Exploring Discrimination against Video Games and Strategies for Reduction: A Review of Stereotypes, Cultural Perceptions, and Media Representation

Chengzhi Jiang *

Institution of Social Research, University College London, London, UK

* Corresponding Author Email: chengzhi.jiang.22@ucl.ac.uk

Abstract. Video games have become an emerging field in the past twenty years, and video game culture is permeating different aspects of society and is associated with various properties of culture. This paper aims to analyse some discrimination faced by video games and video game culture and provide some suggestions on how to reduce such discrimination from different perspectives such as players and video game publishers. This paper examines a variety of previous research on video game culture, including assessments, misconceptions, and prejudices about it, as well as suggestions for decreasing negative discrimination. It shows that the discrimination towards video games is from several different perspectives, including stereotypes towards video game players, negative representation of video games in culture and entertainment and marginalization of video game culture. On the other hand, efforts have been made by game publishing companies and game players' groups to reduce discrimination, such as strengthening industry standards and encourage more diverse media reports on video games. In order to reduce discrimination, more detailed studies need to be carried out in the future, focusing on topics like different types of discrimination.

Keywords: Video games; Cultural perceptions; Game players; Media representation.

1. Introduction

Video games have become an emerging field in the past twenty years [1]. They are seen as one type of culture and video game culture is defined as the institutionalization of video game practices, circumstances, and meanings in modern society [2]. This means that video game culture is permeating every aspect of society and is associated with various properties of culture. Examples of these properties include the way that video games are becoming a focal point for both new and old forms of media, and the way that they play a significant role in the blurring of the boundaries between fields like play, education, and work [2, 3].

Different authors have explored video games in relation to a variety of topics. Gender is one topic that has been discussed with video games. Cassell and Jenkins explores the connection between genders and video games, especially how aggressive action-oriented games like Mortal Kombat attract to boys, while softer games like Barbie caters to girls by perpetuating traditional gender norms [4]. They also look at the restrictions imposed by these gendered gaming categories, as well as the wider societal ramifications of gender representation in video games and how it affects players' self-identity, especially that of young girls. On the other hand, McKenna et al.'s study looks into transgender and gender diverse (TGD) teenagers using the development of video game avatars for gender exploration and affirmation [5]. This study indicates that for TGD adolescents of all gender identities and experiences, creating an avatar in a video game may be a very uplifting and validating experience. Customizing their own video game avatar provides a low risk setting for experimenting with gender. Avatars provide goals for gender transition and internal and external validation, enable users to embody desired physical attributes. There are also studies on how video games could influence players' ways of thinking and learning. The "sleeper curve" theory, which Johnson presents, holds that contemporary entertainment—including video games—is become more sophisticated and cerebrally taxing [6]. He contends that the cognitive skills of gamers may be enhanced by the forced critical thought, decision-making, and situational adaptation that comes with playing video games. Also, Johnson highlights the ways in which playing video games promotes systems thinking, because

players are required to comprehend and oversee intricate networks of rules and interactions [6]. Cognitive abilities including pattern detection, resource management, and decision-making are improved by this way of thinking. Moreover, Garneli and Chorianopoulos's study on impacts of creating video games for scientific curriculum on students' performance and capacity for computational thinking also provide similar results on how video games can help players to promote system thinking and computational thinking skills [7].

What cannot be ignored is that there are both positive and negative reviews towards video games. For the positive aspect, some studies have shown that there is a positive correlation between playing video games and players' well-being [8, 9]. Playtime did not influence need fulfilment or incentives during play; rather, these factors were associated to well-being on their own [8]. Moreover, Reynaldo et al's literature review shows there are a range of research findings that suggest video games can improve cognitive skills and decision-making abilities, especially for the real-time strategy players and first-person shooters [10]. On the other hand, there are also negative aspects. Video games are frequently held responsible for inciting real-life violence, particularly those with graphic material. Some individuals think that playing violent video games over extended periods of time might make players, especially younger players, become more aggressive [11]. What is more, according to some studies, playing video games for a long period of time can negatively affect a player's mental health, increasing their risk of developing anxiety and depression, and other psychological issues [12, 13].

Despite all these reviews, an overview of prejudice against video games as a specific point is still lacking. In this article, such discrimination faced by video game culture will be explored by analysing existing literature works. This article will first analyse specific studies about video game culture and the comments it faced. Next, the discrimination faced by video games will be summarised. Finally, this article will provide some suggestions on how to reduce discrimination.

2. Discrimination Faced by Video Games as A Subculture

2.1. Negative Stereotypes Towards the Player Groups

The video game player community has endured some discrimination regarding video games. Towards players who play games for long periods of time or play online video games, they are often portrayed in the media as poor health and lack of real-life success, even socially inept and escapist [14]. Kowert et al. find that the stereotype of online gamers centres on four themes: (UN) popularity, (UN) attractiveness, idle-ness, and social (in) competence [15]. Researchers also discovered evidence that suggests these negative characterizations have become individually recognized as accurate representations of the online gaming community [15]. These stereotypes are common in media reports and mainstream culture, which further reinforcing the stereotypes. At the same time, female players would suffer additional prejudice like being unsuitable for certain types of action games or being ignored, even though they make up 46% of the gaming community in the US alone [16, 17].

However, studies' findings have showed that there is little empirical evidence to sustain the stereotype of player groups. Kowert et al. conducted interviews and secondary interviews with 50,000 gamers aged 14 and older, found that the average online gamer does not fit the stereotype that is anecdotally associated with them, as broad differences did not emerge between online, offline, and non-playing populations for most of the stereotypical constructs like unpopular, unathletic, loner, isolated, socially inept, and reclusive [14]. These stereotypes are more just media spin and negative portrayals of video game players in popular culture [1]. At the same time, there is no evidence that gender has an impact on game performance, although female gamers tend to be underestimated when they play games, or they may underestimate their performance because of stereotypes [18].

2.2. Negative Portrayal of Video Games as Culture and Entertainment

Compared to more traditional culture forms like films, televisions, literature, video games are often being underestimated. The contribution that games can make as a form of creativity in terms of artistic expression, the narrative of the work, and the artistic value of the game itself can often be ignored.

According to Bourdieu, social elites maintain power and social status through the accumulation of cultural capital, such as literature and art appreciation [19]. Video games, because of their origins in popular culture, do not have much of a threshold of appreciation and are often belittled as forms of entertainment that do not possess cultural capital. Newman discussed the trivialisation of video games in academia and cultural criticism. He argues that this stigma stems in part from traditional cultural critics' misunderstanding of the "interactivity" and "entertainment" of videogames, which Newman points out are perceived by many to be overly focused on technology and visual effects and lacking in deep artistic or cultural meaning [20]. Newman also notes that many people believe that games are too focused on technology and visual effects and lack deep artistic or cultural meaning [20]. What is worse, video games are seen by political and social conservatives as a source of moral or social problems, and they are often associated with violent behaviour, leading to their negative image in the eyes some public and in the media, especially when it comes to violent gameplay or sexual content [21]. Such moral panics often lead to over-regulation and criticism of games. This is a negative, demonising tendency towards video games, even though video games are not associated with some social problems [22].

However, video games have disproved this point by attempting to explore deeper themes and considerations in the form of games. For example, the game Disco Elysium explores some ideas pertaining to idealism – the belief that reality is inextricably intertwined with the operations of mental faculties, as well as the questioning of hegemonic politics [23]. Also, Bogost study [24] explores the evolution of video games and its diversity, characteristics, and value as a form of culture, countering the view of it as low entertainment.

2.3. Marginalization of Video Game Culture at the Social Level

Video game culture is still viewed as a minor or marginalized phenomena in the mainstream social and cultural spheres, where it is dismissed as cheap, pointless amusement. The trivialization of gaming journalism and culture in the mainstream media, as well as the disregard for gaming culture in the formulation of public policy and the implementation of educational programs, are examples of this marginalization [25]. Fiske's popular culture theory helps to explain this. Popular culture like video games is frequently viewed as meaningless or superficial, according to Fiske, since it does not adhere to the same ideals as elite culture [26]. Social elites despise popular culture because they believe it to be unmanageable and pervasive. Kirkpatrick also explores why video games are often excluded from so-called high-level culture [27]. He suggests that this bias stems from the conflict between video games and traditional cultural forms like literature and theatre, particularly in terms of narrative and formal differences, and analyses why cultural elites and critics may despise games because they challenge traditional artistic and cultural boundaries.

3. Suggestions and Ways to Reduce Discrimination

3.1. Promote Diversified and Comprehensive Media Reporting

The media and media coverage are important for reinforcing or challenging discrimination towards video games. The agenda-setting theory of McCombs et al. states that the media can exert a significant effect over matters that the public considers to be significant [28]. This suggests that a heightened focus on the advantages of gaming in the media could alter the way society perceives video games. From the perspective of media advocacy, it may be argued that instead of focusing solely on bad instances or stories about video games, the media should cover video games and video game culture more extensively and objectively. However, in-depth coverage and analysis of video games by major media outlets can delve into the benefits of gaming, including its potential for education and its cultural and socializing implications. For instance, study by Kowert et al. shows that playing video games online can really improve users' psychological well-being, dispelling the idea that they are always negative [29]. Additionally, they discovered that when the media analyses and reports some

advantages of online gaming, like social and psychological aspects, people's perceptions of video gamers improved, and the stigma attached to video games decreased [29].

Not only the media, but game players can also use social media and online media platforms to break down discrimination and stereotypes. According to Jenkins' theory of participatory culture, societal attitudes would change if more diverse voices were heard in digital venues [30]. Internet forums aggressively challenge outdated misconceptions and promote gaming as a form of social, artistic, and inclusive engagement. Now, on social media platforms like Twitch and YouTube, players can share their experiences and break down stereotypes. These Media platforms outlets now feature more nuanced portrayals of gamers. By promoting a more varied and nuanced picture of gamers, a number of well-known content creators on these platforms highlight the good parts of gaming that foster community and contribute to the reduction of discrimination. Meanwhile, the popularity of video game streamers, e-sports players, and gaming influencers on social media has normalized video gaming culture as a normal form of entertainment. According to Shaw's research, media outlets have made it easier to understand gaming and its users more broadly, demonstrating that video games have purposes beyond amusement and are not limited to any certain demographic [31]. These players have changed the stereotypes about games, thus lessen the discrimination.

3.2. Raise Public Awareness

A different approach to reduce prejudice against video games, from the viewpoint of the public, is teaching the public about the distinctions between video games and its preconceptions. Public talks, seminars, and exhibitions are useful platforms for advancing both the beneficial impacts of video games and cultural values. When people are provided with precise facts on the benefits of video games, their opinions tend to shift. In Ferguson and Colwell's study, for instance, participants' perceptions of video games improved after they were presented with information that contradicted the notion that playing violent video games leads to violence [32]. This implies that initiatives highlighting the beneficial qualities of video games—like their capacity to impart knowledge, foster collaboration, and highlight the diverse range of player demographics—may help lessen the constrained and oftentimes unfavourable perceptions attached to the medium. Like this study, Granic et al.'s study highlighted that the public's impression of gaming becomes more favourable when they are informed about the benefits of video games, such as enhanced cognitive abilities, social connections, and mental health benefits [33]. Their research also shown how public attitudes may be changed by awareness campaigns and workshops that present information about video games and their advantages, such as their favourable effects on cognition and social interaction [33].

Another method for raising public awareness is carrying out media literacy programs such as develop ability of personal media choices and recognising stereotypes. Media literacy refers to a broader definition of literacy, which encompasses the capacity to access and evaluate media messages in addition to the capacity to produce, consider, and act, utilizing the power of information and communication to change the world [34]. Media literacy interventions, according to Burgess et al., can reduce bias by teaching participants how to identify and criticize the ways in which specific groups and activities, like gaming, are portrayed in the media [35]. These initiatives can also be used to address sensationalist media depictions of video games and players, therefore provoking public inquiry. They can also challenge the stereotypes of video games would cause violence, addiction or antisocial behaviours, and in this way, associated discrimination towards video games can be reduced.

Furthermore, leaders in the game industries and publishers of video games may also contribute to increasing public awareness. The video game industry may be able to influence society's views by working on diversity in game content, supporting studies on the positive effects of gaming, and fostering inclusion. For instance, Juul's research challenges the stereotype of gamers as young, socially awkward men and shows how the popularity of casual games, such as those on smartphones, has diversified the gaming community [36].

3.3. Strengthening Industry Standards and Community Management

Game publishing companies, gaming industries and governments can also make efforts to reduce discrimination towards video games. Game development companies should develop and adhere to industry standards and codes of ethics to ensure diversity and social responsibility in game content. According to a study by William et al., the standards set by the video game industry to support diversity in character representation based on various perspectives, such as gender and ethnicity, can aid in combating the historical depictions of violent or hypersexualized stereotypes, which are frequently connected to the negative connotations associated with video games [37]. Games may dispel misconceptions about gaming culture and appeal to a wider audience by covering a variety of topics [37]. This shows that by ensuring that they may portray a wide range of characters and narratives that avoid damaging stereotypes, controlling in-game content could alter how people see video games and diminish bias against them. In the meanwhile, more inclusive game material that represents the many backgrounds and experiences of players is encouraged by the International Game producers Association (IGDA) and has been advocated as diversity standards for game producers [38]. This can help to lessen societal prejudices towards gamers.

Companies and industries should also actively respond to social concerns about game violence, gender discrimination and other issues and take measures to mitigate these negative impacts. For instance, the establishment of industry-wide ethical standards and the use of rating systems can help parents, and the general public understand the content of video games. These ratings ensure transparency and can reduce misconceptions about the role of violence, gender roles, or sexual content in gaming. Anderson and Bushman's study show that when game content is more transparent and aligned with community values, public concern about games' negative effects decreases, and more informed consumers may then be less inclined to hold prejudices against video games [39].

The players' community can promote inclusion and diversity within the community and reduce internal discrimination and harassment through voluntary organization and rule formulation, to reduce the discrimination towards all players groups. It has been shown that strengthening community management, particularly in online multiplayer environments can reduce toxic behaviour, harassment, and discrimination, thus improving the gaming experience and public perception of gaming communities. During the investigation on community moderation in the well-known online game, Kou and Nardi discovered that efficient reporting and moderating mechanisms can decrease the prevalence of negative conduct, including harassment and discrimination towards certain player groups. In addition to enhancing playing experience, this decrease in toxicity changed the negative public image of the gaming community to one of friendliness [40]. According to 2020 and 2021 surveys by Amnesty International, hate speech and toxic interactions inside video games decreased dramatically for gaming companies like Blizzard Entertainment and Nintendo that implemented stricter community management and inclusion policies. This ultimately led to the growth of a more positive perception of gaming communities [41].

4. Limitations

However, there are still limitations in this article. It only examines the discrimination faced by video games in the context of the current times and does not consider how video games themselves have evolved and how they have been evaluated over time. Meanwhile, this article is limited in literatures about intersection of discrimination on certain groups, such as discrimination experienced by female players, as they may both experience discrimination towards video games and gender discrimination from other players. Meanwhile, discrimination at the societal level can be studied further. For example, how video games are being marginalised because video games are often associated with social issues (such as violence and crime) in the media, or are a source of moral and social problems, and over magnify the negative effects of video games. As a widespread form of culture and entertainment with many players, the discrimination faced by video games over time is difficult to be summarised in a few points. To study in depth, the current situation of video games

and the discrimination they face, it is necessary to carry out research that is closer to the different types of video games and different player groups, to study in detail the different types of discrimination and to provide targeted solutions. In response to this discrimination, there are also suggestions on reducing discrimination that have not been discussed in this paper.

5. Conclusion

In conclusion, video games, as a new form of culture and entertainment, is facing different types of discrimination. Video games' players may experience negative stereotypes and discrimination, video games themselves receive negative perceptions and are underestimated as one kind of culture or entertainment, while they are also being marginalised at social level. This article also provides some suggestions to reduce discrimination and misunderstandings towards video games, including promoting diversified and comprehensive media reporting, raising public awareness, strengthening industry standards and self-management of the gamer community. This article could be a way to help readers understand the culture of video games and can also in some extent dispelling some of the misconceptions and prejudices readers may have about this form of entertainment. In the future, more in depth studies need to be conducted on different aspects of video games, such as players' gaming experience, the contents of video games and the relationship within video games and social events, to have a more accurate judgement of the attitudes and opinions facing by video game culture and reduce possible existing discrimination.

References

[1] Shaw A. What Is Video Game Culture? Cultural Studies and Game Studies. Games and Culture. 2010, (4):403–24.

[2] Muriel D, Crawford G. Video Games as Culture: Considering the Role and Importance of Video Games in Contemporary Society. Routledge. 2018, 198 p.

[3] Williams JP, Hendricks SQ, Winkler WK. Gaming as Culture: Essays on Reality, Identity and Experience in Fantasy Games. McFarland. 2014, 233 p.

[4] Cassell J, Jenkins H. From Barbie® to Mortal Kombat: Gender and Computer Games. MIT Press. 2000, 400 p.

[5] McKenna JL, Wang YC, Williams CR, McGregor K, Boskey ER. "You can't be deadnamed in a video game": Transgender and gender diverse adolescents' use of video game avatar creation for gender-affirmation and exploration. Journal of LGBT Youth. 2024, 21(1):29–49.

[6] Johnson S. Everything bad is good for you: How today's popular culture is actually making us smarter. New York, NY, US: Riverhead Books/Penguin Putnam. 2005, xiv, 238 p.

[7] Garneli V, Chorianopoulos K. The effects of video game making within science content on student computational thinking skills and performance. Interactive Technology and Smart Education. 2019, 16(4):301–18.

[8] Johannes N, Vuorre M, Przybylski AK. Video game play is positively correlated with well-being. Royal Society Open Science. 2021, 8(2):202049.

[9] Reer F, Quandt T. Digital Games and Well-Being: An Overview. In: Kowert R, editor. Video Games and Well-being: Press Start [Internet]. Cham: Springer International Publishing. 2020, p. 1–21.

[10] Reynaldo C, Christian R, Hosea H, Gunawan AAS. Using Video Games to Improve Capabilities in Decision Making and Cognitive Skill: A Literature Review. Procedia Computer Science. 2021, 179:211–21.

[11] Anderson CA, Bushman BJ. Effects of Violent Video Games on Aggressive Behavior, Aggressive Cognition, Aggressive Affect, Physiological Arousal, and Prosocial Behavior: A Meta-Analytic Review of the Scientific Literature. Psychol Sci. 2001, 12(5):353–9.

[12] Burke B, Lucier-Greer M. Comparing video game engagement measures as related to individual and relational well-being in a community sample of adult gamers. Computers in Human Behavior Reports. 2021, 4:100136.

[13] Przybylski AK, Weinstein N. A Large-Scale Test of the Goldilocks Hypothesis: Quantifying the Relations between Digital-Screen Use and the Mental Well-Being of Adolescents. Psychol Sci. 2017, 28(2):204–15.

[14] Kowert Rachel, Fest lRuth, Quandt Thorsten. Unpopular, Overweight, and Socially Inept: Reconsidering the Stereotype of Online Gamers. Cyberpsychology, Behavior, and Social Networking [Internet]. 2014 Mar 4 [cited 2024 Sep 9], Available from: https://www.liebertpub.com/doi/10.1089/cyber.2013.0118

[15] Kowert R, Griffiths MD, Oldmeadow JA. Geek or Chic? Emerging Stereotypes of Online Gamers. Bulletin of Science, Technology & Society. 2012, 32(6):471–9.

[16] McCullough KM, Wong YJ, Stevenson NJ. Female Video Game Players and the Protective Effect of Feminist Identity against Internalized Misogyny. Sex Roles. 2020, 82(5):266–76.

[17] The ESA [Internet]. [Cited 2024 Sep 5]. 2024 Essential Facts about the U.S. Video Game Industry. Available from: https://www.theesa.com/resources/essential-facts-about-the-us-video-game-industry/2024-data/

[18] Vermeulen L, Castellar EN, Janssen D, Calvi L, Van Looy J. Playing under threat. Examining stereotype threat in female game players Computers in Human Behavior. 2016, 57:377–87.

[19] Bourdieu P. Distinction. In: Social Theory Re-Wired. 3rd ed. Routledge. 2023.

[20] Newman J. Videogames. 2nd ed. London: Routledge. 2012, 192 p.

[21] Anderson CA, Gentile DA, Buckley KE. Violent Video Game Effects on Children and Adolescents: Theory, Research, and Public Policy [Internet]. 1st ed. Oxford University PressNew York, 2007 [cited 2024 Sep 9]. Available from: https://academic.oup.com/book/4958

[22] Ferguson CJ. Blazing Angels or Resident Evil? Can Violent Video Games be a Force for Good? Review of General Psychology. 2010, 14(2):68–81.

[23] Khamis D. Disco Elysium as Philosophy: Solipsism, Existentialism, and Simulacra. In: Kowalski DA, Lay C, S. Engels K, editors. The Palgrave Handbook of Popular Culture as Philosophy [Internet]. Cham: Springer International Publishing. 2024, p. 1865–81.

[24] Bogost I. How to Do Things with Videogames. U of Minnesota Press. 2011. 194 p.

[25] Kirkpatrick G. Computer Games and the Social Imaginary. Polity. 2013. 229 p.

[26] Fiske J. Understanding Popular Culture. 2nd ed. London: Routledge. 2010. 232 p.

[27] Kirkpatrick G. Aesthetic theory and the video game [Internet]. Manchester, New York: Manchester University Press, Distributed in the United States exclusively by Palgrave Macmillan. 2011 [cited 2024 Sep 10]. 247 p. Fangfang. Research on power load forecasting based on Improved BP neural network. Harbin Institute of Technology, 2011.

[28] Amjady N. Short-term hourly load forecasting using time series modeling with peak load estimation capability. IEEE Transactions on Power Systems, 2001, 16(4): 798-805.

[29] Ma Kunlong. Short term distributed load forecasting method based on big data. Changsha: Hunan University, 2014.

[30] SHI Biao, LI Yu Xia, YU Xhua, YAN Wang. Short-term load forecasting based on modified particle swarm optimizer and fuzzy neural network model. Systems Engineering-Theory and Practice, 2010, 30(1): 158-160.

[31] Fangfang. Research on power load forecasting based on Improved BP neural network. Harbin Institute of Technology, 2011.

[32] Amjady N. Short-term hourly load forecasting using time series modeling with peak load estimation capability. IEEE Transactions on Power Systems, 2001, 16(4): 798-805.

[33] Ma Kunlong. Short term distributed load forecasting method based on big data. Changsha: Hunan University, 2014.

[34] SHI Biao, LI Yu Xia, YU Xhua, YAN Wang. Short-term load forecasting based on modified particle swarm optimizer and fuzzy neural network model. Systems Engineering-Theory and Practice, 2010, 30(1): 158-160.

[35] Burgess MCR, Stermer SP, Burgess SR. Sex, Lies, and Video Games: The Portrayal of Male and Female Characters on Video Game Covers. Sex Roles. 2007, 57(5):419–33.

[36] Juul J. A casual revolution: reinventing video games and their players. Cambridge, Mass: MIT Press. 2010. 1 p.

[37] Williams D, Martins N, Consalvo M, Ivory JD. The virtual census: representations of gender, race and age in video games. New Media & Society. 2009, (5):815–34.

[38] Game Industry Standards – IGDA [Internet]. [Cited 2024 Sep 15]. Available from: https://igda.org/resourcelibrary/game-industry-standards/

[39] Anderson CA, Bushman BJ. Effects of Violent Video Games on Aggressive Behavior, Aggressive Cognition, Aggressive Affect, Physiological Arousal, and Prosocial Behavior: A Meta-Analytic Review of the Scientific Literature. Psychological Science [Internet]. Available from: https://journals.sagepub.com/doi/abs/10.1111/1467-9280.00366

[40] Kou Y, Nardi B. Regulating anti-social behavior on the Internet: The example of League of Legends. 2013 Feb [cited 2024 Sep 17]. Available from: https://hdl.handle.net/2142/39981

[41] Amnesty International. Amnesty International. Amnesty International Report, 2021. 2020/21: The state of the world's human rights. Available from: https://www.amnesty.org/en/documents/pol10/3202/2021/en/