

# A Review on the Evaluation of Video Game Addiction as a Legitimate Disorder

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## Abstract

Through fundamentally understanding addiction and reviewing the arguments that support and contradict video game addiction as a disorder, this paper seeks to answer the question of whether video game addiction is a legitimate disorder or a premature diagnosis of the growing popularity of a new form of entertainment. It was found that issues associated with video game addiction such as the inability to manage time properly or prioritise the games over real-life responsibilities are not equivalent to real mental disorders. The research also raises the question of whether these addictions are facets of other preexisting disorders or a new branch of non-substance addiction.

## Keywords

Gamers, Non-Substance Addiction, *Gatcha*, RPG, Fantasy Elements, PTSD, Anger Management

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## 1. Introduction

The DSM 5 criteria for substance abuse or addiction include craving the use of a substance, wanting to stop but not being able to, neglecting other aspects of life due to substance use, continuing to use a substance even when it causes problems in relationships, and continuing to use the substance even when it puts you in danger (Hartney, 2020). Addiction involves the reward circuit where the release of dopamine is affected due to the constant repetition of action and that becomes the norm. Once the norm has been established, going against it results in low amounts of dopamine, causing the subject to feel an insufficient level of satisfaction and pleasure. In the end, it triggers the addiction cycle but forces the user to keep up the dosage to stay normal and satisfied (Koob & Volkow, 2016).

The causation of addiction may be triggered for several reasons; the experience of traumatic events has been linked to the creation of addiction in the subject (Ratini, 2021). Although this link may not be present in all victims of trauma, the reason behind it is that the victim finds a source of happiness and a coping mechanism through the substance. As shown, one in three veterans receives treatment for substance abuse due to PTSD induced during warfare (NIDA, 2019; Murray, 2022).

Another cause of addiction is the influence of people surrounding the subject in question. Humans by nature are social species since our ancestors were primates and often formed groups to survive. It is simply a fact that an adult figure or close friend abusing a substance is likely to result in the victim becoming a substance abuser as well.

Hence, with this characterization in mind, it is a premature move to call video game addiction a form of non-substance addiction; at this point in time, we are not even sure if the addiction to video games exists as we don't identify someone who reads books every day as a reading addict. The vast genre of games facilitates different audiences who have different backgrounds and ways of thinking. Therefore, more research must be done on different types of games.

## 2. The Growth of Video Games in Popularity

Video games have changed from arcade machines to personal computers and consoles. Games have turned from 2D to 3D. The rise in popularity of video games is very evident as the types of teenagers' hobbies have shifted from physical activities to more digital hobbies (Darvesh et al., 2020). For instance, in 2021, 95% of people from the age of 18 to 29 years old own a smartphone (O'Dea, 2021), and 58% of the demographics of people who play video games are under 34 years old in the USA (Clement, 2021). The increasing strides within the PC gaming world, such as the Unreal engine, have been able to render images so surreal that they are churning out award-winning games like *Batman: Arkham City*, *Little Nightmares 1 & 2*, *Star Wars Jedi: Fallen Order*, and *Street Fighter 5* (Drake, 2021; Wikipedia, 2022). The gaming market also speaks for itself as companies like Riot Games, which earned \$36.5 million only from their 3 mobile games: *Legends of Runeterra*, *Teamfight Tactics*, and *League of Legends: Wild Rift* (Chapple, 2021). This number does not include its PC games like *League of Legends* and *Valorant*, which earn millions through cosmetics, merchandise sales, and esports tournaments (Gough, 2021). Esports tournaments boast numbers like 5.41 million viewers during the *Freefire World Series Singapore 2021 Tournament*, which became the most-watched esports tournament by May 2021 (Gough, 2021).

## 3. The History of Video Game Addiction

The first report of video game addiction came in the form of a report in the psychological and psychiatric literature in the early years of the 1980s by Ross,

Finestone, and Lavin, which describes 3 cases of obsessive behaviour displayed towards a game by the name of Space Invaders (Ross et al., 1982). However, the term “video game addiction” was only referenced in 1983 by Soper and Miller as they based their observations on school counsellors who mentioned that the disorder was like any other behavioural addiction, which includes compulsive behaviour involvement, being in a friend group that consists of other like-minded addicts, and a lack of interest in other activities that do not involve video games. However, this research was rather outdated as the games that came earlier were nothing like the modern-day games. RPGs like World of Warcraft and Starcraft are most commonly associated with addiction. Additionally, the variety of games in the world provides a huge arsenal of reasons why someone would spend time and continue to grind out achievements and levels. Whether it be the cosmetics, the rank, good storytelling elements, or outstanding gameplay mechanics, games have evolved beyond the simplistic outlook of pong and old-school Mortal Kombat (Fabricatore, 2007). This poses a problem since different game genres attract different crowds of gamers who have their own reasons for staying. Hence, no studies so far have been able to properly pinpoint whether video game addiction is a valid disorder or a matter of multiple disorders. However, basic observations show that adolescent males tend to be the main demographic for this disorder, since, as mentioned above, the main target audience for most games is male adolescent players due to the larger number of subjects. The number of potential video game addicts within the demographic of adolescent male players is higher than any other target demographic.

#### **4. Arguments Supporting the Validity of Video Game Addiction**

The DSM V has included the addiction to video games as a legitimate disorder under the term “internet gaming disorder”. However, the reason for including it as a legitimate disorder in the most renowned manual in psychology has not been included. Even so, for the sake of discussion, the disregard for some official manuals citing video game addictions as a non-substance addiction is necessary.

The main argument for the advocacy of identifying video game addiction as a legitimate disorder is a simple fact that the symptoms of video game addiction are similar to conditions an addict would face (Poznyak, 2018). The symptoms include attempting to cut back on the addiction but constantly failing, neglecting self-appearance, requiring more of the activity to get the same level of enjoyment, continuing the activity despite it causing problems to self-life & surroundings, displaying signs of irritability, anxiety, or anger when forced to separate from the activity, dependency on the activity to maintain self-control, and cutting back on recreational activity in preference for the activity (Griffiths, 2012). These forms of symptoms are similar to those that are displayed in substance and non-substance addiction victims.

## 5. The Argument against Video Game Addiction Being a Legitimate Disorder

To begin, how do we know if we are dealing with a legitimate addiction or another type of disorder? Video games cover a large aspect of life. Games can include gambling, role-playing elements, competitive spirits, out-of-this-world experiences, and a chance to interact with people without having to actually meet these people face-to-face. Each one of these elements has facilitated a form of the disorder. For instance, games that involve prominent gambling, such as slot games, digital poker, or blackjack, and the recently more famous “Gacha” games, have players that spend large sums of money called “whales” (Grguric, 2022). These whales pay a significant amount of money compared to the average player. For perspective, most of the game companies’ revenue is derived from only 2% of the player base (Tassi, 2014). This can be technically diagnosed as a form of gambling addiction. However, there are people who have the monetary power to pay for these gaming cosmetics and yet still not be addicted, but rather more invested in the artwork and variety of the cosmetics and the in-game assets. The term “Gacha” comes from the Japanese phrase “Gachapon”, which is a children’s toy vending machine that gives you a random toy from a pool of toys. “Gacha” games tend to require players to put in resources to have a specific percentage of a chance to acquire the wanted in-game asset, similar to a Gachapon machine. The urge to complete an entire collection of in-game assets can also stem from hoarder’s syndrome or simply a completionist mentality, which also has the monetary capability to spend money without breaking the bank (Mayo Clinic, 2018).

Another situation is the role-playing elements and out-of-this-world type fantasy world in RPG games. These games can be offline open-world experiences, such as Red Dead Redemption 2, the Elden Ring campaign, Legend of Zelda, Pokémon, Dark Souls, and Final Fantasy, or online open-world experiences, such as Final Fantasy Online, Rust, Star Wars: The Old Republic, Destiny 2, and Genshin Impact. These games have deep-seated fantasy elements that are far removed from reality. Cyberpunk has a gritty future where body augments have been normalized. Elden Ring and Dark Souls have a darker twist on the mediaeval genre with body dysmorphia found in almost all of the mobs and massive structures filled to the brim with lore and architectural works of genius. Ghost of Tsushima has ancient Japanese settings and cultural references to folktales and real-life history within each aspect of the game. Thus, it is understandable that these kinds of games appeal to people who want to immerse themselves in a world other than their own. This information may point to the possible case that these games are used as an escape for people who experience trauma, depression, and social anxiety. People who have conditions that involve painful pasts need ways to forget that the reality behind them still haunts them every day. These are rare cases, as studies show that casual gaming seems to have assisted people in combating depression (Ruiz et al., 2022). However, the possibility of people coping with severe depression, social anxiety, and childhood PTSD

meant that they would spend the majority of their free time dedicated to playing RPG video games (Gateway Foundation, 2021).

Lastly, aspects of PVP games are very contentious as these games have many sides that are a common trend with these games. Firstly, the ranking system for these games is very unique to each individual game. For example, League of Legends' highest rank is the challenger, and depending on the server, the number of players that represent the challenger rank lies somewhere between the top 200 and top 300 players (Sabrina, 2022). This is a real struggle to reach as the server with the least number of players, Japan, has over 1.7 million players on it and the server with the highest player count is a combined server of 27 unique servers in China, with an estimated total of 75 million unique players on those servers (Clement, 2022). In League of Legends' culture, challenger players are regarded as Gods among men; most of them are well-known professional players who have an esports team backing them through merchandise sales and daily streams. To earn a rank above master in League of Legends is already considered an impossible task if the player doesn't dedicate their lives to spending their waking hours going into a rank queue and going against players with a similar rank (James, 2021). This obviously has two consequences: the possibility of anger management issues and a total obsession with the rankings.

Firstly, to understand the anger that can be generated by PVP games, the rage compilation on YouTube of popular gaming streamers is worth observing. Although some were done just for the camera, some can display a realism of rage even in children's games like Among Us. There are even terms dedicated to this form of attitude, like "raging", "rage quit," "copium," etc. This begs the question: are the clips of people raging on the internet the tip of the iceberg? The answer is uncertain. However, it is probably yes, as no one actively records their gameplay and rage does not come in one form. Again, one must backtrack to League of Legends again. In 2021, according to a study done by ADL, 65% of players have faced harassment and it has the largest percentage of the player base that receives harassment-the highest being Valorant and DOTA 2, at 79% and 78%, respectively. To pass judgement upon toxic players is very tough as well. These individuals could have calm personalities in real life, but when it comes to competitive-style games, teammates who do not perform well in-game can drag the whole team down to a loss. With this reason in mind, the way players handle it can have many factors, including the level of skill of the teammates, the state of mind the player is in, the opponents' playstyle, and so much more. Everyone has their own trigger, so when players rage in-game, it definitely needs more context to show whether this person has anger management issues.

Secondly, the amount of time someone spends on games is plentiful to people who are not familiar with games at all. A ranked match in Valorant consists of at least 13 rounds, each going up to 2 minutes. Thus, a very dominant, one-sided match of ranked Valorant takes about 30 - 40 minutes, making it the baseline. The amount of time you sink in one match in proportion to the amount of RR needed to rank up is quite small, with it being around 10 - 50 RR. With 100 RR

required to rank up, it isn't an easy task to reach a respectable rank in Valorant. Players all around the world have a desire to reach a rank they are satisfied with, so whenever they are around similar players, they command respect (Staton, 2022). It is similar to the reward cycle in the brain, but more inconsistent and not caused by the game. This directs us to the main issue – when a player is forced to avoid playing a game, they may show slight signs of displeasure as they have already invested substantial time and effort in it, not to mention the possibility that their rank may decay. However, it is easy to get over the fact that rank rises and falls. Only in extreme cases when children are unable to differentiate between what is important in life and what is not will they have extreme levels of irritability towards being separated from their games. Hence, the level of anger felt when being forced to leave a game is only directly proportional to how much the player values game progress. Additionally, some games keep and maintain your current progress, so nothing will be missed. If a player values a game over family, friends, and personal connections and is overly obsessed with the game, then it is a matter of compulsive obsessive disorder (OCD) (Fields, 2020).

## 6. Conclusion

From the above research, it can be vaguely construed that video games don't cause most disorders. Yet, under certain circumstances, there will be small-scale issues such as the inability to manage time properly or prioritise the games over real-life responsibilities. However, issues like these are not equivalent to real mental disorders. As mentioned above, the majority of the consumers of video games are under the age of 34, and not enough research has been done to determine whether these issues are flaws in personality that time will smooth out or actual mental disorders that they will carry throughout their life. Even so, it begs the question of whether these mental disorders are facets of other preexisting disorders or a new branch of non-substance addiction. The obstacles to obtaining such data are plentiful, some of the data can only be gained through retrospect, and one option is to acquire data via observation from a non-bias source throughout the early lifespan of an individual. Thus, more in-depth research over time is required to be able to classify whether video game addiction is a legitimate variation of non-substance addiction.

## Subject

Psychology.

## Glossary

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RPG	Role-playing games
PVP	Player versus player
DSM	Diagnostic and Statistical Manual of Mental Disorders
PTSD	Post-Traumatic Stress Disorder
RR	An in-game points system for Valorant to calculate the rankings of a player

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## Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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