

# An Exploration of the Students' Perception Towards Online Games in China during Covid-19

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## Abstract

**This qualitative study focuses on the perception and attitudes of students towards online games during the Covid-19 pandemic. It contains five chapters. Introduction, Literature review, Methodology, Findings and Discussion and Conclusion. The research objectives were to find the factors which affect students' attitudes to online games during Covid-19, to explore how students perceive the impacts of online games during the Covid-19 pandemic, and to analyze the potential issues of the increased number of student players during this period. The purpose of this paper was to study the cognitive and psychological changes of students towards online games. The scope of the study will be limited to university students from mainland China. Data would be collected with 3 participants by interview. The ATLAS.ti software was used in data analysis. The conclusion discussed the findings that based on the research questions as well as the limitation.**

## Keywords

**Online Games; Perception; Covid-19; Qualitative Study.**

## 1. Introduction

### 1.1. Background of Study

Coronavirus disease 2019 has become a global pandemic that affecting human life. At the time of writing, many countries are still plagued by the coronavirus seriously because the virus has mutated and the existing vaccines cannot fully protect against the virus. To control the spread of the virus, governments worldwide have implemented several measures such as lockdown and self-isolation policies which mean people have to stay at home except for essential activities, the workplaces and public entertainment areas must be closed, strictly mask-wearing and so forth (Amin et.al 2020). This led to individuals feel stress and anxiety, especially for students. They worried about their future career, experience boredom as well as other psychological distress.

Unexpectedly, the gaming industry has not been affected negatively during the Covid-19. On the contrary, users are growing fast during this period compared to the past. For instance, an Indian gaming company WINZO GAMES have reported three times more users and 30% increasing in online mobile gaming during the pandemic (Amin et.al 2020); Tencent's net profit in the third quarter of 2020 was 38.54 billion yuan, up 89% from a year earlier and 16% from the previous quarter. The revenue from online games rose 45% to 41.422 billion yuan (Zhou 2020).

### 1.2. Purpose of the Study

The large number of data showing that the gaming industry has a huge increase in users and revenue during the pandemic from the beginning of 2019 in China, the purpose of this paper is to study the cognitive and psychological changes of students towards online games. The scope of the study will be limited to university students from mainland China by qualitative research.

### 1.3. Research Problems

RQ1: What factors affect students' attitudes towards online games during Covid-19?

RQ2: How did students perceive the positive impacts of online games during the Covid-19 Crisis in China?

RQ3: What are the concerns or any potential issues of the huge increased number of student players during Covid-19?

### 1.4. Significance of Study

Even though several studies could be founded on the topic of digital games during Covid-19, there are still not adequate articles that because of the sudden appeared pandemic as well as the huge change of students' social life in the specific region. Therefore, understanding how students' perception and psychological changes towards online games during Covid-19 is a necessary topic to study. In addition, we cannot easily see the potential issues due to the uncertainty about how long the pandemic will be lasting. In this case, this study has high value for exploring Chinese students' perception and giving some recommendations to individuals and the gaming industry.

## 2. Literature References

### 2.1. Research Paradigm

Based on the purpose, the research paradigm of this study is Interpretivism. The Interpretivist thought means it is not appropriate to collect findings from one study to another, knowledge is not found and needs to be constructed. It is more common to understand the subjective human behavior and experiences that may change according to various contingency and environmental factors. Thus, this paradigm indicates that the researchers will analyze the data through subjective thinking, construct knowledge socially, utilize the data gathered through interviews and observations (Merriam and Tisdell 2016).

### 2.2. Relevant Past Research

Maden indicates that since Covid-19, online games have played a supporting role to enforce effective distance among people and have also been encouraged by the World Health Organization's collaborative campaign called #PlayApartTogether (Maden 2020). In this situation, Amin et al. conclude that most engagement in the gaming industry has positive benefits in helping to develop cognitive skills such as awareness concentrate, problem-solving, and reasoning skills (Amin et.al 2020). Király et. al shows that the importance of information and communications technology (ICT) is even higher in the Covid-19 crisis than before because social media and online games can be useful to maintain meaningful relationships across physical distances and reduce feelings of loneliness (Király et. al 2020).

However, excessive gaming can cause students many potential mental problems such as obesity, lack of sleep, poor self-control, low school well-being, etc. Kriz's study analyzes the different perspectives of how games can have both positive and negative impacts, especially in a pandemic (Kriz 2020). For instance, games can help people relax and lower stress. It also can provide the opportunity to interact with family or friends through the virtual mode of play. On the other side, Lukosch and Phelps pointed that some of the games may reduce people's health over time and make people out of control (Lukosch and Phelps 2020). The article by Bayeck mentioned that some digital games can also increase creativity, social skill, and teamwork. For instance, some escape room app can be used to help teams work together to solve a series of puzzles or challenges in order to escape a room (Bayeck 2020). Cohen et al. even offer an article to discuss the concerns of how to develop an escape room for team-based methodological applications and challenges (Cohen et.al 2020).

### 3. Methodology

As mentioned before, this study uses Interpretivism as the ideal research philosophy. Therefore, the methodology should be qualitative research. The appropriate approach is based on previous studies, observations, and interviews. It indicates that this study aims to focus on a small size of sample by collecting primary data through interviews.

During the process of interviews and observations, the study focuses on a sample size of 3 university students to explore their perception and experiences about online games. The most suitable research design is phenomenology.

#### 3.1. Research Design

##### 3.1.1. Role of Researchers

In this paper, the researcher has to explore past documents as much as possible to generate the findings towards the topic through qualitative analysis, and also needs to apply the standards of credibility by reducing bias. When doing data collection, the researcher must also use the appropriate way to access the true feelings and experiences of the participants (Merriam and Tisdell 2016).

##### 3.1.2. Participants

The participants of this study are limited to university students in mainland China who began to spend more time playing online games due to Covid-19. And, these participants were interviewed through face-to-face and phone calls during a time that they were free. The interview questions have been pre-determined and the interview process has no time limitation. The privacy of the participants will be strictly protected and all names will be pseudonyms.

##### 3.1.3. Data Collection

In this study, secondary data would be collected from previous literature. The literature was searched according to the relevant topics through Google Scholar, then the authors' research results and theories will be extracted, and the sources will be cited.

Furthermore, the primary data will be collected through individual interviews and observations. And 5 open-ended questions will be provided to help participants show their personalized answers. At the same time, researchers must carefully observe the expressions, movements, and expectations of participants to determine their emotions and attitudes. In addition, this study includes 3 participants. All participants are the persons who felt that online games had a great impact on their lives and changed them during the Covid-19 pandemic.

#### 3.2. Data Analysis

##### 3.2.1. Data Organizing

This qualitative research will organize the data by reading the relevant documents as well as using the interview transcripts. The data will be collected and then assigned codes into the software that make the researcher analyze the findings more effectively.

##### 3.2.2. Validity and Reliability

All researchers are concerned with providing valid and reliable knowledge to the readers in an ethical manner. In the qualitative study, the reader may not be able to generalize the findings through the statistical sense (Merriam and Tisdell 2016). Therefore, ensuring the study is trustworthy and reliable is quite crucial when collecting the information that answering the research questions. The method in this study can be reliable because other researchers also are able to use similar procedures to work out their own outcomes (Aminath 2021).

### 3.2.3. CAQDAS

The CAQDAS method of this study will choose ATLAS.ti software as it will be more sufficient in qualitative research. It will contain quotations, cross tabulation, and network to show the relationships between the codes and groups. The figures and records will help researchers clearly understanding the research questions, the crucial viewpoints of the interviews, and the reliability of the study.

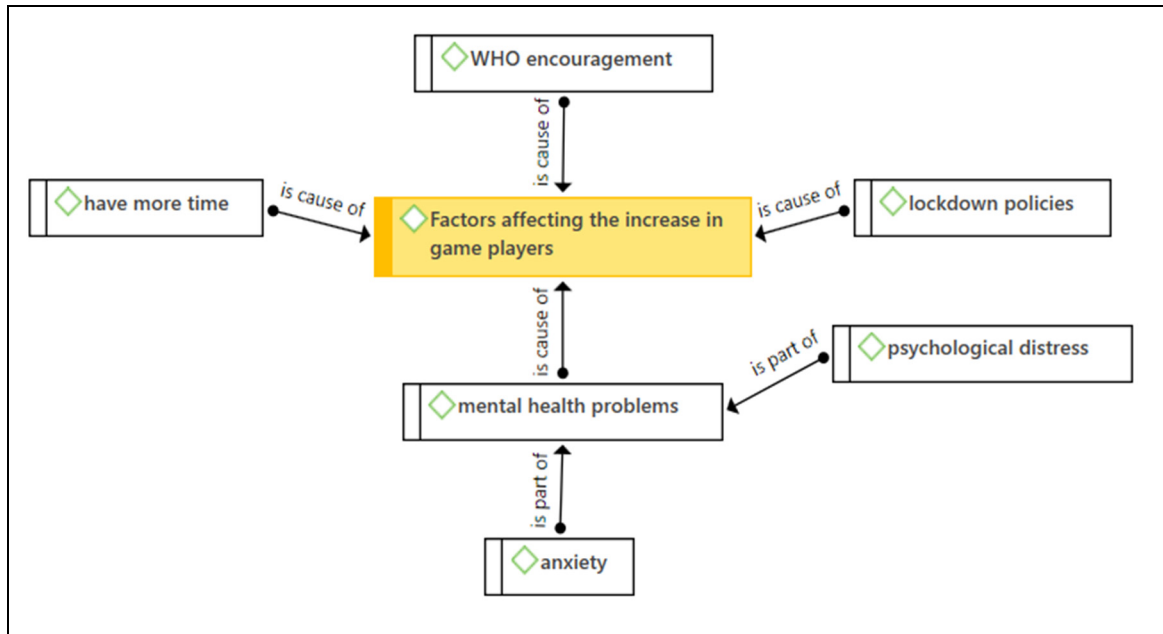


Figure 1. Network of 'factors' code groups

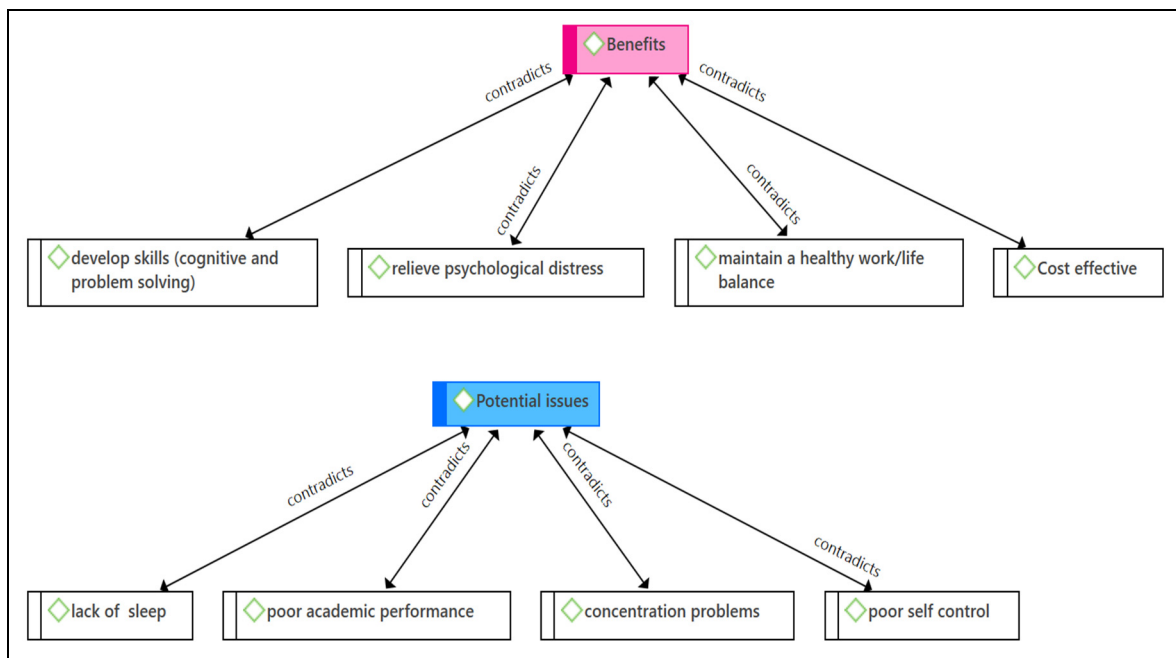


Figure 2. Network of 'benefits' and 'challenges' code groups

**Active: 6 Quotations:**

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**Code 1**

**Benefits**

**11:8 p 6 in Gaming in the Time of COVID19**  
 Board gameplay may not only support learning and building or changing of mental models but can also increase creativity, social skills and teamwork (Baveck, 2020).

**12:11 p 2 in Online Gaming During the COVID-19 Pandemic in India**  
 Research evidence suggests that most engagement in gaming is of positive benefit (Griffiths 2019) and that the benefits can be educational, physical, and therapeutic

**12:12 p 2 in Online Gaming During the COVID-19 Pandemic in India**  
 Developing cognitive skills such as reasoning, spatial awareness, and problem-solving.

**Code 2**

**Challenges**

**12:14 p 2 in (H)Online Gaming During the COVID-19 Pandemic in India**  
 problematic gaming is associated with psychosocial problems such as lack of sleep, low school well-being, concentration problems, impaired life skills, and poor self-control

**12:15 p 2 in (H)Online Gaming During the COVID-19 Pandemic in India**  
 Extreme engagement in online gaming is also strongly associated with poor academic performance

**12:18 p 3 in (H)Online Gaming During the COVID-19 Pandemic in India**  
 Engaging in gaming can be time-consuming and has been associated with increased consumption of sweet drinks

Figure 3. Quotations with labels

Table 1. Cross tabulation of Interview

	1: Participant 1 n= 8	2: Participant 2 n= 9	4: Participant 3 n= 6	Totals
Factors of playing online games during Covid-19 n= 9	3	4	2	9
Positive impact of online games during Covid-19 n= 5	2	1	2	5
Potential issues of online games during Covid-19 n= 6	2	3	1	6
<b>Totals</b>	<b>7</b>	<b>8</b>	<b>5</b>	<b>20</b>

## 4. Findings and Discussion

### 4.1. Interview

#### 4.1.1. General Background

Participant 1 (P1) Jennifer is a second-grade student who studied at Shandong University, and her boyfriend is a permanent resident living in Australia. Due to the Covid-19 pandemic, they have been separated for almost a year. Through the interview, the researcher also can feel that she is very depressed. Jennifer and her boyfriend have to communicate with each other through online games as well as Wechat to express the feelings of missing.

Participant 2 (P2) Leo is a freshman at Henan university. Because China's pandemic appeared repeatedly around July 2021, many colleges and universities are delayed the new semester, so he felt boring and downloaded different types of online games to kill time.

Participant 3 (P3) Ben is a senior student in mainland China. Due to the Covid-19 pandemic, his internship work was suspended. Therefore, he started to play online games to earn extra money because he had very good game skills in helping other players to have a better performance in the games.

#### 4.1.2. Interview Transcript

Q1- What impacts and changes the lockdown policy has had on your lives since the COVID-19 pandemic?

P1: I felt very depressed and lonely, due to the lockdown policy, my boyfriend and I have been separated for almost a year.

P2: The most change maybe we cannot travel and even not know when can we go aboard haha, then I had more time to stay at home.

P3: Many shops and restaurants were closed due to the pandemic; I also lost my part-time job.

From the above, it can be seen that all participants felt the Covid-19 pandemic had significant impacts and changes in their lives.

Q2- What factors may lead you to spend more time playing online games?

P1: To communicate and play with my overseas boyfriend, we cannot meet only can use this method.

P2: Because I felt very bored staying at home and had nothing to do.

P3: I lost my part-time job and the university extended the summer vacations due to the pandemic, playing online games also can help me to make some money.

When the three participants were asked what factors lead them to tend to play online games during the pandemic period, P1 preferred to use online games as the communication tool and P2 spent more time on playing online games in order to diminish stress and bored, P3 has the

similar reason with P2 plus making extra money through online games, all three participants have specific reasons based on their personal situation.

Q3- How is your experience in playing online games when you suddenly have a lot of time to stay at home? Do you think it's beneficial?

P1: It's helpful actually, I think online games and other communicating software really can maintain social distancing in a safe way.

P2: Not bad, it helps me kill a lot of time by such a low-cost method.

P3: It can relieve some psychological anxiety and stress to some extent.

When the three participants were asked whether they support playing games during the pandemic, they all expressed a very positive attitude.

Q4- What potential issues or problems do you think regarding your own experiences?

P1: I think maintaining a very healthy diet and adequate sleep is quite a crucial thing, sometimes the excessive online chat and games make me feel pain in my hands and neck.

P2: I often felt tired because of my irregular eating habits and rest schedules, it becomes harder to be concentrate on studying.

P3: Visual problems? But I'm already trying my best to adjust the game time and do some exercise.

When the participants were asked the potential issues of playing online games, they all think the excessive engagement in games can really prove challenging in developing a healthy routine life.

Q5- As the pandemic gradually abates, do you think this phenomenon will change the development of online games in the future?

P1: Yes, maybe. We don't know when the international travel will return to what it was before the Covid-19.

P2: haha I think the Game industry becomes the biggest winner of the pandemic, but if the pandemic eases and the regional entertainment venues are gradually opening up, people will definitely reduce the time playing games.

P3: Because no one knows how long the pandemic will last, maybe three years or five years, the internet will become more and more important at this stage.

P1 and P3 believed that this situation will continue for a long time in the future because it does not know when the world will return to normal, but P2 believes that when the pandemic becomes ease, as long as people's normal life gradually recover in a regional range, not need to take a long time, people will greatly reduce the time playing games.

## 4.2. Discussion

By looking through the findings of this research, it can be determined that students play online games during the pandemic is a positive behavior. According to Code 1 of the Quotations (Figure 3) and the network of 'factor' codes (Figure 2), they clearly show the benefits and the motivation factors of playing online games during this special period of time. We can see the figures from Table 1, the motivation factor and the positive impact still occupied the recognition of most participants. Marston and Kowert in their article that different factors may motivate students to play online games according to their personal situations, especially in Covid-19 (Marston and Kower 2020). Moreover, the interview transcripts also indicate similar results as the past studies. This is also supported by Amin et al.'s study, it concludes that most engagement in the gaming industry has positive benefits in helping to develop cognitive skills such as awareness concentrate, problem-solving, and reasoning skills (Amin et.al 2020).

## 5. Conclusion

Based on the discussion and the interview transcripts, the perception and attitudes of university students towards online games during Covid-19 can be positive. Because all three participants agree that during the pandemic, online games do bring a lot of positive changes in their lives. It also implied that different factors would motivate students to play online games according to their personal situations. The limitation of this qualitative study does not have adequate samples because it has only chosen three participants from three different provinces in mainland China, as too few samples made the research results not representative of the universality.

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