

knowledge snapshot



Association between Internet Gaming Disorder and mental health

What this article is about

Internet addiction (IA) refers to excessive Internet use for all sorts of activities including, but not limited to, video gaming. Internet Gaming Disorder (IGD) refers to addictive video game use, which may be online (i.e., over the Internet) or offline. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) includes IGD as a condition requiring further study, and Gaming Disorder was added to the most recent International Classification of Diseases (ICD-11). IA is not included in the DSM-5 or ICD-11.

Past research has found that IA tends to co-occur with mental health problems (e.g., depression). However, the study designs used to explore these relationships could not conclude whether having a mental health problem leads to the development of IA, vice versa. IGD and mental health problems may also share a common cause. Furthermore, it is unknown whether IGD has similar or different co-existing mental health problems to IA. This article reviewed recent studies that explored the associations between IGD and various mental health problems.

What was done?

The authors searched for relevant articles on several databases, including PubMed, PsycINFO, ScienceDirect, Web of Science, and Google Scholar. They performed the searches between October and December 2017. They also searched the reference lists of selected articles to find relevant studies.

Selected studies had to assess IGD using standardized questionnaires or proposed criteria (e.g., the DSM-5), and assess co-existing mental health problems using standardized questionnaires. Studies must be

Why is this article important?

This article reviewed 24 studies that examined the association between Internet Gaming Disorder (IGD) and mental health. IGD was linked to many mental health problems including anxiety, depression, ADHD or hyperactivity symptoms, social phobia/anxiety, and obsessive-compulsive symptoms. Males were more likely to have IGD than females. There was a lack of studies that examined IGD and mental health over time. It is hard to tell if IGD leads to mental health problems, if mental health problems result in IGD, or if IGD and mental health problems share a common cause.

published in a peer-reviewed journal after 2010 and written in English or Spanish (the languages known by the authors). The authors also selected studies that researched IA, but only if the Internet was used to play video games. In total, 24 studies were included.

The authors reviewed the studies. They paid attention to the study type, study population, methods, results, and effect size (how large the association between IGD and a mental health problem is). The authors compared the associations between IGD and various mental health problems with those reported for IA.

What you need to know

Nineteen of the 24 studies were cross-sectional studies that assessed IGD and mental health problems at only one point in time. There were only two longitudinal studies that examined IGD and mental health problems across several time points. Thus, the authors could not determine if IGD was a cause or

consequence of mental health problems. Nine studies focused on adolescents, six studies focused on adults, and one study focused on children. Eight studies were carried out in the general population. Most of the studies took place in Europe.

Fifteen studies were published after 2013 when IGD was proposed in the DSM-5. But only eight studies used the DSM-5 criteria or a questionnaire based on them to assess IGD symptoms. These questionnaires included the Internet Gaming Disorder Test-10 (IGDT-10), the Gaming Addiction Identification (GAIT), and the Internet Gaming Disorder Scale (IGDS). The rest of the studies used questionnaires developed for IA or gambling disorder, or general addiction criteria.

IGD had strong associations with most mental health problems. Almost all of the studies (92%) reported a significant link between IGD and anxiety; 89% between IGD and depression; 87% between IGD and attention deficit hyperactivity disorder (ADHD) or hyperactivity symptoms; and 75% between IGD and social phobia/anxiety and obsessive-compulsive symptoms. However, these results should be taken with caution as it appears there is publication bias, that is, studies that did not find any association between IGD and mental health problems might be less likely to be published.

In summary, it is difficult to conclude from the current evidence whether IGD leads to mental health problems or the other way around. This is in part due to the lack of longitudinal studies, and the inconsistent diagnostic criteria and psychological measurement tools used across the studies. The authors suggest that future research address these issues, as well as investigate how personality traits and type of harms experienced affect the association.

Who is it intended for?

This review is intended for clinicians and researchers who work with IGD. Information about the mental health issues commonly associated with IGD may help clinicians diagnosing and treating IGD. Future research on this association could investigate whether one disorder leads to the other or if they share a common cause. Future research could also examine IGD and

mental health problems among clinical populations that have been diagnosed by professionals.

About the researchers

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