

## **The Management Method For Preventing Poor Mental Health For Internet Addiction Disorders**

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**Abstract.** Internet addiction disorder is internet excessive use that causes sleep disorder, limited physical activity, obsessive-compulsive disorder, anxiety, low family relationships, or academic procrastination in students. Therefore, it needs certain psychoeducation methods to prevent poor mental health for internet addiction disorders. This paper aims to describe the management methods for internet addiction disorders. This is a narrative literature review. Literature was taken from PubMed, Google Scholar, and Science Direct. The selected articles were published within 10 years. The term internet addiction disorder includes gadget addiction, social media addiction, and gaming disorders. Some prevention and treatments include psychosocial (psychoeducation), pharmacological, software-mediated (technology-based intervention), and combination. Technology-based solutions are mobile applications, web-based programs, and virtual reality. However, no single management is better than other treatments. It needs certain approaches for each individual based on age, the severity of disorders, and treatment responses. In conclusion, the management method for preventing poor mental health for internet addiction disorders is based on individual response. The choices of management are psychosocial (psychoeducation), pharmacological, software mediated (technology-based intervention), and combination.

**Keywords:** *Gadget Addiction, Internet Addiction Disorders, Mental Health, Psychoeducation*

### **INTRODUCTION**

Internet addiction disorder is internet excessive use that causes sleep disorder, limited physical activity, obsessive-compulsive disorder, anxiety, low family relationships, or academic procrastination in students. This problem is faced by adults and children. Internet addiction happens due to an increase in digital device usage, loneliness, and poor relationships between children and parents. Therefore, internet addiction is also known as digital addiction (Bağatarhan & Müge, 2023; Pradhita & Widyorini, 2020).

The usage of computer games is also one of the causes of internet addiction. In 2020, the number of game players around the world was approximately 2.7 billion. The numbers are getting more due to the COVID-19 pandemic. It was found a 75% increase in online gaming activity during the COVID-19 pandemic. This condition might raise a mental health problem over the years (Gorowska et al., 2022).

Digital addiction is an obsessive usage of digital devices that induces the harmful consequences of overuse. The affected individuals tend to repeat entering the websites or applications such as social media, games, or shopping online or offline through digital devices. Indicators of digital addiction are feeling pleasure when using digital devices and there is intense desire when digital devices are not used (Singh & Singh, 2019).

The prevalence rate of digital addiction is approximately more than 8% in Eastern countries. Therefore, it needs certain management methods for preventing poor mental health for internet addiction disorders (Cemiloglu et al., 2022). Although internet addiction disorder is increased, management is still a challenge. The treatment is various, such as psychoeducation and technology-based solutions. The technology-based solutions include mobile applications, web-based programs, and virtual reality. Each method has some unique challenges and advantages (Gorowska et al., 2022).

This paper aims to describe the management methods for internet addiction disorders. This is a narrative literature review.

### **METHODS**

Literature was taken from PubMed, Google Scholar, and Science Direct. The selected articles were published within 10 years (2013-2023). Articles were read twice to reduce bias. The selected articles were summarized and narrated.

## **RESULTS AND DISCUSSION**

### ***Internet addiction***

The term internet addiction disorder includes gadget addiction, social media addiction, and gaming disorders. Gadget is a term that refers to technological tools such as smartphones, tablets, iPhones, and computers. Some prevention and treatments include psychosocial (psychoeducation), pharmacological, software-mediated (technology-based intervention), and combination. Technology-based solutions are mobile applications, web-based programs, and virtual reality. However, no single management is better than other treatments. It needs certain approaches for each individual based on age, the severity of disorders, and treatment responses (Cemiloglu et al., 2022; Fitriani et al., 2023).

There is a lack of consensus on digital addiction definition. Some characterizations of digital addiction are usage style (over-attachment and total time spent), harmful consequences (occupational and relationship harm), and behavioral addiction withdrawal, mood modification, and preoccupation). Digital addiction is related to poor mental health statuses such as anxiety, depression, poor sleep quality, social relationships, problems with self-care, and daily activities (Cemiloglu et al., 2022).

Based on the research by Bagarhan & Muge in 2023, it was found that digital addiction appears due to the increased use of digital devices. The Digital Addiction Scale for Children (DASC) is a special scale used for early detection of the risk of digital addiction among children. Based on the data of 670 children aged 9–14 in Turkish children, it was revealed that there is no invariance (no difference) across gender (Bağatarhan & Müge, 2023).

### ***Consequences of internet addiction to health***

The addictive activities of using gadgets for more than 8 hours a day could induce health problems such as obesity, decreased brain and eye function, also sleep pattern disturbances (Boumosleh & Jaalouk, 2018; Mabarah & Sugianti, 2021; Tamura, 2017). Attention deficit disorder and hyperactivity (ADHD) might happen in children. ADHD is one of the mental and emotional disorders. The symptoms are tantrums and negative behavior when prohibited from any gadget activities (Efastrı et al., 2022; Wulandari & Hermiati, 2019). Furthermore, the impact of gadget addiction could affect physical and mental health, as well as learning achievement of students (Astari et al., 2023).

### ***Management***

Internet addiction could affect children and adults. The management is almost the same, including the method used in counseling. Gadgets might be used to deliver some information about counseling such as leaflets, educational videos, tutorial videos, and slides (powerpoint/PPT). The goal of counseling is the prevention and management of mental health problems regarding internet/digital/gadget addiction. The counseling method is done by question and answer session (Lestari, 2023).

### ***Psychoeducation***

Psychoeducation is a strategy for reducing gadget addiction by providing information for education. The material given is adjusted to the student's preference, i.e. auditory and visual. This health education can be given to parents and children, individuals or groups. The goal of psychoeducation is knowledge improvement for parents and children (Astari et al., 2023; Fitriani et al., 2023; Jalal et al., 2022; Wicaksono et al., 2023). A psychoeducation program based on a cognitive-behavioral therapy (CBT) approach is effective in reducing smartphone addiction levels (Tanşu, 2023).

The addiction to gadgets was measured by using the Smartphone Addiction Scale-Short Version instrument (SAS). Psychoeducational activities might reduce the level of gadget addiction at school. There was a decrease in SAS-VS scores after psychoeducation (p-value 0.001). Therefore, psychoeducation might improve health and mental status. Healthy digital skills should be encouraged (Astari et al., 2023). Parents are encouraged to give more supervision in children's habit of using gadgets for better goals such as reading, memorization, and giving tasks (Wicaksono et al., 2023).

### ***Combination of Cognitive Behavioral Therapy (CBT) and pharmacotherapy***

A combination of Cognitive Behavioral Therapy (CBT) and pharmacotherapy reveals an augmented effect of treatment (Wölfling et al., 2019). CBT might improve anxiety and depression symptoms related to digital addiction. Family relationships and function could be strengthened through family-based intervention.

### **Digital-based intervention**

Digital-based intervention includes application-based, website-based, and virtual reality interventions. However, online digital-based intervention has some limitations due to its infancy. Therefore, future studies should integrate more interventions and assessments to provide better management. Example of assessment includes brain neuroimaging combined with objective and subjective evaluation methods (Ding & Li, 2023).

### **Challenges**

Although the treatments for internet addiction are many, there are challenges in the diagnostic and recognition of the disorder. Continued research is needed to identify the most suitable treatment for each individual. Multidisciplinary approaches are needed due to the complexity of the brain structure, neurotransmitters, function, genetic factors, and environment. Standardized diagnostic criteria should be provided to facilitate accurate treatment (Ayub et al., 2023).

### **CONCLUSION**

In conclusion, the management method for preventing poor mental health for internet addiction disorders is based on individual responses. The choices of management are psychosocial (psychoeducation), pharmacological, software mediated (technology-based intervention), and combination. Although the treatments for internet addiction are many, there are challenges in the diagnostic and recognition of the disorder. Continued research is needed to identify the most suitable treatment for each individual. Multidisciplinary approaches are needed due to the complexity of the brain structure, neurotransmitters, function, genetic factors, and environment.

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