

Different Background and Situation of US and China Bring Different Opinions about Video Games

Chengzhi Yang *

Department of Art and Humanities, Penn state Abington, 19001 Abington, US

* Corresponding Author Email: cky5231@psu.edu

Abstract. With the booming of technology development, video games gradually became a kind of common way to relax. Nowadays cellphones and laptops are generalizing, and video games' quality has become better than before. Video games seem to be a necessity in people's daily life, especially the teenagers and the young. This study works on different environments between the US and China leading to the differences in video game development and people's perspective towards it. The environment is composed of countless elements. This study will focus mainly on education, institutions, and gaming companies in these two different countries. The totally different education, policy, and companies will bring different opinions about video games. The purpose of the study is to compare the differences and seek both benefits and disadvantages of each side. These facts shape the parents from these two countries to have quite different opinions about video games. Compared to Us parents, China parents' attitudes are relatively serious towards video games and think it will bring more negative influences. US parents are relatively open to video games. Also, the different environment causes teenagers in China may be more obsessed with video games than Us teenagers.

Keywords: Education; videogames; gaming company; violence.

1. Introduction

Video games, have been developed for a couple of decades and have become a more and more popular topic as time moves. Video games are a way of entertainment that is various, there are a lot of different types of it and different ways to play. Because of the popularity of the video games, people would rather spend a huge amount of money and time on it. Take the game Hogwarts Legacy as an example, this game sells about 850 million in 2 weeks [1]. In 2022, about 3.2 billion people played video games. The huge number of players makes video games a kind of very influential media. Video games have been recognized as a complicated medium. People both talk about how many advantages it brings but critic it at the same time. The purpose of this study is to lead people on the right track and analyze video games rationally also figure out how's the future of video games. The study will concentrate on the educational background, culture, and companies in China and the US. All these factors will effectively shape people's perspective towards video games that conclude both positive and negative. One of the negative perspectives is to relate video games to violent behavior. Especially in the US, there is no restriction for video games. This leads to some negative information being posted such as sexual and violent behavior. This information and images will do harm to both children's physical health and mental health. The priority of this study is to figure out how different countries' education, policies and companies cause different opinions that include criticism and praise. The majority focus point is on these general differences in education, culture, and the companies in these two countries. They all play an important role in both people's opinions and the next step of video games.

2. Description of Gaming Circumstance in China

2.1. Educational Environment and High Pressure

In the past few decades, China has developed fast and sustainably. During this progression, the education contributes a lot. This is highly connected with China's education system. After all kids



finish their 9-year mandatory studies, 90% of them can go to some form of high school. 50% of these students can reach a higher education level [2]. However, to get a good job opportunity is extremely challenging in China. This makes their competition for diplomas intense. In order to get a good job, Students in China sacrifice their time, effort, and money to a higher diploma. This inevitably makes Chinese students more stressful relatively. Two researchers do an experiment in Nanjing, Jiangsu Province. They randomly choose a school, and all the participants are 466. 203 are male and the rest of them are female. Their average age is around 16.64. The researchers let participants do a 20-minute survey and use an adolescent stress questionnaire to measure the pressure they have. The result is that both male and female students are suffering from high pressure and don't have free time for playing [3]. With the booming of video games and the academic pressure. High stress makes teenagers in China can't easily get rid of video games. They gain joy in video games and play it to relax themselves. This makes Chinese parents deeply believe video games are the most vital reason that causes their children to be distracted from studying and jeopardize grades. However, the research proves that works in an opposite way. The researchers have a group of 17 participants in a small public university in Saudi Arabia [4].

Table 1. student's academic outcome and time of playing video games

No.	Leisure in h	Studying in h	Average h on games	Do you like gaming	Max h on games	Min h on games	GPA	Avg GPA
1	6	3	2	YES	3-5h	1h	3.00-3.49	3.25
2	1	5	0	NO	-	-	3.00-3.49	3.25
3	0	7	0	NO	-	-	3.00-3.49	3.25
4	1	5.5	1	YES	1-3h	Less than 1/4 of an hour	2.50-2.99	2.75
5	2.5	6	3	YES	1-3h	Less than 3/4 of an hour	More than 3.50	3.75
6	5	5	0	NO	-	-	2.00-2.49	2.25
7	2	2	4	YES	5-7h	2-3h	2.00-2.49	2.25
8	1.5	2.5	0.5	YES	1-3h	Less than 1/4 of an hour	2.00-2.49	2.25
9	2	10	2	YES	5-7h	Less than 3/4 of an hour	2.50-2.99	2.75
10	0	7	0	NO	-	-	More than 3.50	3.75
11	7	4	3	YES	5-7h	Less than 3/4 of an hour	2.00-2.49	2.25
12	1	2	2	YES	1-3h	1h	2.50-2.99	2.75
13	4	8	3	YES	-	Less than 1/4 of an hour	2.50-2.99	2.75
14	1.5	5	0	NO	-	-	2.50-2.99	2.75
15	4	10	1	YES	1-3h	Less than 1/2 of an hour	2.00-2.49	2.25
16	2	2	2	YES	1-3h	0	3.00-3.49	3.25
17	7	7	7	YES	5-7h	More than 3h	3.00-3.49	3.25
Avg	5.24	1.79						2.87

In the Table 1, No. 2, 3 and 6, they all have 0 hours of video games and their study hours don't have huge differences. But the difference is that the leisure time for group 6 is 5 hours. The No. 2 and 3 are 1 and 0-hour leisure. This makes their average almost the same is 3.25. However, for No.6 the average GPA is only 2.25, almost the lowest. This manifests that leisure matters a lot, video games are not the priority reason. Combine NO.9 and 15 together, they both study for about 10 hours, which

is the highest in this experiment. However, their grade is both lower than the average GPA of 2.87. From No.10 and 5, they got the highest GPA 3.75 around the group and their study time is around 6,7 hours. All these data illustrate that students' grades are highly connected with their study time and leisure time. Video games sometimes will lower the grade but it's not the biggest reason. Except for video games, there are TV, TikTok, Instagram, comic books, and tons of different ways to distract students' attention. However, in China, most of their parents think that video games are the biggest reason is also reasonable. New Zoo states that compared to 2020, the total video game player growth is 5.3% in 2021. 55% of the players are in the Asia-Pacific area which is 55% of 3 billion [5]. China as a huge country in East Asia has countless game players. On September 2, 2021, the Chinese government posted a policy that children under 18 years old can only play video games in a particular time slot 8 pm-9 pm during the weekend. Such action's purpose is in order to prevent children addicted to video games. In China, literally, you are not allowed to play these games from other countries and the gaming company can't conclude any sexual or violence-related images in the games. Also, related to education reason, Chinese parents usually worry that video games will do harm to the physical health of their kids. The most obvious one is about their eye healthiness. Parents always believe that their kids get Myopia because of Video games.

2.2. Game Companies Offer More Accessible Games

In China, free games are relatively more popular than premium games and it's due to the game company's strategy. Tencent, which is almost dominant in the game industry in China has tons of these free games and many of them are popular in China. The success of Tencent has various reasons. One of the most fundamental things is the communication apps like WeChat and QQ. When people are playing these games, they can see their friends playing this game, and then, more and more people come and join this contributing to the huge population. Also, the generalization of mobile phones makes access to mobile games easier, and usually, mobile games have a faster pace. This means that many people can utilize the fragment of time to play some games and relax. With this development, people put more time into mobile games than PC games. These communication apps make the payment becoming easier. When people log in by WeChat or QQ, the payment becomes super easy. Because of a lack of discipline, kids always can't control themselves and spend a huge amount of time and money on these free games. The data is shocking that in China in 2018, game apps took 86% revenue of all app stores and it's about 44.8 billion [6].

3. Description Video Games Circumsrance in US

3.1. Loose Educational Environment and Low Employment Pressure

In the US, people have quite a different opinion about video games. Many parents will accompany their kids and play video games together. Education is an essential part of the reason. In the US, students are relatively chill and have less stress. Table 2 shows that for elementary teachers, in most sections teachers in China think the materials are relatively easy and this manifests that Chinese elementary students' learning materials are more challenging compared the American elementary schools [7]. Also, the job requirement is lower in the US. In the US, basically, students can have a decent job after they graduate especially if they are STEM majors. Because US has more of these big firms and these firms have more resources compared to these small firms. Also, every year the population of undergraduate students in China is significantly higher than the population in US. More firms and fewer undergraduate students make the competition less intense. Also, the average income of a truck driver in Pennsylvania is about 74,000 dollars per year. The average salary for a corporate communication major student in Pennsylvania is only 62,300 dollars which is even lower than the truck driver. So many people in the US think that learning a skill is also a good way of living. Most parents support their kids' choices and won't recognize video games as a reason to impact student's grades. Many families will choose to play some family games together in order to pass the time.

3.2. Possible Negative Effects of Negative Game Elements

The education of sexuality is usually taught during junior high school. Also, it's different from state to state. In Pennsylvania, although there is no law stating that schools are required to teach sex education, schools have to teach sexually transmitted diseases. This gives the students in the US a better understanding of this field and won't easily be misdirected by video games. However, in US there is no law to ban video games with some violence-related stuff. This really caught the parent's attention and think this is a dangerous point. Many records state that violent games have a short-run effect on aggression. The article "How Long Do Short-Term Violent Game Effects Last?" it mentions that 15 minutes of playing video games will cause 5-10 minutes of violent behavior and it's not correlated with whether the gamer is a violent game or not. It's highly connected with many other factors like characters, the difficulty of the game, competitive or not, and so on [8]. Also, the article "Violent Video Games and Violent Crime", demonstrates that violent behavior is caused by other stuff like social media, time, season, and many other factors [9]. Also, this paper figures out that the crime rate went up during the warm weather. And the sale of video games is at the end of the holidays. There is no correlation between these two things. But the video games can be counted as a factor that will cause violent behavior. However, stopping engaging in violent content will lead to a decline in profit for these gaming companies. So, it's inevitable to play video games with violent information in US. This is why US parents may be worried about it. For these gaming companies, violent game is a huge part of the game industry. From January 1, 2005-January/1/2012, intense violence game owns almost 2/3 sales of all the games, which is significantly high. Although these game companies try to catch players' attention and contain violent information you don't have to spend too much money on these games.

3.3. High Quality Games from Gaming Companies

In US, many popular games are free games and premium games. Premium game is that as soon as you purchase the game, there's no extra cost. Free games mean superficially that it's free to download but afterward, players may spend a lot of money in the game for some equipment, skin, and so on. In US, companies prefer to develop premium games. Because many people own a PC in order to play these games and with the development of technology, the price of these gaming platforms like Xbox and PlayStation is getting cheaper. About 55%-60% of people use a PC as the device they play video games [10]. This means that almost everyone has access to these games. Also, the reason why these company like Sony and Software prefer to develop premium games is because it can stimulate the selling of the gaming device at well. Companies like Sony, Software, and Nintendo will publish some limited games that you can only play on the PlayStation, Xbox, and switch. This kind of way is called first-play software, take Nintendo as an example, after the high-quality game brings a good reputation and fame, more and more people will choose to buy the Switch and contact with other games on Switch. Also, the gaming company has to give 30% of the whole revenue of the games [10]. This makes a deal that both side wins. Gaming device company, they get money from companies without doing anything, and good games will stimulate their device's selling. For the gaming company, counting on the gaming device company can bring them a solid customer population, good propaganda, and a reputation. This makes the premium game in US highly developed and makes tons of money. The high development of the premium game leads to people buying the game and don't have to pay extra. According to the research, about 10% of people give up playing the game after they played it for 10 minutes [10]. If gameplayers buy the disc will sell the game after they find that they do not really like the game. Also, there are game subscribers that customers pay for 10 bucks per month, and you are free to play most of the game on that platform. All of these effectively prevent game players spent a lot of money on the games.

4. Comparison between China and the United States

Compared to Chinese and US student's pressure, Table 2 clearly demonstrates that the difficulty evaluation in Chinese teachers' opinion is different from US teachers. In most fields, when US

teachers think the materials are difficult or average for students, Chinese teachers recognize it as average or easy stuff. This means that the materials or learning stuff for Chinese students are more difficult than US students' and it refers to the higher pressure. This leads to more Chinese students addict to video games. In the article "Addiction to Internet Use, Online Gaming, and Online Social Networking Among Young Adults in China, Singapore, and the United States." [11]. Data manifest that in US, there are 16.8% of college students addicted to video games. Although its high, Chinese students are even higher than US students. This is the reason why most Chinese parents think video games jeopardize their kid's grades. Secondly, violent behavior relates to video games. In China, there is a policy to make sure that there should not be sexual or violence-related images or topics occurring in Games, so the situation is not that bad. However, for US is totally different because there is no policy to rule it so the situation is not that bleak. More importantly, there is an experiment to prove that playing violent video games is related to violent behavior. The image video games transmitted to people is good or not matters a lot. Especially in the US, parents should be really careful about what video games are good for kids and what harms kids' mental health. It's true that looking at a screen long time will hurt your eyes. But video games do not only bring negative effects. The Nintendo Switch's Ring Fit Adventure successfully combines sports and video games together which really brings positive effects. Finally, the different gaming companies definitely bring different kinds of game players. In the US, premium games are more popular than premium in China. Premium games actually cost less money than free ones. The popularity of the free game in China contributes to the huge revenue of the game industry in China. This also shapes the parents' opinion about the video game that video games waste countless of money.

Table 2. Teacher's stress in China and US

Scale	item	USA	China	DIF	t	X ²
Demands	15 (paperwork requirements)	-1.45 Easy	-0.55 Easy	0.90	-12.70	91.33
	16 (number of program/ administrative disruptions)	0.30 Average	-0.65 Easy	-0.96	15.16	100.00
	23 (Outdated Instructional materials and resources)	1.05 Difficult	0.41 Average	-0.64	8.43	45.81
	26 (Time spent on nonteaching related duties)	0.17 Average	-0.67 Easy	-0.85	13.45	86.95
	29 (Assessments of children's achievement)	-0.75 Easy	-0.07 Average	0.68	-10.20	61.21
Resources	36 (Aides /assistants)	-1.30 Easy	0.33 Average	1.63	-16.30	64.58
	42 (Support for children with learning disabilities)	-0.54 Easy	0.28 Average	0.81	-9.59	49.20
	44 (Support for gifted or talented children)	-0.59 Easy	0.06 Average	0.65	-7.45	26.02
	52 (Other teachers/ peers)	-1.19 Easy	-0.42 Average	0.76	-8.73	49.20
	59 (Materials for children from diverse backgrounds)	0.91 Difficult	0.23 Average	-0.68	7.65	44.64
	60 (Materials for children with problem behaviors)	1.10 Difficult	0.16 Average	-0.95	11.81	92.01

5. Conclusion

In conclusion, different environments definitely build different opinions and future paths of video games. High competitiveness and high academic pressure lead to a higher rate of addiction to video games. Due to the policy and rules, people in US easily get access to violent games and it will connect with violent behavior and aggression. Free games make people in China spend more money on games, which is out of their expectations. The premium in the US may not cause that kind of situation. However, if people buy the game's digital version and find they don't really like it. This is also a way of wasting money. There's a long way for both countries to go. Especially for the future, by technology development more and more new devices and vision pro will pop out and video games will gradually be a part of people's daily lives. Against video games is not a good way. Video games are not poison, take violent behavior and violent games as an example. What matters more is the situation of one's family and the education, not the video game itself. Overall, some situations are inevitable, just like the education in China and the game policy in US. It has been conducted for several decades and is hard to change. But as time changes, more and more people may modify their opinion of video games and seek the best path in the game industry.

References

- [1] Adžić S., Al-Mansour J., Naqvi H., Stambolić S. The impact of video games on Students' educational outcomes. *Entertainment Computing*, 2021, 38: 1875 - 9521.
- [2] Bai D., Chen L., Shang Z., Wang Y., Guan G. Esports Industry, Video Game Industry and Economic Growth: An Empirical Research in China. April 3, 2022. March 17, 2024. Retrieved from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4074000.
- [3] Barlett C., Branch O., Rodeheffer C., Harris R. How long do the short-term violent video game effects last? *Aggressive Behavior*, 2009, 35 (3): 225 - 236.
- [4] Coe N. M., Yang C. Mobile Gaming Production Networks, Platform Business Groups, and the Market Power of China's Tencent. *Annals of the American Association of Geographers*, 2021, 112 (2): 1 - 24.
- [5] Cunningham S., Engelstätter B., Ward M. R. Violent Video Games and Violent Crime. *Southern Economic Journal*, 2016, 82 (4): 1247 - 1265.
- [6] Gåsemyr H. J. China in the Sustainable Development Agenda: Contributions to health and education. *JSTOR*, 2020.
- [7] Liu Y., Lu, Z. The Chinese high school student's stress in the school and academic achievement. *Educational Psychology*, 2011, 31 (1): 27 - 35.
- [8] Pales E. Microsoft and Activision-Blizzard: Examining the Largest Tech Acquisition of All Time. May 11, 2022. March 17, 2024 Retrieved from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4106912.
- [9] Tang C. S.-K., Koh Y. W., Gan Y. Addiction to Internet Use, Online Gaming, and Online Social Networking Among Young Adults in China, Singapore, and the United States. *Asia Pacific Journal of Public Health*, 2017, 29 (8): 673 - 682.
- [10] The Economist. As video games grow, they are eating the media. *The Economist*. March 23, 2023. March 17, 2024. Retrieved from: <https://www.economist.com/leaders/2023/03/23/as-video-games-grow-they-are-eating-the-media>.
- [11] Wang C., Zhang J., Lambert R. G., Wu C., Wen H. Comparing teacher stress in Chinese and US elementary schools: Classroom appraisal of resources and demands. *Psychology in the Schools*, 2022.