
Review

Behavior Therapy in Those Who Are Addicted to Online Games

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ABSTRACT

Adolescents addicted to online games harm their physical, psychological, and social health and require therapy. Providing therapy such as behavior therapy can help reduce online game addiction. This research aims to review articles that discuss the addictive behavior of online games and the therapy used. The method used in this study is a literature review by identifying articles from a systematic review identifying articles from four data based on ScienceDirect and PubMed in 2020. Based on the inclusion and exclusion criteria set, using the keywords behavior therapy, adolescents, and online game addiction from 2017-to 2020. We discovered 15 publications that satisfied the inclusion criteria and deserved to be considered in our examination of data-based articles. Adolescents who experience online game addiction discussed they vary in the causes, symptoms, effects, and psychotherapy given. Cognitive Behavioral Therapy (CBT), Social Skill Training (SST), and Mindfulness are all types of behavior therapy that can help kids addicted to online games. Psychotherapy can help teens addicted to internet games.

Introduction

Game addiction is a negative behavior characterized by excessive online and offline playing. People addicted to online games will have a fun effect while playing (Ayumi, Zulkarnain, and Hendra, 2019). A gamer is prone to losing track of his other tasks while playing (Vaccaro, Potenza, Sanchez, 2019). These harms one's health, thinking, social life, family relationships, academic achievement, and overall well-being (Sanchez, 2019). Playing online games is more than 30 hours per week (King & Delfabbro, 2016). Addiction to online games harms users because it makes players lose control of playing online and offline games.

The most significant users of online games are teenagers. Teenagers tend to be shy in the real world and use the virtual world as a place to express their abilities. Teenagers feel confident if they get the highest score when playing. Playing online games is used as a strategy to change moods and virtual escape because of boredom. Playing online games is used as a strategy to change moods and virtual escape because of boredom (Pawlikowski *et al.*, 2018). Teenagers feel confident in their abilities in cyberspace. In addition, online games are used as a strategy to relieve boredom.

Physical online game addiction is clinical symptoms such as being engrossed in games on the internet, spending more time playing games, losing control while playing games, and losing interest in other activities. Psychological online game addiction causes clinical symptoms such as feeling sad, irritable, and restless. Socially online game addiction has clinical symptoms such as lying to family members and losing relationships, jobs, education, and careers because of online games (Zajac *et al.*, 2017; Wichstrom *et al.*, 2019). Clinical symptoms of online game addiction spiritually, such as teenagers being more engrossed in playing online games so that they leave their worship (Bhayana & Ahuja, 2018). Online game addiction shows several physical, psychological, social, and spiritual clinical symptoms.

Online game addiction among teenagers during the COVID-19 pandemic has

increased in several countries, both in Europe and Asia. The prevalence of adolescents experiencing online game addiction in the United States is 8.7%, the Netherlands is 2.9%, Germany is 0.2%, and Norway is 0.9%. In Asian countries in Hong Kong, as many as 83.0% (2377/2863) of teenagers played games during the COVID-19 pandemic. The prevalence of excessive and pathological game addiction behavior in males is 20.9% (597/2863), and in females, 5.3% (153/2863) (Shimin Zhu *et al.*, (2021). In India, there is an increase in nearly 200% who played online games during the pandemic with 75,000 new players (Ahaskar, 2020). In Turkey, the percentage of teens who spent more than 40 hours a week playing online games in May was 3.9%, experiencing an increase in May. June to 8.7%. This score consists of male students from 6.4% increased to 13.4%, while female students from 0.7% increased to 5.1%. The average weekly time spent playing digital games increased from 10.67 to 16.15 hours (Cakiroglu, Soylu & Gormez, 2021). In Indonesia, game addiction cases during the COVID-19 pandemic increased by 13.05% compared to only 10.15% (Detik.com, 2020). Research results related to online game addiction by type of sex lamins are 8.09% male and 5.53% female; based on these data, the male score is higher than the female (Rangkuti, Nasution, & Yurliani, 2021). The prevalence of online game addiction is more in men than women.

The impact of online game addiction during the COVID-19 pandemic has caused physical, psychological, and social health problems. Online game addiction harms health, way of thinking, social life, family relationships, academic performance, and well-being (Sanchez, 2019). Physical impacts include sleep disturbances, poor sleep quality, eating disorders, limited physical activity, back strain, eye fatigue, and decreased hearing and visual function (Kuss *et al.*, 2018; El-Sherbini & Abdou, 2020). In particular, addiction to online games is related to sleep disorders, namely psychological problems such as anxiety, depression, and stress (Wong *et al.*, 2020).

Other psychological impacts include irritability, suicidal ideation, social phobia, schizophrenia, obsessive-compulsive disorder, aggressive behavior, and self-injurious behavior (Al Gammal, 2019). The social impacts are teenagers being indifferent, family dysfunction, ignoring family responsibilities, lack of social interaction, not caring about the environment, decreased self-expression, decreased learning time, execution, and inhibition (Sari, Kartina, Kusumawati, & Sulisetyawati, 2020). Addiction to online games in adolescent's harms adolescents through physical, psychological, and social disorders.

The increasing addiction to online games in adolescents is of great concern. Teenagers need help to control the adverse effects of online game addiction by giving psychotherapy. Psychotherapy is a process to help heal psychological disorders through specific series of therapeutic activities (Abdul Karim, 2021).

Counseling, mindfulness, behavior modification treatment (BMT), cognitive behavior therapy, and social skills training can benefit from psychotherapy. Counseling is provided to clients to assist them in enhancing their mental abilities and functions when coping with a problem (M. Zainal, 2019). Training attention, cognitive assessment skills do mindfulness, and nature as therapy (We Li *et al.*, 2017). Mindfulness helps clients take advantage of positive, negative, and neutral events to overcome feelings of depression and lead to self-welfare (Aust *et al.*, 2017). Behavior modification therapy (BMT) was used to lessen online games' frequency, intensity, and length. BMT assists in overcoming ideas and sensations associated with the issue of excessive gaming (Ramos & Agnes, 2020). The recommended psychological therapy in dealing with online game addiction is by giving psychotherapy. Psychotherapy can overcome problems related to thought and feeling disorders due to excessive online game addiction by using Cognitive Behavior Therapy (CBT) (Bass, 2015). In addition, social skill training therapy is also used to help online game addiction. This

therapy trains the client's social skills (Widuri *et al.*, 2018).

Online games make teens lose control while playing; this makes teenagers addicted. Addiction to online games harms physical, psychological, and social health problems. Based on the description of the problems above, this article aims to determine psychotherapy in adolescents addicted to online games to be used as a basis for preventing mental disorders.

Method

This systematic review study discusses psychotherapy in adolescents addicted to online games. This study applies the PRISMA checklist to select scientific articles from the database that can be modified for writing purposes. Use Prisma checklists to select scientific literature by looking at the title, abstract, introduction, and method.

The search for scholarly publications is restricted by the inclusion criteria, studies on psychotherapy in teenagers suffering from online gaming addiction. Respondents are teenagers who provide self-diagnosis after using online games as a source of information on online game addiction. Articles are published in databases in the period from 2016 to 2021. Scientific literature is not limited to research articles but all forms of articles, including letters from editors, reviews, and research articles. We ensure articles are available in full text and English, and Indonesian.

Assessment of study quality and risk of bias from each article uses the JBI Critical Appraisal Tools. Following a systematic review, ten papers were found based on the JBI Critical Appraisal Tools evaluation. The JBI assessment is divided into the answer choices of 'yes,' 'no,' 'unclear,' or 'not applicable,' with a value of 1 given for the answer 'yes' and a value of 0 for the other answer choices. Research that meets 60% of the critical appraisal criteria is eligible and included in this systematic review. We excluded low-quality studies to avoid bias in the validity of the results and review recommendations.

Results and Discussion

Our review of data-based papers yielded nine articles that meet the predetermined inclusion criteria and ought to be evaluated. Adolescents who experience online game addiction discussed various causes, symptoms, effects, and behavior therapy. Behavior therapy that can be used for teenagers addicted to online games is Cognitive Behavioral Therapy (CBT), Social Skill Training (SST), Mindfulness, and Hypnotherapy.

Game *addiction* is a repetitive play activity that might be a video or digital (El-Sherbini & Abdou, 2020). Games provide a sense of interest that can affect cognitive, emotional, and behavior that can cause significant damage in the real world and can be referred to as addiction (Milani *et al.*, 2017). Addiction to technology on the internet can be known as internet gaming disorder (Wartberg *et al.*, 2019).

Teenagers who are addicted to online games are because they are ashamed to express their abilities in the real world. In addition, the causes of online games are relationship, manipulation, immersion, escapism, and achievement. They feel confident if they use the virtual world as a place to express their ability to get the highest score while playing. Playing online games is used as a strategy to change moods and virtual escape because of boredom (Pawlikowski *et al.*, 2018).

Symptoms that arise in adolescents addicted to online games are physically, psychologically, socially, and spiritually. Physical addiction to online games is clinical symptoms such as being engrossed in games on the internet, spending more time playing games, losing control while playing games, and losing interest in other activities. Psychological online game addiction causes clinical symptoms such as feeling sad, irritable, and restless. Socially online game addiction has clinical symptoms such as lying to family members and losing relationships, jobs, education, and careers because of online games (Zajac *et al.*, 2017; Wichstrom *et al.*, 2019). Clinical symptoms of online game addiction are spiritual, such as teenagers

being more engrossed in playing online games to leave their worship (Bhayana & Ahuja, 2018).

Addiction to online games harms physical, psychological, and social health problems. Physical impacts include sleep disturbances, poor sleep quality, eating disorders, limited physical activity, back strain, eye fatigue, and decreased hearing and visual function (Kuss *et al.*, 2018; El-Sherbini & Abdou, 2020). In particular, online game addiction is related to sleep disorders, namely psychological problems such as anxiety, depression, and stress (Wong *et al.*, 2020). Other psychological impacts include irritability, suicidal ideation, social phobia, schizophrenia, obsessive-compulsive disorder, aggressive behavior, and self-injurious behavior (Al Gammal, 2019). The social impacts are teenagers becoming indifferent, family dysfunction, ignoring family responsibilities, lack of social interaction, not caring about the environment, decreased self-expression, decreased learning time, execution, and inhibition (Sari, Kartina, Kusumawati, & Sulisetyawati, 2020).

The increasing addiction to online games in teenagers is of great concern. Teenagers need help to control the adverse effects of online game addiction by giving psychotherapy. Psychotherapy is a process to help heal psychological disorders through specific series of therapeutic activities (Abdul Karim, 2021).

Therapy that can be used to help teenagers who are addicted to online games are:

1. Cognitive Behavior Therapy (CBT)
Cognitive behavior therapy (CBT) is a short-term problem-focused behavioral treatment. In general, it helps online gaming enthusiasts realize the feelings and actions of online gaming addiction. Adolescents will learn new coping skills and methods to prevent relapse. It focuses on adolescents by considering the relationship between beliefs, thoughts, and feelings and following patterns of behavior and actions (Stevens *et al.*, 2018). CBT effectively deals with individuals who experience psychological stress, such as

game addiction. This sort of therapy involves corrective actions in the cognitive process and the detection and transformation of irrational beliefs into more rational thoughts (Torres-Rodríguez, Griffiths, Carbonell, & Oberst, 2018). CBT has a theoretical basis and empirical evidence by producing interventions related to changing negative behavior and thoughts to reduce the symptoms and severity of online game addiction (Zhang *et al.*, 2016; Gonzales *et al.*, 2018).

2. Social Skill Training (SST)

Social skill training is an intervention used to train clients' abilities in social interaction so that they can be appreciated by their social environment (Yuswatiningsih & Rahmawati, 2020). SST is done by training individual behavioral skills. It aims to be able to conduct orientation in achieving goals, values, and acceptance in the social environment. It focuses on youth by improving socialization skills in the surrounding environment. So that the time you have is not only spent playing online games. Teenagers are expected to be able to control themselves by playing online games, doing new hobbies that are more useful, interacting with the environment, and improving school achievement (Hasibuan, Yahya, & Bakar, 2019).

3. Mindfulness

Mindfulness can be done to help reduce online game addiction. Training attention, cognitive assessment skills do mindfulness, and nature as therapy (We Li *et al.*, 2017). Mindfulness helps clients take advantage of positive, negative, and neutral events to overcome feelings of depression and lead to self-welfare (Aust *et al.*, 2017). Mindfulness can be obtained by fulfilling goals obtained when individuals act according to goals through self-control. Meanwhile, disturbing thoughts, also called intrusive thoughts, are usually seen as expressions of low levels of self-control in individuals. Intrusive thoughts are mental processes that are unplanned and difficult to control; also, they frequently interfere with ongoing activities, and the desired content is usually harmful. Addiction is

closely related to intrusive thoughts; both arise because of problems in self-control. This confirms the relationship between mindfulness and self-control so that it can mediate the effect of mindfulness on addiction to something (Zakiyatul Fuadah, 2021).

4. Hypnotherapy

Hypnotherapy is a model that can change human behavior that focuses on the subconscious mind. Hypnotherapy can also be referred to as mental therapy and healing technique, which use hypnosis to give positive suggestions or orders to the subconscious mind for healing a psychological disorder or to change thoughts, feelings, and behavior to become better (Syarifudin, 2018). Hypnotherapy-based interpersonal communication model has been developed to reduce online game addiction in adolescents (Rachayu & Banat, 2020). Habits or behaviors appear at the subconscious level, so it will be faster and more effective to eliminate a behavior through hypnosis because it can directly access direct information on a subconscious level. In dealing with deviant behavior in youth can use several techniques in hypnotherapy, such as direct technique suggestion, parts therapy, and age regression (Suwandi, 2017).

Conclusion

Teenagers are the most frequent consumers of online games, where they are ecstatic to express themselves in the virtual world. This occurs because they are timid in the real world—playing online games is a way to shift their mood and provide a virtual vacation from monotony. Teenagers tend to play online games excessively by playing continuously to forget other activities. This has a negative impact physically, psychologically, socially, and spiritually. So teenagers need treatment to reduce online game addiction. The treatment given to reduce online game addiction is given psychotherapy. Psychotherapy can be used to reduce online game addiction with CBT, SST, and mindfulness.

Limitations

The limitations in this systematic review are related to the source of original research articles that discuss the types of psychotherapy that can be used to reduce online game addiction in adolescents.

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Conflict of Interest

None

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