In the case of online game addiction, someone needs to frame the positive impact of leaving the game. Or conversely, he needs to provide arguments about the negative impacts on daily activities if someone continues to enter online game addiction.

From several things that the author has explained above, in the context of prevention at least we can understand how dissuasion works: (1) The need to convey information and build awareness. A pearl of wisdom says "prevention is better than cure", this sentence seems to be related to how someone provides information about preventing online games. Or providing information about the dangers of online game addiction. Including its negative impacts on physical, mental and social health. In this context, it is important for someone to consider the framing of the message. Related to building awareness, this is related to rational thinking. Where it can be assumed that people who are addicted to online games are those who have irrational thoughts. So what needs to be done is to restore their rational thoughts. (2) Implementation of limits and rules. Dissuasion is an effort that is coercive as a rule. In preventing maladaptive behavior, the implementation of limits and rules needs to be enforced. To regulate someone in playing online games, there needs to be limits and rules. Often online game addicts experience a tolerance phase, which is a condition where someone who is addicted provides time for themselves to play games. This condition causes people to play games for a long time and forget the rules on limits, both time and activity. (3) Social campaigns and negative narratives. Some social institutions that work in preventing destructive behavior use this strategy. For example, in the campaign to prevent child marriage, the jargon that is thrown out and the narratives that are produced lead to the formation of public opinion (Mustaqim and Chasanah, 2022). They highlight the negative impacts of destructive behaviors, such as risky dating, child marriage and violence against women. This effort seems to be formulated in preventing online game addiction. By framing negative

narratives of online game addiction, someone will at least think twice about repeating this detrimental behavior.

(4) Use of technology and monitoring. Several schools in Indonesia implement student attendance by scanning barcodes on students' smartphones directly connected to parents' cell phones. This is done to monitor student attendance at school. The increasing number of students who skip school has made this innovation necessary to prevent school violations. However, there is an interesting opinion: Xu and Yuan (2008) said that dissuasion is actually not very appropriate when applied in prevention. He said in the context of preventing and handling online game addiction, parental supervision, and diversion are efforts that appear to be influential. Meanwhile, dissuasion is called like medicine. Dissuasion is more appropriate to use in the context of treatment. It is like a medicine that is needed when someone is sick. When someone plays online games, they will be given dissuasion. The more often children play online games, the more dissuasion they get.

### ***How education work?***

Education is a foundational element for an individual's cognitive development, playing a critical role in shaping how individuals acquire, process, and utilize knowledge. One of the primary ways education influences cognitive development is by promoting critical thinking and problem-solving skills. According to, embracing the values of cognitive development in educational settings involves recognizing the multidimensional nature of cognitive processes, which include personal epistemologies that shape how individuals understand and engage with knowledge. This perspective highlights the importance of fostering educational environments that encourage students to construct their own understanding and apply cognitive strategies effectively. Education refers to knowledge or focuses on education that aims to shape a person's cognition through an active attitude (Xu et al., 2012). Education emphasizes the aspect of a person's cognitive formation that can be controlled by themselves. Constructing a way of thinking, building one's own opinion so that a person can understand the problems faced and be able to solve them. The concept of education as a basic element for individual cognitive development plays an important role in preventing and treating internet gaming addiction. Education not only provides knowledge but also fosters critical thinking, emotional regulation, and self-control, which are important in reducing the risks associated with excessive gaming. The interaction between cognitive development and educational strategies can significantly affect an individual's vulnerability to internet gaming addiction.

First, education enhances cognitive skills that are important for self-regulation and decision-making. emphasize that cognitive abilities, such as impulse control and critical thinking, are protective factors against Internet addiction (Kuss et al., 2013). By integrating educational programs that focus on these cognitive skills, individuals can develop a better understanding of their gaming habits and the potential consequences of excessive gaming. For example, educational interventions that teach students about the risks of gaming addiction can empower them to make informed decisions regarding their gaming behavior (Kuss et al., 2014). In addition, emotional intelligence, which can be developed through educational practices, plays an important role in preventing internet gaming addiction. highlighted that developing emotional intelligence in educational settings can improve students' ability to manage their emotions and engage in healthy social interactions. This emotional regulation is crucial, as individuals

struggling with emotional distress are more likely to turn to gaming as a coping mechanism, potentially leading to addiction (Lertkrai et al., 2019). By incorporating emotional intelligence training into educational curricula, schools can help students develop healthier coping strategies, reducing their reliance on gaming to relieve emotions. In addition, the role of parental education and involvement cannot be overlooked. Research shows that parents educated about the signs of internet addiction and the importance of monitoring their children's gaming habits can significantly influence their children's gaming behavior. Educational programs aimed at parents can provide them with the tools necessary to foster a balanced approach to gaming, encouraging moderation and healthy engagement with technology. This parental guidance is essential in creating an environment that supports cognitive and emotional development, ultimately reducing the risk of addiction (Wang et al., 2014).

Furthermore, the integration of cognitive behavioral therapy (CBT) into an educational framework may serve as an effective treatment for those already struggling with internet gaming addiction. found that CBT, when combined with educational interventions, can help individuals recognize and change maladaptive thought patterns associated with their gaming behavior (Zajac et al., 2017). By teaching students cognitive restructuring techniques, educational programs can empower them to challenge their gaming beliefs, thereby reducing compulsive gaming behavior. Education can serve as an important foundation for an individual's cognitive development, which is essential in preventing and treating internet gaming addiction. By enhancing cognitive skills, fostering emotional intelligence, involving parents, and integrating therapeutic approaches such as CBT, the education system can play a significant role in addressing the challenges posed by internet gaming addiction. Future efforts should continue to explore innovative educational strategies that promote healthy gaming habits and cognitive resilience among adolescents.

## **Conclusion**

The dissuasion and education approach is an effective strategy in preventing and treating online game addiction in adolescents. Dissuasion reduces the appeal and urge to play games excessively by increasing awareness, implementing limits, and promoting healthier alternative activities. Dissuasion acts like a drug; when someone plays a game, the consequence is dissuasion. Meanwhile, education functions as a cognitive foundation that helps adolescents understand the risks of addiction, develop self-regulation skills, and build critical digital literacy. By combining these two approaches, it is hoped that adolescents can be wiser in managing their gaming time so that addiction can be prevented and treated more effectively.

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## **Conflict of interest**

The authors confirm that there is no conflict of interest involve with any parties in this research study.

## REFERENCES

- [1] Buntaran, F.A.A., Riskinanti, A., Dawanti, R. (2024): The Mediation Role of Self-Control between Self-Regulation And Internet Addiction. – *Quantum Journal of Social Sciences and Humanities* 5(6): 11-23.
- [2] Chia, D.X., Zhang, M.W. (2020): A scoping review of cognitive bias in internet addiction and internet gaming disorders. – *International Journal of Environmental Research and Public Health* 17(1): 11p.
- [3] Choi, T., Park, J.W., Kim, D.J. (2021): The effect of stress on internet game addiction trends in adults: mindfulness and conscientiousness as mediators. – *Psychiatry Investigation* 18(8): 10p.
- [4] Cornelius, J.B., Appiah, J.A. (2016): Using mobile technology to promote safe sex and sexual health in adolescents: current practices and future recommendations. – *Adolescent Health, Medicine and Therapeutics* 14p.
- [5] Dieter, J., Hoffmann, S., Mier, D., Reinhard, I., Beutel, M., Vollstädt-Klein, S., Kiefer, F., Mann, K., Leménager, T. (2017): The role of emotional inhibitory control in specific internet addiction—an fMRI study. – *Behavioural Brain Research* 324: 1-14.
- [6] Fetter, D.S., Dharmar, M., Lawry-Hall, S., Pressman, J., Chapman, J., Scherr, R.E. (2019): The influence of gain-framed and loss-framed health messages on nutrition and physical activity knowledge. – *Global Pediatric Health* 6: 10p.
- [7] Fety, Y., Said, F.M., Nambiar, N., Poddar, S. (2023): A Comparative Study on the Differences in Knowledge, Attitude, and Behavior Regarding Sexual and Reproductive Health (SRH) among High School Adolescents in Kendari City, Indonesia. – *The Malaysian Journal of Nursing (MJN)* 15(1): 87-92.
- [8] Gallagher, K.M., Updegraff, J.A. (2012): Health message framing effects on attitudes, intentions, and behavior: a meta-analytic review. – *Annals of Behavioral Medicine* 43(1): 101-116.
- [9] Ghuman, D., Griffiths, M. (2012): A cross-genre study of online gaming: Player demographics, motivation for play, and social interactions among players. – *International Journal of Cyber Behavior, Psychology and Learning (IJCIBPL)* 2(1): 13-29.
- [10] Hurlock, E.B. (1980): *Psikologi Perkembangan*. – Gelora Aksara 53p.
- [11] Jensen, C.D., Duraccio, K.M., Barnett, K.A., Fortuna, C., Woolford, S.J., Giraud-Carrier, C.G. (2019): Feasibility, acceptability, and preliminary effectiveness of an adaptive text messaging intervention for adolescent weight control in primary care. – *Clinical Practice in Pediatric Psychology* 7(1): 57-67.
- [12] Jordan, C.J., Andersen, S.L. (2017): Sensitive periods of substance abuse: Early risk for the transition to dependence. – *Developmental Cognitive Neuroscience* 25: 29-44.
- [13] Kassa, G.M., Arowajolu, A.O., Odukogbe, A.A., Yalew, A.W. (2018): Prevalence and determinants of adolescent pregnancy in Africa: a systematic review and meta-analysis. – *Reproductive Health* 15(1): 17p.
- [14] Kemel, E. (2013): Dissuasion de la conduite sous l’emprise de l’alcool: de la théorie aux comportements. – *Les Cahiers Scientifiques du Transport-Scientific Papers in Transportation* 63: 26p.
- [15] Kim, D., Nam, J.K., Keum, C. (2022): Adolescent Internet gaming addiction and personality characteristics by game genre. – *Plos One* 17(2): 14p.
- [16] Kuss, D.J. (2013): Internet gaming addiction: current perspectives. – *Psychology Research and Behavior Management* 12p.
- [17] Kuss, D.J., Griffiths, M.D., Karila, L., Billieux, J. (2014): Internet addiction: A systematic review of epidemiological research for the last decade. – *Current Pharmaceutical Design* 20(25): 4026-4052.
- [18] Kuss, D.J., Van Rooij, A.J., Shorter, G.W., Griffiths, M.D., van de Mheen, D. (2013): Internet addiction in adolescents: Prevalence and risk factors. – *Computers in Human Behavior* 29(5): 1987-1996.

- [19] Leducq, S., Bonsu, N., Clement, K., Barlow, R., Williams, H.C. (2023): Predator and Alien: the threat of predatory journals and conferences. – *Clinical and Experimental Dermatology* 48(8): 847-853.
- [20] Leekuan, P., Kane, R., Sukwong, P., Kulnitichai, W. (2022): Understanding sexual and reproductive health from the perspective of late adolescents in Northern Thailand: a phenomenological study. – *Reproductive Health* 19(1): 17p.
- [21] Lemmens, J.S., Valkenburg, P.M., Peter, J. (2009): Development and validation of a game addiction scale for adolescents. – *Media Psychology* 12(1): 77-95.
- [22] Lertkrai, J., Lertkrai, P., & Kaewboonma, N. (2019): An Ontology-Based Model for Treatment Guidelines of Internet and Games Addiction. – *International Journal of Recent Technology and Engineering* 8(2S2): 113-117.
- [23] Maimon, D., Alper, M., Sobesto, B., Cukier, M. (2014): Restrictive deterrent effects of a warning banner in an attacked computer system. – *Criminology* 52(1): 33-59.
- [24] Marhayati, N., Badriyah, L., Andani, U. (2023): Negative impact of parental verbal abuse on the formation of adolescent self-concept. – *Bisma The Journal of Counseling* 7(1): 52-58.
- [25] Menna, T., Ali, A., Worku, A. (2015): Effects of peer education intervention on HIV/AIDS related sexual behaviors of secondary school students in Addis Ababa, Ethiopia: a quasi-experimental study. – *Reproductive Health* 12(1): 8p.
- [26] Milani, L., La Torre, G., Fiore, M., Grumi, S., Gentile, D.A., Ferrante, M., Miccoli, S., Di Blasio, P. (2018): Internet gaming addiction in adolescence: Risk factors and maladjustment correlates. – *International Journal of Mental Health and Addiction* 16(4): 888-904.
- [27] Mohammad, S., Jan, R.A., Alsaedi, S.L., Jabir, S.A.M. (2023): Symptoms, mechanisms, and treatments of video game addiction. – *Cureus* 15(3): 6p.
- [28] Mohandespour, F., Maasoumi, R., Pourmand, H., Amir Shahkarami, S.N., Daemi, F. (2023): The impact of theatre-based interventions for sexual health education to adolescents: A systematic review. – *Journal of Holistic Nursing And Midwifery* 33(1): 34-42.
- [29] Mustaqim, A., Chasanah, I. (2022): Keterlibatan Laki-Laki dalam Pencegahan Perkawinan Anak: Studi Pada Komunitas Gerakan Laki-laki Peduli Perempuan dan Anak. – *Prosiding Konferensi Gender dan Gerakan Sosial* 1(01): 450-460.
- [30] Novrialdy, E. (2019): Kecanduan game online pada remaja: Dampak dan pencegahannya. – *Buletin Psikologi* 27(2): 148-158.
- [31] Obach, A., Sadler, M., Cabieses, B. (2019): Intersectoral strategies between health and education for preventing adolescent pregnancy in Chile: Findings from a qualitative study. – *Health Expectations* 22(2): 183-192.
- [32] Park, C.H., Chun, J.W., Cho, H., Kim, D.J. (2018): Alterations in the connection topology of brain structural networks in Internet gaming addiction. – *Scientific Report* 8(1): 9p.
- [33] Paulus, F.W., Ohmann, S., Von Gontard, A., Popow, C. (2018): Internet gaming disorder in children and adolescents: a systematic review. – *Developmental Medicine & Child Neurology* 60(7): 645-659.
- [34] Quancai, L., Meng, C., Kunjie, C. (2023): Social control and self-control: factors linking exposure to domestic violence and adolescents' Internet gaming addiction. – *Frontiers in Psychiatry* 14: 9p.
- [35] Sutan, R., Mahat, A.N. (2017): Parenting skills determinant in preventing adolescents' sexual health risk behavior. – *Open Journal of Preventive Medicine* 7(1): 1-13.
- [36] Tapscott, D. (2013): *Grown Up Digital*. – Gramedia Pustaka Utama 288p.
- [37] Tas, I. (2017): Relationship between Internet Addiction, Gaming Addiction and School Engagement among Adolescents. – *Universal Journal of Educational Research* 5(12): 2304-2311.

- [38] Tsumura, H., Kanda, H., Sugaya, N., Tsuboi, S., Takahashi, K. (2018): Prevalence and risk factors of internet addiction among employed adults in Japan. – *Journal of Epidemiology* 28(4): 202-206.
- [39] Tze, V.M., Li, J.C.H., Pei, J. (2012): Effective prevention of adolescent substance abuse—educational versus deterrent approaches. – *Alberta Journal of Educational Research* 58(1): 122-138.
- [40] Van Rooij, A.J., Schoenmakers, T.M., Van de Eijnden, R.J., Van de Mheen, D. (2010): Compulsive internet use: the role of online gaming and other internet applications. – *Journal of Adolescent Health* 47(1): 51-57.
- [41] Wang, C.W., Chan, C.L., Mak, K.K., Ho, S.Y., Wong, P.W., Ho, R.T. (2014): Prevalence and correlates of video and internet gaming addiction among Hong Kong adolescents: A pilot study. – *The Scientific World Journal* 9p.
- [42] Wang, X., Huang, X., Huang, X., Zhao, W. (2022): Parents' lived experience of adolescents' repeated non-suicidal self-injury in China: a qualitative study. – *BMC Psychiatry* 22(1): 9p.
- [43] Wei, H.T., Chen, M.H., Huang, P.C., Bai, Y.M. (2012): The association between online gaming, social phobia, and depression: an internet survey. – *BMC Psychiatry* 12(1): 7p.
- [44] Wells, J., Barlow, J., Stewart-Brown, S. (2003): A systematic review of universal approaches to mental health promotion in schools. – *Health Education* 103(4): 197-220.
- [45] Woolford, S.J., Barr, K.L., Derry, H.A., Jepson, C.M., Clark, S.J., Strecher, V.J., Resnicow, K. (2011): OMG do not say LOL: obese adolescents' perspectives on the content of text messages to enhance weight loss efforts. – *Obesity* 19(12): 2382-2387.
- [46] Xie, Y., Yang, Q., Lei, F. (2023): The relationship of internet gaming addiction and suicidal ideation among adolescents: the mediating role of negative emotion and the moderating role of hope. – *International Journal of Environmental Research and Public Health* 20(4): 10p.
- [47] Xu, Z., Turel, O., Yuan, Y. (2012): Online game addiction among adolescents: motivation and prevention factors. – *European Journal of Information Systems* 21(3): 321-340.
- [48] Xu, Z., Yuan, Y. (2008): The impact of motivation and prevention factors on game addiction. – *European Journal of Information Systems* 21: 321-340.
- [49] Zajac, K., Ginley, M.K., Chang, R., Petry, N.M. (2017): Treatments for Internet gaming disorder and Internet addiction: A systematic review. – *Psychology of Addictive Behaviors* 31(8): 30p.
- [50] Zhang, Y., Zhong, Y.L., Luo, J., He, J.L., Lin, C., Zauszniewski, J.A., Zhou, J.H., Chen, Y., Wu, C.Y., Wang, S.R., Li, Z.H. (2023): Effects of resourcefulness on internet game addiction among college students: The mediating role of anxiety and the moderating role of gender. – *Frontiers in Public Health* 11: 8p.