

# ***Factors that Predispose Teens to Video Game Addiction during COVID-19***

**Zhouhong Li<sup>1,a,\*</sup>**

*<sup>1</sup>Department of psychology, University of British Columbia, Vancouver, British Columbia, V6T 1Z4, Canada*

*a. zhoh2@student.ubc.ca*

*\*corresponding author*

**Abstract:** In today's world, video games are a common source of entertainment, particularly among teens. Teenage gaming addiction has gradually become a very common thing. In recent years, with the outbreak of COVID-19, the emergence of many external factors has led to a gradual increase in video game addiction among teenagers. This is what this paper needs to discuss. External factors such as family factors, friends, social needs factors, and other environmental factors are discussed in this paper. In the article, the content of various studies is analysed and finds that adolescent video game addiction is related to external factors during COVID-19. The relationship between a child and a parent and the loss of a loved one during the pandemic can have an impact on a child's behavior. Friends are also an indispensable factor. The desire to seek socializing with the outside world during the epidemic will also be a reason. Because of this pandemic, both isolation and online classes have greatly affected people's lives, including on the topic of teenage video game addiction. This provides some ideas and theoretical basis for the exact related research later.

**Keywords:** Video game addiction, COVID-19, Teenager

## **1. Introduction**

With the development and popularization of technology, everyone now uses mobile phones, computers, or other electrical devices every day. Video games have also become more common. For a better gaming experience, many game companies will create a lot of attractive graphics, characters, settings, etc. for their games. And these settings have a certain degree of interaction with players. This creates a strong sense of engagement in the game while players are playing. This also increases the possibility of players becoming addicted to the game. This also leads to the lack of self-control of many teenagers and leading to addicted in gaming. This kind of phenomenon is not uncommon. And this will lead to many negative situations, such as declining grades and sleeplessness. Gaming addiction has varying degrees of negative social and psychological effects. These include various mental illness such as depression or anxiety, which can also affect aspects of interpersonal communication. Reluctance to communicate with people, decreased social skills, or affect academic performance, and so on [1]. During the COVID-19 period, teens have more time to touch electronic devices as the way schools are taught has changed to online classes. Therefore, whether adolescents are addicted to video games due to these external factors during the epidemic is a question worthy of study.

Video game addiction is a hot research topic. One of the studies looked at the differences between the psychological, physical, social and health status of young video game addicts and non-

addicts [1]. The study shows that the psychological and physical conditions of the addicts are relatively poor. And women's addiction to video games was more negative than men. There is also an article on the influence of teens on gaming addiction in the context of family, media, and school [2]. The article concludes that both single-parent families and children with low levels of well-being at school are at higher risk for gaming addiction. These previous studies have been limited to varying degrees, and some have only focused on adolescents in one country. Because different cultural backgrounds may also have different experimental results, these results are not comprehensive enough. Some focus on just one cause of gaming addiction or only study the consequences of gaming addiction. The epidemic has now taken on significant significance in the context of COVID-19 and in people's daily lives. Therefore, it is worth exploring whether the factors of the epidemic are related to adolescent game addiction.

Therefore, the research question discussed in this paper is what external factors can make teenagers addicted to video games during COVID-19. The family factor will be discussed first. Parents are the people children have the most contact with, so parents' behavior can directly affect children's emotions and behavior. The second discussion is about friends and social needs. Aside from parents, the people teens have the most contact with are friends. Being unable to connect with friends during the pandemic has become a big point in this topic. Long periods of social isolation at home can also be tiresome, and the appropriate need for socialization becomes a reason to play video games. The last thing to discuss are other environmental factors. For example, the long-term isolation has made it impossible to perform some outdoor activities, and the only relaxing activities are video games. Online classes in schools are also a factor.

## **2. Video Game Addiction**

### **2.1. Definition and Expression**

First, addictive behavior is a big topic. Addiction refers to the constant repetition of compulsive behaviors. That is, continue to do these actions even when someone already know that their actions will have bad consequences. So, game addiction simply means that someone continue to indulge their own behavior when they know they have been playing games for a long time, and it may even be more serious. Loss of control over how much time is spent playing video games, withdrawal symptoms from video games, and conflicts with personal relationships and academic or professional obligations are the main characteristics of video game addiction [3]. It demonstrates how gaming addiction will impact people's normal lives. Not up to a very good standard both socially and for what is supposed to be done.

### **2.2. Major Impact of Video Game Addiction**

With the development of technology, the types of video games have also become diverse. Playing video games may be an appealing and satisfying pastime due to a variety of variables, including social acknowledgment from other players, feeling satisfied as part of a group, playing can help people unwind, manage their mood, chase sensations, and get rid of boredom and loneliness [4]. Teens prefer video games that allow them to interact with others. This kind of game can make them not only feel the joy of pure game operation, but also give them a high degree of participation. And this form of making friends in the game has become a new way of socializing. Video game addiction can have a big impact on normal life. Addiction is a pathological manifestation. Brunborg et al. [3] found increased levels of sadness, poorer academic performance, and greater behavioral problems are all associated with video game addiction. Long-term video game addiction can lead to more mental illnesses.

### **3. External Factors**

There are many reasons for the formation of game addiction. Addicts to video games use their addiction as a coping mechanism for difficult and unwelcome aspects of their daily existence [5]. Today's teenagers have low psychological endurance, and they will choose to escape when they encounter any setbacks in life. The things and people that young people can come into contact with are relatively limited. And the most popular option is to play video games. For example, in school, if they fail an exam once, they will feel frustrated and will choose to play video games to relax and escape their emotional and psychological conditions. In the environment in which teens live, the people and things they contact the most can influence their behavior. Family is one of those factors.

#### **3.1. Family Factors**

##### **3.3.1 The Relationship between Teen and Parents in the Context of COVID-19**

In normal life, the relationship between parents and children will affect the children's emotions and lead to children's video game addiction. Teens who are at home during the COVID-19 quarantine are most in contact with their parents or relatives. Although being together is a good opportunity to promote communication and strengthen relationships, it is also easy to have some conflicts. The teenagers were under a lot of psychological and mental strain due to the pressures of everyday regular living as well as the distress of the parents and elders at home [6]. During the pandemic, many things have changed. Employees who must go to work every day have become working from home. And some businesspeople may have suspended some projects because of the epidemic. Therefore, during the epidemic, the income of everyone and every family has been greatly reduced. Many companies need to lay off employees because the economy is not doing well due to the epidemic. Unfortunately, there are families whose parents are one of them. After suddenly no job, the psychological gap will be very large. Therefore, parents who stay at home are likely to have poor psychological conditions because of these reasons. Parents may become more emotionally distant or irritable as a result of psychological anguish connected to the COVID-19 epidemic, rather than being helpful, sensitive, and encouraging to their children [7]. And the presence of their children became a cathartic outlet. Children are monitored daily for homework, class, and even how much they eat three meals a day, etc. This has become their daily routine. These behaviors can cause great psychological pressure on children. This can make children want to escape the control of their parents and immerse themselves in the virtual world of video games.

##### **3.3.2 The Impact of the Death of a Loved One due to COVID-19 on Teens**

COVID-19 initially caused widespread deaths due to its high degree of contagion and no treatment. Because it is unavoidable, many people are dying from this virus every day around the world, and in all different age groups. There are many children whose fathers or mothers or both parents have died because of this virus, which will bring a huge psychological shadow to them. Teenagers who have lost a parent have been found to be more vulnerable to a variety of adjustment issues in the past. They have also been found to be more likely to attempt suicide, go through despair, experience more severe and persistent psychiatric issues, get in more trouble in school, have poorer self-esteem, and have lower grades [8]. Usually losing a father or mother must be a heavy blow to a child. But during this epidemic, many people are not allowed to visit after they are infected with the virus, and they cannot even see them for the last time after they die. The sudden death of a loved one and the absence of companionship would be even more unacceptable. Research shows adolescents tend to feel both good and negative emotions more strongly, frequently, and volatily than adults [9]. In this situation, even adults cannot easily maintain a good attitude, and teenagers may collapse even

more. This extreme sadness can also make teens want to escape. Maybe even trying to escape the fact that a loved one has died. Video games make them distract themselves, and sadness gradually shifts. When they are immersed in the game world, they can temporarily forget about things to relax themselves.

## **3.2. Friends and Social Need Factors**

### **3.3.3 Frequency with Friends**

Teens can often hang out with friends when there is no epidemic. Spending time with friends can effectively reduce psychological stress, whether it's from grades or parents. When exercising with friends, teens can improve their mental state more effectively. Because exercise itself is a decompression process for some people, it will be more effective if they add the condition of participating with friends. But after the outbreak, not only did not meet friends, but even outdoor sports were difficult to do. During adolescence, friendships take on a special significance as sources of connection, closeness, and social support, and the perceived lack of friends might impair these requirements [9]. The only thing left to meet with friends is chat on the phone. There is a good chance that people of the same age will play the same video game. Playing video games is a fun and safe way to pass the time, interact with others, and release tension [1]. In the game, it can not only achieve the function of communicating with friends, but also relieve psychological pressure. Increased depressed symptoms were associated with perceived reductions in friend support during COVID-19 [9]. Games also become a topic of conversation among friends because there are no other activities to do. If all the friends around the child are playing, and only they are not playing, it will reduce the topic of conversation with friends. This can also be a reason why children start playing games. So, video games will be one of the most popular ways teens choose to relax during the pandemic.

### **3.3.4 Lack of Social Interaction**

During the epidemic period, because of being unable to go out or communicate with people at close range, there is a lack of social interaction. There are many fewer opportunities to meet new people in real life. Staying at home all day can't get in touch with new people or things. With increasing sociability being connected with higher levels of addictive-like experiences, video game addiction was the social component [5]. With face-to-face interactions dwindling during the pandemic, video games as a new form of social media contributed to their addiction. Because of the limited things they can do when stuck at home, many people play video games. So, socializing on video games has become a mainstream way of socializing during the pandemic. Many video games require the cooperation of the team, so it is inevitable to chat with the person who contact for the first time. Sometimes randomly matched teammates may have a high level, which will make the game experience of the matched teammates skyrocket. Teenagers also meet people in the game that they may not meet in life. Their usual social interactions revolve around school and home, so playing video games will broaden their social circles. In the process of chatting, it is very possible to become good game teammate due to good cooperation or other factors. After teenagers meeting new people in games, they will start playing games frequently because they get the fun of socialize with strangers online.

### 3.3. Enviromental Factors

#### 3.3.1 Quarantine

Quarantine at home completely interrupts everyone's normal daily life. Teenagers in this age group like to go out to play some outdoor sports or to participate in some recreational activities such as partying. They've experienced boredom and irritability, followed by discomfort, fear, and worry due to total lockdown [6]. Being in the same space all day, with limited activity, can be very frustrating. Tired of everything around. It may be bearable at first, but as time goes on, the things people can do at home are very limited, and gradually they will start to feel bored, and their mood will become unstable. According to a review, the negative psychological impacts of isolation included Post-traumatic stress disorder symptoms (PTSD), bewilderment, and rage. Risk factors were the length of the detention, infection fears, boredom, irritation, and lack of supplies and information [10]. When a person does not go out for a long time, because the information to the outside world can only be received through the network. They will become sensitive to some events they hear, amplify the influence of this event, and have a certain fear of the outside world. Video game addiction is more common in those who are psychologically stressed out and less satisfied with their lives [2]. Without contact with the outside world for a long time, adolescents' psyches are affected by isolation and become anxious and dissatisfied with real life, so they will be immersed in video games for a long time.

#### 3.3.2 Online School

During the epidemic, schools have also changed to home classes due to isolation and other circumstances. There are some disadvantages to online classes. To flourish in a non-traditional context, online education necessitates for pupils who are self-control, independence, and access to the resources on the internet. Students must also possess organizational abilities [11]. Teenagers who do not have these conditions will have a hard time keeping up with online classes. Teachers can't be sure that students are serious in class during class. According to certain research examining the connection between emotional and behavioral traits and academic accomplishment, an individual's behavioral and emotional traits have an impact on their attention, which in turn affects how they learn [12]. Therefore, when online classes are held, the negative emotions of teenagers during the COVID-19 period will also affect learning. Even if the camera is turned on, they may be looking at other things on the computer screen. This can lead to a dramatic drop in student achievement. Moreover, the premise of using a computer in class every day will lead to parents not strictly controlling what their children will do with the computer. At this time, if the child's self-control ability is poor, it will easily lead to a decline in academic performance. After grades drop, teenagers will start to play games even more to avoid the pressure of schoolwork and the high demands of parents. After that, the grades will get worse, which is an endless cycle.

### 4. Conclusions

Some external factors caused by the COVID-19 may lead to teenagers' addiction to video games. Whether it is at the family level, the environment level and the social needs of friends have a certain connection. The purpose of this paper is to pay more attention to the gaming addiction of teenagers, especially during the difficult period of the epidemic. The article summarizes the impact between children and parents on factors influencing adolescents' addiction to video games during COVID-19. The sudden death of a loved one can also affect a child's psychological state, leading to video game addiction. According to the increase in gaming performance, teens can meet and chat with friends on the game during the epidemic and socialize with people who may be difficult to meet in their



own social community. Some environmental changes during COVID-19, such as isolation and online classes, have affected adolescents' psychological states to varying degrees, which will increase the addiction to video games among adolescents. If it can be detected early, it will be easier to improve the bad habits of teens. Educators should pay attention to this type of problem and need to be always concerned about the mental health of young people. However, the previous research has some limitations. There is some research that only focuses on adolescents from one regional background. The conclusions drawn from the research are not comprehensive enough. This paper provides an idea and basis for subsequent research. In the later stage, experimental research can be carried out according to one of the specific factors. This will also improve accuracy.

## References

- [1] Stockdale, L., & Coyne, S. M. (2018). Video game addiction in emerging adulthood: Cross-sectional evidence of pathology in video game addicts as compared to matched healthy controls. *Journal of Affective Disorders*, 225, 265-272. <https://doi.org/10.1016/j.jad.2017.08.045>
- [2] Rehbein, F., & Baier, D. (2013). Family-, media-, and school-related risk factors of video game addiction: A 5-year longitudinal study. *Journal of Media Psychology*, 25(3), 118-128. <https://doi.org/10.1027/1864-1105/a000093>
- [3] Brunborg, G. S., Mentzoni, R. A., & Frøyland, L. R. (2014). Is video gaming, or video game addiction, associated with depression, academic achievement, heavy episodic drinking, or conduct problems? *Journal of Behavioral Addictions*, 3(1), 27-32. <https://doi.org/10.1556/JBA.3.2014.002>
- [4] Yilmaz, E., Griffiths, M. D., & Kan, A. (2017). Development and validation of videogame addiction scale for children (VASC). *International Journal of Mental Health and Addiction*, 15(4), 869-882. <https://doi.org/10.1007/s11469-017-9766-7>
- [5] Hull, D. C., Williams, G. A., & Griffiths, M. D. (2013). Video game characteristics, happiness and flow as predictors of addiction among video game players: A pilot study. *Journal of Behavioral Addictions*, 2(3), 145-152. <https://doi.org/10.1556/JBA.2.2013.005>
- [6] Geethika Sai, K., Jalaja, R., Amutha, A., Venkatesan, U., Anjana, R., & Unnikrishnan, R. (2021). Psychological impact of COVID-19 on teens belonging to a social media group. *Journal of Diabetology*, 12(2), 232-236. [https://doi.org/10.4103/jod.jod\\_77\\_20](https://doi.org/10.4103/jod.jod_77_20)
- [7] Janssen, L. H. C., Kullberg, M. J., Verkuil, B., van Zwielen, N., Wever, M. C. M., van Houtum, Lisanne A E M, Wentholt, W. G. M., & Elzinga, B. M. (2020). Does the COVID-19 pandemic impact parents' and adolescents' well-being? an EMA-study on daily affect and parenting. *PloS One*, 15(10), e0240962-e0240962. <https://doi.org/10.1371/journal.pone.0240962>
- [8] Feigelman, W., Rosen, Z., Joiner, T., Silva, C., & Mueller, A. S. (2017;2016;). Examining longer-term effects of parental death in adolescents and young adults: Evidence from the national longitudinal survey of adolescent to adult health. *Death Studies*, 41(3), 133-143. <https://doi.org/10.1080/07481187.2016.1226990>
- [9] Rogers, A. A., Ha, T., & Ockey, S. (2021;2020;). Adolescents' perceived socio-emotional impact of COVID-19 and implications for mental health: Results from a U.S.-based mixed-methods study. *Journal of Adolescent Health*, 68(1), 43-52. <https://doi.org/10.1016/j.jadohealth.2020.09.039>
- [10] De Pietri, S., & Chiorri, C. (2021). Early impact of COVID-19 quarantine on the perceived change of anxiety symptoms in a non-clinical, non-infected italian sample: Effect of COVID-19 quarantine on anxiety. *Journal of Affective Disorders Reports*, 4, 100078-100078. <https://doi.org/10.1016/j.jadr.2021.100078>
- [11] Saleh, A., & Sanders, H. (2014). The wolf in sheep's clothing: The matthew effect in online education. *International Journal of Sociology of Education*, 3(1), 26-50. <https://doi.org/10.4471/rise.2014.02>
- [12] Park, Y., Seo, D. G., Park, J., Kim, B., & Choi, J. (2019). The influence of behavioral and emotional characteristics on academic achievement of middle school students: A growth modeling approach. *School Psychology International*, 40(5), 433-455. <https://doi.org/10.1177/0143034319853010>