

The Relationship between Internet Gaming, Aggression and Social Anxiety among Young People

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Abstract

Background: Video games are known to have certain benefits, such as improved focus, multitasking, and working memory, but they can also have a cost when used intensively. Internet gaming disorder (IGD) is a serious disorder that causes and sustains personal and social damage. Currently, online video games are widely considered activities that can be associated with addictive behavior; therefore, the diagnosis of an Internet gaming disorder is now part of DSM-5 and ICD 11. Aggression and anxiety may occur together in childhood and adolescence. Fear of humiliation and constant fear are the characteristics of Social anxiety disorder (SAD). However, there are a few studies on psychological symptoms associated with the overuse of online games.

Aims: This study aims to examine the relationship between Internet Gaming, Aggression, and social anxiety among Young People.

Methods: Multiple database searches, followed by individual database searches and online search engines using the following keywords in various combinations: “internet gaming”, “aggression”, “social anxiety”, “young people anxiety”, “relationship between internet gaming, aggression, and social anxiety”.

Results: This search strategy resulted in 20 articles of potential relevance to this review. Internet gaming disorder (IGD), while becoming popular, is becoming a risk to physical and mental health, especially for teens, as they contribute to a sedentary lifestyle. Online gaming technology has evolved rapidly over the past decade, and related issues are increasingly being addressed.

Conclusion: It was documented that depression, social phobia, and internet addiction were common in those online video game players having weekly gaming times.

Key word: Anxiety, Depression, Internet Gaming Disorder and Young People

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I. Introduction

Video games are a very popular leisure activity among adults (Domoff et al., 2020). The time spent playing video games increased from 5.1 hours/week in 2011 to 6.5 hours/week in 2017 (Bennett et al., 2017). Video games are known to have certain benefits, such as improved focus, multitasking, and working memory, but they can also have a cost when used intensively. When spending the vast majority of their daily games, excessive video players are at risk of having lower education and professional career, problems with colleagues, and lower social skills (Mihara and Higuchi, 2017).

Currently, online video games are widely considered activities that can be associated with addictive behavior; therefore, the diagnosis of an Internet gaming disorder is now part of DSM-5 and ICD 11; but some peculiarities of the disorder, the aspect of which is discussed, are still the time spent playing. Internet gaming disorders are defined as continuous and repeated involvement in video games, which usually leads to serious daily, professional or educational disorders, and has been proposed by the American Psychiatric Association (APA) as a preliminary psychiatric disorder that requires further study (diagnosis and statistics). DSM-5) (Petry et al., 2018, Pontes and Griffiths, 2015, Young et al., 1999).

Internet gaming disorder (IGD) is a serious disorder that causes and sustains personal and social damage. IGD should be evaluated in light of heterogeneous and incomplete concepts (Achab, 2016). (Achab, 2016). Internet Gaming Disorder (IGD) is a new disorder that is currently part of the Diagnostic and Statistical Manual of Mental Disorders Supplement. Few clinical studies indicate that psychological and pharmacological interventions can significantly reduce the severity of IGD symptoms (Erickson, 2018).

Among disorders associated with psychiatry like depression (Fava, 1998), post-traumatic stress disorder (Tedeschi and Quigley, 2000), anxiety disorders, antisocial personality disorder (Eronen et al., 1998), and alcohol abuse (Giancola et al., 2009) have been associated not only with serious emotional disorders but also with disorders of social functioning (Giancola et al., 2009).

Aggression and anxiety are common in childhood and adolescence. According to a recent survey (Granic, 2014), the rate of anxiety disorders in children and adolescents with behavioral disorders is at least 22% in community samples and 60% in clinical samples (Meeus et al., 2016).

Social anxiety disorder (SAD) is a debilitating condition characterized by a marked and persistent fear of humiliation or scrutiny by others (Organization, 1993). Individuals fear a variety of social interactions, such as talking to strangers, participating in groups, or making phone calls. Most things that involve watching others are difficult. This includes entering the room when others are already sitting, eating, or drinking in public and performing in front of an audience. Suffering is afraid to say or do something they think is degrading or embarrassing. Common concerns include fear of sweating, tremors, flushing, stumbling over words, looking anxious, or looking boring, stupid, or incompetent (Steinberg and Monahan, 2007).

Online gaming technology has evolved rapidly over the last decade and attention is increasingly focused on related issues. However, there are few studies on the psychiatric symptoms associated with the overuse of online games (Wei et al., 2012). This study aims to examine the relationship between Internet Gaming, Aggression, and social anxiety among young people.

II. Methods

Search strategies: Multiple database searches, followed by individual database searches and online search engines. Multiple database searches were conducted by searching the EBSCO host Web: Academic Search Complete, CINAHL, MEDLINE, Psychological, and Behavioral Sciences Collection. The searches were carried out in following databases, SpringerLink, Oxford University Press Journals, Pubmed database, BMJ, CMA, BMC, and Scopus using the following keywords in various combinations: “internet gaming”, “aggression”, “social anxiety”, “young people anxiety”, “relationship between internet gaming, aggression and social anxiety”.

Inclusion and exclusion criteria: The literature search was based on a theoretical rather than on a systematic review format. This search strategy resulted in 20 articles of potential relevance to this review. Each article was read in full and assessed for relevance to the review concerning the following inclusion criteria: English language publication; primary research paper; research that measured the relationship between internet gaming, aggression, and social anxiety. Five studies were excluded from the final review. These included aggression and social anxiety among non-gamer.

III. Aggression

Aggression is a highly studied area of psychosocial literature, especially theories of aggression and adolescence, aggression and adult violence, aggression and criminal behavior, and psychopathology (Card et al., 2008, Kempes et al., 2005, Stoff and Cairns, 2014). Although interrelated, it is important to distinguish between the concepts of aggression, aggressive behavior, and violence (Liu, 2004). Aggressive behavior can be understood as an observable manifestation of aggression, which is defined as any act aimed at causing harm, pain, or injury to another (Johnson and Mayer, 2010). Violence is a form of physical aggression, while aggressive behavior is a broader construct that includes physical, verbal, psychological, and other forms of harm, which means that violence is only a form of aggressive behavior. Therefore, aggressive behavior does not necessarily involve a physical component. This distinction is important because although understanding aggressive behavior as a predictor of violence is instructive, nonviolent aggressive behavior can still lead to negative results and deserves equal attention. The study of aggressive behavior is important for health due to the wide range of possible negative outcomes for public health, including youth violence, increased use of medical resources (for instance; emergency, psychiatry, and intensive care) and costs, and greater involvement in criminal justice (Bastiaens and Bastiaens, 2006). From adolescence to adulthood, aggressive behavior can turn into more serious and violent acts, such as domestic violence, sexual abuse, child abuse, and homicide. Young adults (18 to 24 years old) are reported to have the highest homicide rate (Statistics, 2004).

IV. Social Anxiety

Social anxiety disorder (previously termed ‘social phobia’) was formally recognized as a separate phobic disorder in the mid-1960s (Marks and Gelder, 1965). The term ‘social anxiety disorder’ reflects “current understanding, including in diagnostic manuals, and is used throughout the guideline”. As set out in the International Classification of Diseases, 10th Revision (ICD-10) (Zivetz, 1992), and in the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition Text Revision (DSM-IV-TR) (Association, 2000). Embarrassment can occur due to Social anxiety disorder as consequences of persistent fear.

Studies showed that Most definitions, research studies, and treatment programs that focus on social anxiety characterize a prototypical person with a disorder such as shy, submissive, inhibited, and risk aversion. However, this stereotype has recently been challenged. Specifically, a subgroup of people with aggressive and impulsive social anxiety seeking new things differs in this prototype (Stone and Colella, 1996).

Social anxiety disorder (SAD) is characterized by an excessive fear of shame, humiliation, or rejection when exposed to a possible negative assessment by others when participating in lectures or social interactions. This is also known as social phobia. Fifty years ago, social phobia in 1966 was distinguished by agoraphobia and specific phobias. Since then, this concept has changed from a relatively rare and neglected state to one that is recognized as prevalent worldwide (Kearney, 2006).

Studies have shown that social anxiety is common in youth (Bernstein and Borchardt, 1991). The review was carried out long before where the review examines anxiety disorders in childhood and adolescence (scratch anxiety disorder, excessive anxiety disorder, and avoidance disorders), including prevalence rates, demographic profiles, comparisons of clinical manifestations in different age groups of development and comorbidity patterns (Kashani and Orvaschel, 1988). Approximately 10 to 20% of children in the general population and primary care settings report anxiety levels (Chavira et al., 2004, Green-Hennessy, 2010). Many studies showed the prevalence of social anxiety disorders were significantly higher in adolescents and young adults than in healthy controls. In large samples of adolescents and young adults with CHR evaluated by Rietdijk et al. (Rietdijk et al., 2013) and McAusland et al. (McAusland et al., 2017). McAusland et al. (McAusland et al., 2017) examined whether anxiety disorders (particularly social anxiety disorder) may or may not be associated with a subsequent transition to psychosis in adolescents and young adults.

A model explaining the risk factors of Social Anxiety

No development seems to be responsible for the development of SAD, which makes it difficult to establish a theoretical framework for understanding this mental illness (Hidalgo et al., 2001). However, given the complexity of the risk factors that are thought to play a role, a particular school of thought combines biological, psychological, and environmental characteristics associated with stress and it may be the etiology of an anxiety disorder (Schmidt et al., 2005). This concept represents the interaction between predisposition to disturbance (diathesis) and environmental disturbances (stress). The greater the genetic vulnerability underlying a specific disorder, the less stress is required to induce problem-related behaviors. Over the past five years, several studies have suggested this model for SAD (Manassis et al., 2004, Muris, 2006, Hudson and Rapee, 2000, Ollendick and Hirshfeld-Becker, 2002).

V. Internet gaming disorder (IGD)

Internet gaming disorder (IGD), while becoming popular, is becoming a risk to physical and mental health, especially for teens, as they contribute to a sedentary lifestyle. To assess the extent of the problem in our configuration, we decided to find the frequency of Internet gaming failure among students in Peshawar and find out their reasons for playing these games (Salam et al., 2019). The study showed that Internet Gambling Disorder (IGD) is a nascent mental problem for teenagers that has aroused growing interest in the last decade. Although many studies have been performed, very few studies have studied low-tech populations (Taechoyotin et al., 2020). The term Internet addiction was first introduced in 2004 (Kuss, 2013). In the following years, studies were conducted that further examined the nature of addiction to Internet games. In 2012, the systematic review included neuroimaging studies explaining the pathology and mechanisms among those with Internet addiction (Kuss and Griffiths, 2012). In 2013, the official term "Internet Gaming Disorder" (IGD) was coined by the American Psychiatric Association (APA) with the definition of "re-use of Internet games, usually by other players, leading to issues relevant to functioning." This term has also been added to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). However, it has been identified as a condition that requires further research. The diagnostic criteria for IGD consist of nine items diagnosed at least 5 per year.

For diagnosing IGD, the IGD-20 test was developed and considered as a reliable and valid tool (Pontes et al., 2014). Aspects related to IGD comprise functional and dysfunctional impulsivity, self-control, anxiety, the pursuit of desired goals, money spent on games, playing time during the week, participation in offline community meetings, membership in the gaming community (Rho et al., 2018), gaming genre (Na et al., 2017), family dysfunction (Schneider et al., 2017), high level of mental anxiety, alcohol consumption, suicidal thoughts (Rikkens et al., 2016), higher neuroticism, decreased awareness and extroversion (Müller et al., 2014) Although the direction of these associations has not yet been completed, studies are still ongoing to clarify these issues. Studies on the incidence of IGD have been conducted in several countries. The prevalence in the systematic review of more than 45 studies ranged from 0.7 to 27.5% (Mihara and Higuchi, 2017); The author also noted that comparisons can be difficult due to the different tools used to identify IGD. Few studies included in this systematic review used IGD-20. Also, no one indicated whether the study area was urban or rural.

VI. Internet gaming disorder association with Social Anxiety

Various psychiatric disorders are associated with Internet gaming and addiction to Internet gaming. Various studies have shown to prove comorbidity as an association between internet gaming and psychiatric disorders, especially anxiety, generalized anxiety disorders, and social anxiety (Caplan, 2006, Cole and Griffiths, 2007, Lehenbauer-Baum et al., 2015). A study by South Korean participants also found that the IGD risk group had significantly higher scores for anxiety symptoms (Kim et al., 2016). As anxiety symptoms are an essential manifestation of GAD, we assume that GAD is associated with IGD. Comorbidity with GAD can rather impair the ability to deal with the negative consequences of addiction. This could help to reduce emotional well-being. Therefore, we hypothesize that those who have IGD comorbidity with GAD may exhibit greater anxiety and depression.

VII. Internet gaming disorder association with Aggression

During the turbulent period of adolescence, adolescents develop into adulthood and begin to show problematic behavior or negative emotions. In adolescents, prefrontal development is still incomplete, and the amygdala, which controls fear and anger, plays a greater role in behavior; for this reason, teenagers are more likely to show impulsive behavior. Besides, adolescent bodies release testosterone, a male hormone greater than that released during youth, and this hormone stimulates their aggression and anger to make them more aggressive (Duke et al., 2014). Aggression is an intended behavior that harms or hurts others and involves emotions of anger that lead to aggressive behavior (Orpinas and Frankowski, 2001). Aggression increases during adolescence and decreases steadily as it enters adulthood (Liu et al., 2013). Adolescent aggression has been reported to be associated with antisocial behaviors such as crime, addiction, and violence, as well as school crimes and wrongdoing. Families influence the socialization of adolescents and can, therefore, play an important role in the antisocial and criminal behavior of adolescents. Parents play the most important role in the socialization process of adolescents. Communication between adolescents and parents is known to be positively associated with adolescence (Cheung and Pomerantz, 2012), self-confidence (Cava et al., 2014), and psychological health and negatively associated with loneliness, depression (Cava et al., 2014), drug abuse and delinquent behavior. Open and free communication between parents and children helps to prevent delinquent behavior, while closed and repressive communication negatively affects the child and leads to delinquency (Khaokhajorn et al., 2015).

VIII. Conclusion

Online gaming technology has evolved rapidly over the past decade, and related issues are increasingly being addressed. Online players with longer weekly gaming periods generally have a long history of online games and symptoms of depression, social phobia, and internet addiction. Social interaction and impulsivity are crucial factors for the etiology and development of online gambling addiction. The longitudinal design can be very beneficial for the knowledge regarding the variations related to time in the association between anxiety and IGD, as well as in the coherence between family and anxiety. Exploring other potentially protective factors that reduce the link between anxiety and IGD can also contribute to existing knowledge.

Aggression is a serious medical problem in several groups of neurological and psychiatric patients. This may be a sign of a non-psychiatric medical disorder or a symptom of a psychiatric or substance use problem. In the case of a patient with aggressive behavior, the most important actions include ensuring the safety of the patient and the team, followed by a thorough assessment of the etiology of aggression. In acute attacks, physical restrictions may be necessary for a short time before performing a physical examination and clinical trial. It is a behavior that can be accompanied by violence and agonistic behavior. Aggression and violence have several adverse social consequences, such as family conflicts, crime, murder, rape, and theft. International issues of war and terrorism are also interrelated.

Internet gaming increases aggressive behavior. Specifically, the literature on the impact of video games and the Internet gaming disorder has influenced six categories of aggressive reactions: cognition, affection, arousal, empathy/sensitization to violence, overt aggressive behavior, and overt prosocial behavior.

Nursing implication

The nursing role is very important in different phases such as assessment and identifying problem as well as are giving instructions and provide interventions for patients with Internet gaming disorder, aggression and social anxiety, so that the main goal of the nursing role is to change the life style of patients, and take care of their condition, which can be managed by several ways:

- Observe the patient during phase of withdrawal symptom and manage to control the symptoms
- Provide education for patients about the disorder in simple details
- Encourage use of self-management strategies such as relaxation and deep breathing exercise
- Insure the patient participation in anger management sessions if there is symptoms of aggression

- Schedule anxiety management sessions for patient with anxiety symptoms and provide education of meditation, relaxation techniques and exercises benefits in reducing anxiety symptoms
- Encourage family participation in the treatment plan
- Encourage patient to focus on the positive things and instruct to put real goals in life and work on it
- Help patient to make daily schedule for his useful activity (sport, reading, watching TV, communicating with friends)

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