# Chapter 7 Digital Games and Mental Health: A Scoping Review on Gaming Disorder in the Last Decade

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## ABSTRACT

As more and more people worldwide play online games, identifying how games can help or harm players' mental health can be helpful for researchers and clinicians developing digital therapies through gaming. This chapter summarizes a scoping review focused on the relationship between digital games and mental health in the last decade. This type of review is designed to provide an overview of the existing evidence base on a particular topic. Of the 115 records selected after the first screening, 21 studies were included according to the inclusion criteria defined by the authors. From this scoping study, it is possible to recommend that even though video games are a real risk for addiction, they can work as digital therapies for psychosocial rehabilitation when administered with precaution in groups with mental disorders such as depression, high levels of anxiety, and ADHD. For this, a rigorous clinical assessment should be conducted that makes appropriate use of gamer typologies and evaluates the individual, emotional, and social factors that impact gamer behavior.

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#### INTRODUCTION

During the pandemic of COVID- 19, our entertainment and socializing habits were altered. Being forced to be at home, we had to adapt to a routine focused almost exclusively on digital media. The emotional instability generated by this *sui generis* context has been combated through human interactions mediated by digital technologies. Many of these interactions occurred in online interactive media, namely Massively Multiplayer Online Role-Playing Games (MMORPG) and Multiplayer Online Battle Arena (MOBA). In this phase, digital gaming quickly went on to have millions of new players worldwide (Statista, 2021). According to the Interactive Software Federation of Europe, playtime increased weekly by 1.5 hours among European players aged 6-64 years old, and 1 in 5 players played more video games online with friends, family, or other video game players during the lockdown. Around 30% of players said video games have helped them feel happier, less anxious, and isolated (IPSOS, 2020). Thus, these interactive entertainment media seem to have "outgrown" the stigma of harming mental health into an indispensable health promotion resource (IPSOS, 2020; Statista, 2021).

During the lockdown, the World Health Organization has teamed up with gaming companies to encourage people to keep their physical distance. Thus, in partnership with this organization, the gaming industry launched the #PlayApartTogether campaign to inform and encourage the population to follow the hygiene and safety guidelines to prevent COVID- 19 (ISFE, 2021). Paradoxically, a few years before the pandemic, the WHO had validated Internet Gaming Disorder (hereafter IGD) as an illness that can be clinically treated (WHO, 2018).

At the same time, the US Food and Drug Administration (FDA) approved the use of a "serious game" as part of the treatment for attention deficit hyperactivity disorder in 2020. It is a digital therapeutic that uses a proprietary algorithm designed to improve attention and related cognitive control processes. It is indicated for children between the ages of 8 and 12 diagnosed with ADHD. In addition, this and other digital therapeutics are currently being applied in people recovering from neurological and cognitive sequelae of COVID-19 (Jaywant et al., 2021).

Even with the visible benefits of digital games in various dimensions of human life (Johannes et al., 2021; Jones et al., 2014; Przybylski & Weinstein, 2017), gaming is classified as problematic when its use becomes no longer therapeutic and pleasurable (Ballou & Van Rooij, 2021; Gentile et al., 2011; Kiraly et al., 2020). IGD was included in the addictive disorders section in the latest edition of the International Classification of Diseases (2018). In this version of the ICD-11, gaming disorder is defined as a pattern of persistent or recurrent gaming behavior, which may be online or offline, manifested by impaired control over gaming, or increasing priority given to gaming to the extent that it takes precedence over other life interests and daily activities. The behavior pattern is of sufficient severity to result in significant impairment in personal, family, social, educational, or occupational spheres and may be either continuous or episodic and recurrent. The gaming behavior disorder and other traits are typically evident. Therefore, they can be assigned a diagnosis in over 12 months, although the required duration may be shortened if all diagnostic requirements are met, and patients show severe symptoms. In turn, the fifth revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) considers the IGD as a potential new diagnosis that requires further research (Carbonell, 2020).

The prevalence of problematic gaming is estimated to range from 0.7% to over 15.6% among the general population (Feng et al., 2017). However, there remains much debate in the academic community about the inflated prevalence figures for IGD and the appropriate diagnostic criteria for problematic online gaming (Kuss & Gainsbury, 2021; Markey & Ferguson, 2017). These dubious and antagonistic

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