

Effect of Addictive Gaming on Empathy and Alexithymia among Young Adults

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ABSTRACT

For the past few years gaming has been in talks among scientists and researchers due to its alarming influence on children as well as adults. Many theories have been formed on addictive gaming behaviour and its psychological as well as physical impact on the young generation. A substantial body of research shows how excess gaming is interlinked with various mental health issues such as depression, social anxiety, lack of motivation and many more. In the current study, a sample of 51 aged 18-25 years, has been studied to examine the effect of addictive gaming behaviour on empathy and alexithymia among young adults. Standardized scales were used to measure empathy, alexithymia, and game addiction in young adults. The study concluded a significant negative correlation between game addiction and empathy and a significant positive correlation between alexithymia and game addiction was also found. Further, the increment in involvement in sports complexes and offline board games was suggested.

Keywords: *Game Addiction, Empathy, Alexithymia, Young adults*

Addiction of any kind can disrupt our rational behavioural as well as cognitive patterns. According to Goodman (1990), addiction is the process by which a behaviour, which can be used to both produce pleasure and serve as an escape from internal discomfort, is used in a manner marked by a loss of control and persistence in the face of grave consequences. He also added that behaviour by itself is not an addiction but it depends on the frequency of occurrence and social acceptability.

In the 21st Century, one of the major addictions among its young population is Online Gaming. The condition known as "video game addiction" is characterised by severely diminished control over gaming behaviours, which has a negative impact on many areas of your life, including self-care, relationships, relationships with others, school, and work. Its growing tendency in teenagers and young adults has become a popular theme among researchers. Many types of research have been done to study Online Games Addiction and it is linked to various Physical as well as Psychological Aspects of Individuals, for this study the two aspects will be Empathy and Alexithymia. Empathy, a well-known concept in the

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field of psychology, is being able to step into people's shoes and understand their situation, while Alexithymia is having difficulty in processing and understanding one's own emotions. FeldmanHall, Dalgleish and Mobbs (2013) concluded that marked impairments in emotional perception, social attachment, and interpersonal relationships characterize alexithymia. Furthermore, people with high levels of alexithymia can have difficulty distinguishing and appreciating the emotions of others, which is thought to lead to unempathetic and ineffective emotional responses. The current study examined how the gaming behaviour of individuals affects their empathy of Alexithymia.

Online gaming is a time- and emotionally-taxing activity. Gaming addicts neglect sleep, diet, exercise, hobbies, and socialising to make more time for the computer (Young, 2004).

In a recent review of 17 empirical studies on cognition and different forms of cognitive impairment linked to internet gaming disorder, Pontes & Griffiths (2015) found that cognitive impairment was more frequently reported by most studies than the general cognitions linked to Internet Gaming Disorder. Especially a group of cognitive-related factors including poor self-control, a preference for virtual life, cognitive bias, impaired cognitive control, cognitive deficits, poor cognitive error processing, decision-making deficits, maladaptive cognitions, and cognitive distortions were linked to internet gaming disorder.

Game Addiction

Addictive behaviour was defined by Mendelson and Mello (1986) as behaviour that is excessive, compulsive, uncontrollable, and physically or psychologically destructive. In accordance with this definition, Lemmens et al., (2009) defined game addiction as excessive and compulsive use of computers or video games that result in social and/or emotional problems.

Addiction to online video games is regarded as an issue with which society should be concerned. Lack of healthy entertainment options and a lack of self-control are the root causes of gaming addiction, which in young adults and students leads to a lack of social stimulation, unhealthy exercise, and psychological issues.

A literature review was done on Game Addiction, past, present, and future which approved that from a substantive perspective, there are some generalizations that can be made regarding the demographic characteristics of gamers and problem gamers. According to the available research, young male adults and adolescent males appear to be more likely to engage in problematic video game play. There are currently a sizable number of studies all indicating that excessive video game play can have a variety of negative psychosocial effects for a small percentage of those affected, regardless of whether problematic video game play can be classified as an addiction. These include sacrificing work, education, hobbies, socializing, time with partner/family, and sleep, increased stress, an absence of real-life relationships, lower psychosocial well-being and loneliness, poorer social skills, decreased academic achievement, increased inattention, aggressive/oppositional behaviour and hostility, maladaptive coping, decreases in verbal memory performance, maladaptive cognitions, and suicidal ideation (Griffiths,2012).

Game Addiction has many physical side effects including minor to severe headaches, neck and back pains, migraines, and other sleep-related issues as well as results in many mental health issues such as stress, anxiety, and depression.

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The current study provided an analysis of research done in South Korea, China, and Japan on computer game addiction. The findings demonstrated that while playing games, prefrontal cortical activity decreased. Additionally, prefrontal cortex damage results from game addiction. The NIRS-EEG and simultaneous recording, during gameplay, correspond well with the decrease of β band and oxygen-haemoglobin (Mori et al., 2015).

The study conducted by Wang, Sheng, & Wang (2019) examined the relationship between mobile game addiction and social anxiety, depression, and loneliness among adolescents. The study discovered that social anxiety, depression, and loneliness were all positively correlated with mobile game addiction. Further study of the gender difference in the paths from mobile game addiction to these mental health outcomes revealed that male adolescents tend to report more social anxiety when they use mobile games addictively.

Empathy

Moore (1990) believed that “empathy has long been considered to be a mediator of various forms of pro-social behaviour. Indeed, a number of theoretical accounts of altruism have suggested that it is necessary to turn to emotional role-taking upon the part of the altruist to explain the motivation to engage in self-sacrificial behaviour”.

Marshall and his colleagues (1995) described empathy as a four-stage process including emotion recognition (The ability to discern the other's emotional state), perspective-taking (Seeing the situation, as best you can, from the other person's point of view), emotion replication (finding and recognizing in one's self the emotion present in the other) and response decision (Act on what you see, understand and feel).

Merriam-Webster Dictionary(year) defined empathy, as "the action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of another”.

Empathy is one of the most essential life skills which helps us in understanding people, their emotions and their experiences from their perspective. It gives us a real glimpse of the emotions that the other person might be feeling or might have felt during the events.

Many researchers have focused on how it gets affected by the activities we engage in or the content we watch in our regular life. This study focuses on how empathy gets affected by addictive gaming behaviour in young adults.

On the one hand, globalisation and our rapidly evolving, the globalised world have led to a deficit in empathy, a situation that urgently calls for a novel strategy to address the empathy problem. On the other hand, recent statistical data has shown that players in some countries today spend on average more than 4 h weekly playing games. Most past research has found that playing violent games decreases pro-social behaviour (Wulansari et al., 2019).

A study conducted by Anderson et al., (2010) showed how violent video games affect aggression, empathy, and pro-social behaviour in Eastern and Western Countries through a meta-analytic review. The study evidence suggested that exposure to violent video games is a causal risk factor for increased aggressive behaviour, aggressive cognition, and aggressive affect and for decreased empathy and prosocial behaviour.

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Another research studying the effect of playing video games on moral evaluation in children showed that long-term exposure to violent video games may be associated with desensitization as reflected in lower empathy, although the direction of causality remains unclear (Funk et al., 2003)

Alexithymia

The term Alexithymia was introduced by psychotherapist Peter Emanuel Sifneos, which has its stem in Greek where a means no, lexis stands for words and thymus represents emotion, meaning no words for emotions. According to Sifneos (1973), alexithymia can be described as "this specific difficulty which appears more likely to be due to a combination of neurophysiological and psychological defects rather than to purely psychological ones".

Alexithymia is a subclinical phenomenon characterised by a deficiency in emotional awareness, or more specifically, by challenges in recognising and describing feelings as well as in differentiating them from the physical sensations associated with emotional arousal. (Nemiah et al., 1976).

It is not a diagnosis, but a construct useful for characterizing patients who seem not to understand the feelings they obviously experience, patients who seem to lack the words to describe these feelings to others, as defined by Muller (2000, 1)

Alexithymia has been characterized in extremely diverse ways. Bagby, Taylor & Ryan (1986) described it as difficulty in identifying feelings and in distinguishing between feelings and bodily sensations, as difficulty in describing feelings to other people, as a modest fantasy reality and as a preference for concentrating on external rather than internal experiences. Numerous studies have looked into the relationship between Alexithymia and game addiction.

One such study done by Bonnaire & Baptista (2019) having a sample of 429 young adults concluded that in male gamers, being alexithymia, being young, and having high anxiety and depression scores were associated with Internet Gaming Disorder. Internet Gaming Disorder was more common in female gamers who had less education than a high school diploma and scored highly on the depression scale.

Recent research examining the relationship between Internet Gaming Disorder, alexithymia and ADHD found that both the severity of alexithymia and the presence of probable alexithymia are related to the severity of Internet Gaming Disorder symptoms, even when controlling the effects of depression and anxiety, among university students (Evren,2020).

Purpose

The purpose is to study the effect of regular online gaming on empathy and alexithymia among young adults falling into the age range of 18 - 25 years.

Hypothesis

- There is a significant negative correlation between empathy and game addiction
- There is a significant positive correlation between alexithymia and game addiction

METHODOLOGY

Sample: In this study, a survey method involving an online questionnaire created through Google Forms was used to collect data employing a quantitative research design. The study

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included 51 participants from all over Delhi. The subjects are between the ages of 18 and 25. The majority of the sample was made up of undergraduate-enrolled college students.

Measures

The questionnaire consisted of 4 sections. The first section consisted of preliminary questions like name, age, and where they live. The second section consisted of Toronto Alexithymia Scale Questionnaire for assessing Alexithymia. The third section included Toronto Empathy Scale Questionnaire and the last section has a game addiction scale questionnaire.

- **Toronto Alexithymia Scale (TAS):** A person's capacity to understand, process, or describe emotions is measured using the Toronto Alexithymia Scale. In 1994, Bagby, Parker, and Taylor created it. Twenty items make up the self-report scale known as TAS-20.
- **Toronto Empathy Questionnaire (TEQ):** The Toronto Empathy Questionnaire (TEQ) is a self-report survey that assesses a person's capacity for emotional understanding of and responsiveness to other people. In 2009, Spreng, McKinnon, Mar, and Levine created it. Higher scores show higher self-reported empathy levels, while scores under 45 show lower self-reported empathy levels.
- **Game Addiction Scale:** Lemmens et al. created the 7-item Game Addiction Scale (GAS), which was conceptually based on the fourth iteration of the DSM's pathological gambling criteria, specifically to assess gaming among adolescents (DSM-IV). The statements are scored on a 5-point Likert scale.

Procedure

The goal of the study was explained to the participants, and the questionnaires were completed using Google forms. Each participant was acknowledged for their participation. The subjects were given Standardized Psychological Tests.

Analysis of Data

The responses of participants were analyzed using Pearson product-moment correlation to see the mental health effects of online gaming among a sample of young adults. The Mean and Standard deviation data are presented in table 1, table 2 shows the correlation between analyses of Game Addiction, Empathy and Alexithymia.

RESULTS

Table 1: N, Mean and SD of variables

	Alexithymia	Empathy	Game Addition
N	51	51	51
Mean	55.8	46.1	17.9
Standard deviation	10.5	9.01	6.31

Table 2: shows the correlation between Game Addiction, Empathy and Alexithymia

	Alexithymia	Empathy	Game Addition
Alexithymia	—		
Empathy	-0.243	-0.358**	—
Game Addition	0.492***	—	—

DISCUSSION OF RESULTS

The results found that there is a significant positive correlation between alexithymia and game addiction ($r=0.492$, $p<.001$), Hence, the hypothesis that game addiction is positively correlated with Alexithymia. The results also found that there is a significant negative correlation between empathy and game addiction ($r= -0.358$, $p<.01$), Hence, the hypothesis that there will be a negative correlation between game addiction and empathy is accepted.

A similar study was conducted by Conmy (2010) on video game addiction and its possible negative effects on adolescents with regard to social skills and empathy which surveyed 251 secondary school students aged 13 to 19. The study concluded that participants addicted to video games had poorer social skills and lower levels of empathy.

Another study conducted by Dalbudak et al (2013) investigated 319 university students for the relationship between Internet addiction severity with alexithymia, temperament, and character dimensions of personality. The severity of Internet Addiction was positively correlated with alexithymia, whereas it was negatively correlated with SD.

CONCLUSION

In the current study, a sample of 51 participants in the age group of 18-25, has been studied to examine the effect of addictive gaming behaviour on empathy and alexithymia among young adults across various colleges. Standardized scales were used to measure empathy, alexithymia, and game addiction in young adults. After analysis, a significant positive correlation was found between alexithymia and game addiction. The study also asserts a significant negative correlation between game addiction and empathy as well. Addiction to anything can rupture our development and game addiction is one of those which is prevalent in young adults.

Various approaches can be adopted to keep away the game use at an optimal level. Using mobile and computer apps like app lock can put a timer on the use of gaming apps on the mobile phone. A proper timetable or a to-do list could be used by individuals in order to save time blocks for important activities. Games should be just a medium of reward for the completion of a complex task. As parents, one should try to openly communicate with the child about the pros and cons rather than directly punishing them. They can also subscribe the child to sports complexes or board games to inculcate a sporting spirit and distract them from the online world.

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