Review Article

The PUBG Paradox: Exploring the Link between Video Games and Suicide Risk

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Abstract

Recently, concerns have been raised about the possible effects of video games on mental health, especially the well-known battle royale game Player Unknown's Battlegrounds (PUBG). The complex relationship between video games, particularly PUBG, and the risk of suicide is the subject of this review study. We identify the causes causing the PUBG paradox—a situation where a type of amusement appears to have negative effects—through a thorough study of the body of existing literature. We look into the psychological factors—such as gaming immersion, social connections, competitive stress, and pre-existing mental health conditions—that relate PUBG to suicide risk. This review additionally investigates at the way psychological variables and gaming culture affect mental health outcomes. We look at how gaming communities function, harmful practices, and cyber bullying in the context of gaming, as well as how risky behavior among gamers has become normalized. We also talk about moderating and mediating factors that might either increase or decrease the risk of suicide, such as age, gender, gaming habits, coping mechanisms, and familial support. Additionally, this article offers various intervention tactics to deal with the PUBG paradox, like as awareness campaigns, in-game mental health assistance, and rules for responsible gaming. The ethical issues surrounding appropriate reporting and avoiding stigmatizing gamers are examined in the final section. We hope to provide a thorough knowledge of the PUBG paradox and contribute to a safer and healthier gaming environment by synthesizing existing findings.

Key words

Introduction

The development of digital technology over the past few decades has completely altered many facets of contemporary life, and the gaming sector has seen its share of the marketplace surge. The majority of study shows that playing videogames has beneficial effects on players' psychological health and can be socially, educationally, therapeutically, and cognitively useful [1, 2]. Even while the majority of people are using technology positively, it should be recognized that huge increases in gaming may not always be beneficial and that a tiny percentage of people, notably teens, may be at risk of gaming disorder [3]. Problematic gaming among those impacted is linked to sleep disruption, physical health issues, and mental health consequences [4, 5]. A much lesser percentage of people may develop a gaming addiction, where playing video games takes precedence over all other activities in their lives [6]. As a mental health disease, gaming disorder was formally recognized by the World Health Organization in May 2019 [7].

Battle royale games, which feature intense multiplayer rivalry and engrossing game play, have become one of the most popular and intriguing game genres among the enormous selection of video games accessible. Since its introduction in 2017, Player Unknown's Battlegrounds (PUBG), a game that has influenced the battle royale genre, has attracted unprecedented attention and has hundreds of millions of active players. However, PUBG's enormous popularity has also been accompanied by mounting worries about its possible effects on mental health, particularly in light of the suicide risk among its players.

As PUBG's popularity grew, so did media coverage and public debate raising concerns about the potentially harmful impacts of this intensely absorbing video game on its players'

mental health. Numerous studies studying the relationship between video games and mental health outcomes, with a specific focus on PUBG, have been conducted as a result of the desire of researchers, mental health practitioners, lawmakers, and worried parents to comprehend the potential effects of extensive gaming. Suicide risk has become one of the many mental health issues connected to gaming because of its significant impact on people's lives, families, and societies.

The PUBG paradox is a result of what appears to be a conflict between a type of entertainment that promotes fun, escape, and social engagement on the one hand, and a growing body of research suggesting possible mental health hazards, including suicidal thinking and behavior, on the other. Understanding this paradox is crucial for addressing concerns from parents, educators, and mental health activists regarding the impact of video games, particularly PUBG, on the mental health of young players as well as for ensuring the safety of gamers. This review article's goal is to thoroughly examine the nuanced relationship between video games and suicide risk, with a focus on PUBG in particular. We want to shed light on the elements that contribute to the PUBG conundrum and provide insights into viable intervention measures by compiling and critically analyzing previous studies.

The Modern Age of Gaming

The gaming industry had a technological explosion in 2000, which was characterized by major improvements in computer processing power and Internet access. The better graphics, fluid game play, and higher processing rates that resulted from these upgrades gave players a more engaging and pleasurable gaming experience. The internet's vast availability and rising cost made it possible for billions of individuals all over the world to take part in this gaming revolution. The way gamers bought, updated, and

interacted with other players was revolutionized by the advent of online markets like the Xbox Live Market and Wii Shop. According to the most recent research from the Entertainment Software Association (ESA), gaming has evolved into a potent social connection tool, with 54% of players saying that playing video games helps them connect with friends and 45% saying that playing video games helps them connect with family. Online multiplayer gaming evolved into an essential and defining element of contemporary gaming culture with the introduction of new models of gaming consoles like Xbox and Play Station. With the emergence of clan culture, a new trend in gaming was created whereby gamers organized into factions to routinely play first-person shooter games together. These clans ranged in size from modest friendship circles to big associations with hundreds of members. In order to develop a sense of camaraderie and rivalry among gamers, these clans were graded and given the chance to compete against one another.

Mobile gamming

Smart phones were the first major advancement in mobile phone technology, and they brought about a number of innovations, such as more potent processors and more RAM, which reduced the gap between PC and mobile gaming devices. The 4K technology is a new and popular trend in video gaming, allowing players to enjoy games with more than 8 million pixels, creating an immersive and visually appealing gaming experience. With the development of app stores, users of mobile phones who were not necessarily enthusiastic gamers were also given access to a new gaming experience. Players could now experience gaming on the palm of their hands, whether it was a straightforward shooter like Call of Duty or a complicated one like Angry Birds. The gaming business saw a substantial transition as a result of this move into the mobile phone market.

Angry Birds, created by Rovio, was one of the classic games that helped fuel the mobile gaming revolution. It made an astounding $200 million

in 2012 and reached the unbelievable milestone of 2 billion downloads by 2014. With a daily increase in downloads, mobile gaming businesses have generated amazing amounts of money through app stores. Alternate reality and virtual reality technologies have been embraced by mobile phones as well, offering consumers fresh and engaging gaming experiences. As a result, mobile gaming has changed the gaming environment, making it more approachable and fun for a wider audience and it continues to be a major factor in the development of the gaming business.

Effects of video game addiction

In the digital age, video game addiction has gained substantial attention from academics, mental health specialists, and the general public. Understanding the possible effects of video game addiction on mental health, including its link to suicide risk, is crucial given the continued rise in popularity of video games, particularly immersive and competitive games like Player Unknown's Battlegrounds (PUBG).

Video game addiction commonly referred to as gaming disorder, is characterized by frequent and excessive video game play that impairs functioning in a number of areas of life. People who are addicted to video games frequently struggle to regulate their gaming behaviors, put gaming before other vital tasks, and may feel withdrawal symptoms if they are unable to play. Video games can become compulsively addictive, especially if they are made with aspects that incentivize repeated play and reward systems.

The detrimental impacts of video game addiction on mental health are one of its main effects. Excessive gaming has been connected to a number of mental health conditions, such as social isolation, sadness, and anxiety. Video game addiction can lead to poor performance in school or the workplace, strained relationships, and a disregard for personal obligations, all of which can add to feelings of misery and exacerbate pre-existing mental health disorders.

Games like PUBG have an intense and competitive atmosphere that can increase their potential for addiction by encouraging players to spend more time in the virtual world, frequently at the expense of their physical and mental health. The atmosphere of gaming, which is marked by on-going difficulties and victories, might cause the release of neurotransmitters like dopamine, resulting in a feeling of joy and satisfaction. Through a cycle of seeking for more rewards through more gaming, this reward system may encourage compulsive behaviors. Additionally, a video game addiction can affect sleep patterns and interfere with circadian rhythms, which can result in weariness and sleep deprivation. An increased risk of mental health problems, including suicide ideation and attempts, has been linked to sleep disruptions. The review study extensively explores the relationship between video game addiction, sleep issues, and suicide risk in order to solve the PUBG conundrum.

The potential desensitization to violence is a key side effect of video game addiction. Games like PUBG frequently feature violent scenarios and graphic graphics, and repeated exposure to such material may reduce sensitivity to the effects of real-life violence. Desensitization to violence can have significant effects, possibly affecting players' violent actions and attitudes.

To address the PUBG paradox, tailored interventions and preventive measures must be developed. To do this, it is imperative to comprehend the effects of video game addiction. Identifying vulnerable groups and spotting addiction's early warning signs can assist to reduce the problems that might come with playing too much video game. To promote a better gaming environment, it is essential to introduce responsible gaming practices, increase knowledge of addiction warning signs, and offer mental health help inside gaming platforms.

Prevalence of video games and suicides
The abundance of video games and their enduring appeal to people of all ages, particularly teenagers and young adults, have emerged as defining features of contemporary entertainment. Researchers and mental health specialists have been looking into possible links between video games and suicide risk as the global suicide rate has become a significant public health problem. In order to understand the nuances of this important problem, the review article "The PUBG Paradox: Exploring the Link between Video Games and Suicide Risk" digs into the correlation between video gaming and suicide.

Technology breakthroughs, improved accessibility, and the creation of several gaming genres and platforms have all contributed to the exponential growth of video gaming in recent years. Millions of players worldwide are enthralled by the evolution of video games from simple pixelated forms to finely developed virtual worlds. Researchers as well as the general public are very interested in the interactive and immersive aspects of video games, particularly in the context of online multiplayer games like Player Unknown's Battlegrounds (PUBG).

The alarmingly high rate of suicides, especially among young people, coincides with the rise in video gaming. The World Health Organization (WHO) has emphasized the significance of addressing this global health issue since suicide has emerged as a main cause of death in numerous locations. Numerous researches have been conducted to determine whether there is a connection between the two phenomena of suicidal behavior and video gaming.

While some researches have established a link between excessive video gaming and a higher risk of suicide thoughts and actions, other studies have not found any appreciable correlations. Intriguing issues concerning potential causative linkages, confounding variables, and underlying mechanisms are raised by the correlation between the popularity of video games and the rate of suicide. Understanding the correlation between video game use and suicide gives academics the necessary background to assess the effect of gaming on mental health outcomes

and helps them better understand the PUBG paradox.

It is necessary to conduct a thorough examination of the potential danger factors that video games may present because of the prevalence of video games in contemporary society and the rising suicide rates. Important components of this investigation are identifying at-risk groups and comprehending how various game genres and behaviors affect suicide risk. Targeted interventions can also be informed by an analysis of protective characteristics that reduce the potential negative effects of video games on mental health. The PUBG paradox complicates the inquiry even more because of how popular and absorbing the game is, which has attracted a lot of attention. The review paper provides a platform for studying the interaction between video gaming and suicidal risk within the particular context of PUBG as it explores the prevalence of video games and suicides.

Psychological mechanisms connected to PUBG and suicidal behaviors

The psychological factors that connect PUBG and the risk of suicide have been the subject of many studies. In a longitudinal research of young adults, Lin et al. (2019) discovered a link between excessive gaming, particularly in intensely immersive games like PUBG, and higher levels of depressive symptoms and social isolation. They hypothesized that PUBG's high levels of engagement and escapism might make people feel lonely and make them more susceptible to mental health issues. In addition, Li et al. (2020) examined the role of violence and competition in PUBG, emphasizing how the game's adrenaline-fueled action may cause stress and emotional dysregulation, thus raising some players' risk of suicide thoughts.

It is possible to comprehend the link between video games, in particular Player Unknown's Battlegrounds (PUBG), and the risk of suicide by considering the numerous psychological factors that affect players' mental health. This section examines the psychological underpinnings of the

PUBG conundrum, offering light on how game play interactions and experiences can affect players' emotional well-being.

Game Immersion and Escapism

A defining feature of the battle royale subgenre is the immersive game play of PUBG. Players are attracted into vast virtual worlds that need concentration, skill, and strategy to prevail. When a person is thoroughly immersed in a game, they can enter a state of flow when they completely forget about their surroundings and the passing of time. Although being in the zone can be fun and gratifying, prolonged immersion can also result in neglecting real-life obligations and social interactions, which may worsen feelings of loneliness and isolation [8]. Additionally, PUBG may give a momentary escape from reality for people experiencing tensions or challenges in their daily lives. However, excessive video game use as a coping mechanism may prevent the development of adaptive coping mechanisms for real-world problems, making one more susceptible to mental health problems [9].

Gaming Communities and Social Interactions

PUBG and other online games frequently entail player relationships, ranging from cooperative team play to fierce rivalries. Players' social relationships inside gaming groups might provide them a sense of community and camaraderie, which is good for their mental health [10]. However, toxic behaviors like cyber bullying, harassment, and verbal abuse do exist in the gaming community and can cause psychological suffering as well as feelings of exclusion and humiliation [11]. Furthermore, players' self-esteem and general sense of well-being may be impacted by social comparisons and perceived social position within the gaming community. People who believe they are less capable or effective than others may feel inadequate and depressed more frequently [12].

Intervention strategies to prevent suicides

Implementing successful intervention options that put players' mental health and wellbeing first

is necessary to address the PUBG paradox and its potential link to suicide risk. It is critical to investigate evidence-based interventions that can lessen the harmful consequences of gaming and foster a better gaming environment as video games, in particular Player Unknown's Battlegrounds (PUBG), continue to draw in millions of players globally.

Education on Responsible Gaming

One of the most important intervention strategies is educating players, parents, and carers about responsible gaming habits. People can establish a balanced attitude to gaming by becoming more aware of the possible dangers of excessive gaming, seeing indications of addiction, and encouraging good gaming practices. By including features that remind players to take breaks, restrict screen time, and promote in-person social contacts, game developers and publishers can also play a significant role.

Interventions in the form of psych education

Interventions in the form of psych education that work to develop resiliency, coping mechanisms, and emotional control can help to lessen the impacts of video game addiction. Individuals can set realistic objectives for regulating their gaming behaviors, identify and confront unhealthy thought patterns connected to gaming, and create healthier coping mechanisms with the aid of cognitive-behavioral therapy (CBT) techniques [13]. Utilizing online platforms or gaming communities to implement CBT-based therapies can guarantee accessibility and reach a larger audience.

Parental and School Participation

Participating parents and educators in the discussion of the PUBG conundrum may benefit players' mental health. Parents can be urged to establish reasonable time restrictions for gaming, keep an eye on their kids' gaming habits, and have open discussions about the dangers of excessive gaming with their kids. To reach a larger group of young players, schools can include mental health education and awareness programmes, including the effects of video games on wellbeing, into their curricula.

In-Game Mental Health Support

Including mental health support in gaming environments can give users access to resources and options for getting assistance. To provide in-game support systems, such as chat help lines or information about mental health services, game creators can collaborate with mental health organizations. Early intervention can be facilitated and the stigma associated with requesting help can be reduced by giving gamers quick access to mental health resources while they are fully engaged in the gaming experience.

Support from the gaming community

In order to solve the PUBG paradox, it is essential to cultivate a positive and encouraging gaming community. A more empathic and compassionate gaming culture can be created by encouraging players to foster respectful relationships, avoid toxic behaviors, and assist one another through difficult situations. To ensure a positive and secure atmosphere, game producers can integrate reporting systems for abusive behaviors and actively control gaming communities.

Conclusion

In conclusion, this review study clarifies the PUBG conundrum by shedding light on the complex relationship between video games, notably PUBG, and the risk of suicide. Our review of the literature suggests a complex understanding of the psychological processes behind the link between playing PUBG and the risk of suicide. Due to the immersive nature of the game, social connections, and competitive stress, some players may experience emotional distress and even damage. Additionally, pre-existing mental health issues may make people more vulnerable, making it crucial to identify at-risk people early and provide them with help. Collaboration between the gaming industry, mental health experts, and legislators is crucial to solving the PUBG dilemma. A friendly gaming

community can be created by implementing educational campaigns on gaming platforms and offering easily accessible mental health services. We stress the significance of ethical reporting that abstains from stigmatization in order to maintain the complexity of this subject in research on video games and mental health. In the end, however, we can establish a safer gaming environment that prioritizes mental well-being while taking into account the diverse and developing video game industry with a balanced approach to research, intervention, and ethical considerations.

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