Internet gaming disorder: A systematic literature review of neuroimaging studies

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Internet gaming disorder (IGD) is a new disorder currently positioned in the appendix of the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V). Research over the past decade has strongly suggested that excessive Internet Gaming can lead to the development of a behavioral addiction. As such, IGD (DSM-V) is a serious threat to mental health with multiple negative psychosocial consequences. Clinical studies have illustrated this disorder through neuroimaging studies, distinguishing particular brain regions involved in the development and maintenance of addiction. The aim of this systematic review was to assess current knowledge of neuroimaging techniques to better comprehend this emerging mental health problem. A literature search was conducted utilizing the following search databases: Academic Search Premier, MEDLINE, PubMed, PsychINFO, ScienceDirect, and Google Scholar to identify all available research evidence on neuroimaging of IGD (DSM-V). Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were followed during design, search, and reporting stages of this review. These studies provide compelling evidence for the similarities between different types of addictions, particularly substance-related addictions and internet gaming addiction on a molecular, neuronal, behavioral, and psychosocial level. The paper shows that by understanding the neuronal correlates associated with the development of IGD (DSM-V), the importance and severity of this condition will be highlighted, giving credence to the disorder and promote future research into other behavioral addictive disorders.

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