

The Analyses Between Different Player Groups

– Describe Their Preferences on Games and Social Media

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Abstract: Video games have become the mainstream entertainment for almost ages. Many people choose to become players of different games for different reasons, which makes the gaming industry have undergone earth-shaking changes in the past decade. This paper is mainly concerned with and investigates four types of games: MOBA, FPS, RPG, and MMORPG. Focus on users playing games and the reason why they choose the typical games to play. Especially their social behavior on several well-known social media such as Weibo, Bilibili, and Huya. Specifically, this paper focuses on combining the players' preferences for social media and their backgrounds, reconstructing the profiles of the different game players and their true intentions for the games. The aim is to discover more about Chinese game player themselves and their surroundings. The research questions are as follows: 1) classification whether the correlation between their average play time and their interests exists. 2) Dig into the aims and reasons players' choices between groups vary from person to person. 3) Research on factors influencing players' social media choices.

Keywords: player group, video game, social media, group analysis

1. Introduction

In recent years, with the increasing number of e-sports events and successfully established projects in large-scale international events such as the Asian Games, video games have become an official sport in some aspects. The concept of video games has gradually entered the field of vision, and almost all generations have widely welcomed it. By the end of 2022, the number of e-sports users in China has reached 487 million, accounting for about one-fifth of the Chinese population, which makes the related market flourishing and be considered a significant and potential market [1]. In the face of such a large audience, the primary game companies have generated fierce competition. By learning more about the competitive environment, understanding the current situation of the target player group, game preferences, and other information, one can better understand the characteristics of current domestic players, which make corresponding optimization plans and improvements, and make a good analysis of the early market status before the release of new games in the future [2].

In previous studies, foreign authors have made relatively straightforward player classifications of foreign players and given different points of interest and playing time of players in different games [3]. Relevant platforms have also disclosed specific data. However, the current domestic game environment is relatively chaotic [4]. The profile information of domestic players is almost all in the

hands of major game companies, and ordinary people cannot obtain relevant information. Therefore, how to accurately profile the target players of the game and strengthen the promotion of the corresponding crowd through social media is a problem worthy of attention in the e-sports industry [5].

This paper is divided into two parts: First, classify and summarize players' differences in age, life stage, income level, and gender. Try to give different player profiles for different kinds of games and restore the preferences of current Chinese video game players [6]. The second is to investigate the leading social media on which they watch game-related videos and understand the way of new games. Moreover, it tries to conclude the degree of influence of social media on game promotion and popularity.

2. “Video Games”, “Social Media” and “Games Related Videos”

Video Games: Also known as electronic games, refer to entertainment behaviors that rely on electronic devices as media during natural game behavior. It started in the late 1960s. Video games are mainly the successor games to traditional game activities such as football, baseball, chess, and word and number games [7]. It also has features traditional games do not have, like adventures in fantasy worlds, wars, and fighting. The media are divided into computer, console, portable, and arcade games. Video games can also be referred to as “video game software.” The definition of video games in this paper is limited to the stage of computer games, and video games only need to be narrowly understood as computer games.

Social Media: Refers to the user relationship-based content production and exchange platform on the Internet. Social media is a tool and platform that people use to share opinions, insights, experiences, and perspectives with each other. In this paper, social media generally refers to a platform that can publish works online with a specific audience of video game players. The survey mainly focused on TikTok, Huya, Kuaishou (Kwai), Weibo, Baidu post bar, Bilibili, and other well-known domestic social media.

Games-related Videos: Refers to the video of game-related content as the main content, including but not limited to the teaching video of game technology, excellent operation highlights, game character creation video, and game walkthrough-related video [8-10]. They are usually published by publishers on social media and have a specific audience among gamers.

3. Research Method

This paper mainly analyzes the data collected from the questionnaire this paper released online. A total of 404 reports were collected up to the date of writing, of which 404 were valid and 0 were invalid. There are no invalid questionnaires because players' answers to the questionnaires reflect their attitude towards the game, and there is no right or wrong for each answer and no high correlation between questions.

The questionnaire consists of three parts: The first is to explore the players' preferences for games, explore their favorite types of games and total play time, and try to give the frequency of the players' common game market. The second part is the analysis of questions related to social media. As a relatively important social attribute, what position social media occupies in players' minds and the reasons for choosing social media are explored and analyzed, and the critical role of social media is confirmed. The third part is collecting basic information about players, trying to perfect the essential information difference between player groups when giving preference profiles.

4. Results

4.1. Reasons Why Players Do Regularly Playing Behavior Online

Of the 404 samples collected so far, players are divided into two groups: players I is players who like and know about video games, and players II who do not know or play video games because they do not like them. The ratio of species data is 222:182 (about 11:9). The following bar chart (Figure 1) compares the average time spent in games per day for different players. As shown in Figure 1, this paper finds that many players do not know the games much. However, they also enjoy playing video games every day for over 10 minutes, which is enough to show that the reason the players choose to play video games is not just about interest.

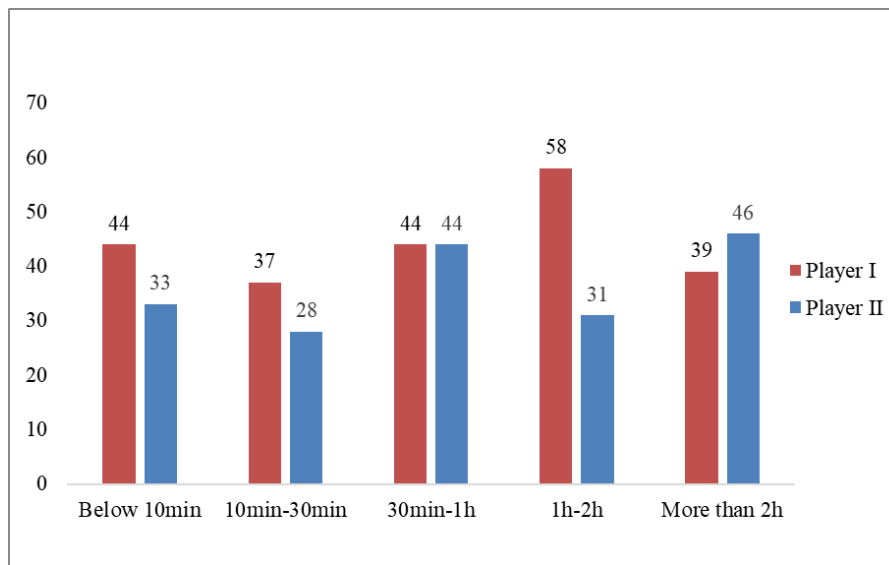


Figure 1: Average play time per day for two kind of players.

4.2. Whether Players' Have Interest in Other Games and the Current Situation

In the following research, players are divided into four categories, from their favorite types of video games to those who know and love games: MOBA players, FPS players, RPG players, and MMORPG players. The reasons for why they chose the corresponding game will be analyzed. In this part, the paper analyzes the interest of the above four players in other game types and discusses the proportion of interest in other types of their categories. As shown in Figure 2, the first category is MOBA players, with 45.31% of the total saying they have no interest in other game genres, a slightly smaller percentage than MOBA players who are interested in other games. The percentage of players interested in other types of games is smaller among FPS players and RPG players. Moreover, the variation among RPG players is relatively significant. MMORPG players have significantly more interested than uninterested players, and the ratio can reach about 1:2, which is uncommon in other player groups.

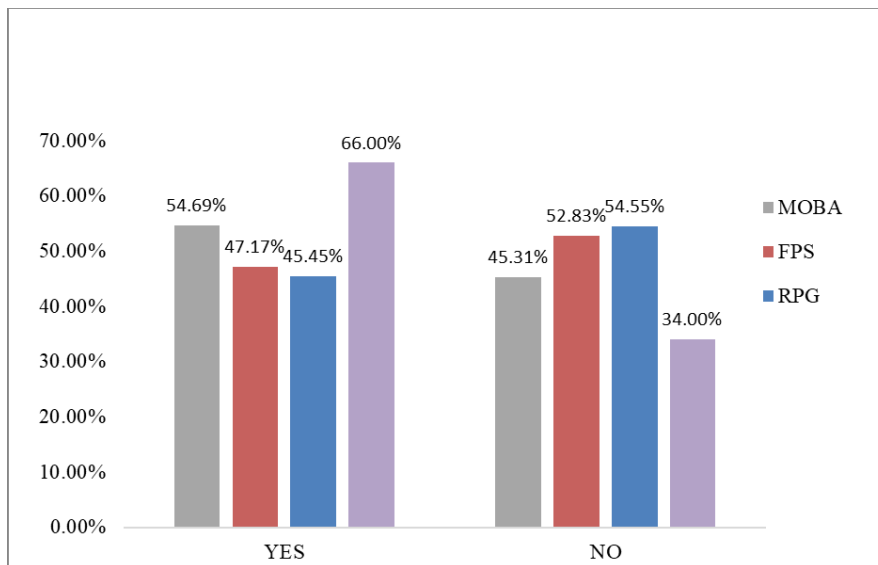


Figure 2: Whether players interested in other types of games.

The analysis below (Figure 3) examined the MMORPG player base and selected a few relatively well-known games from several other categories.

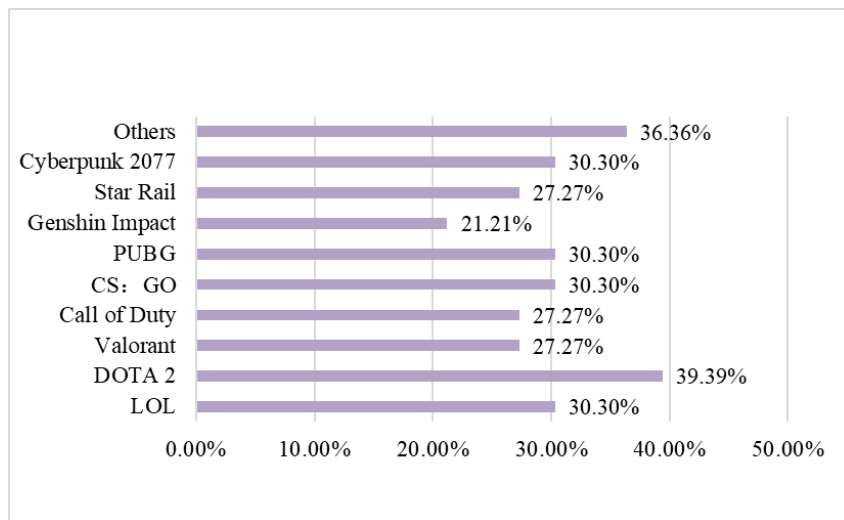


Figure 3: MMORPG players' preference for other types of games.

It can be seen in Figure 3 that there are various games involved. The most popular game among these players is DOTA2, which is generally more challenging to operate in theory. On the contrary, the least is the Genshin Impact, considered a relative console game.

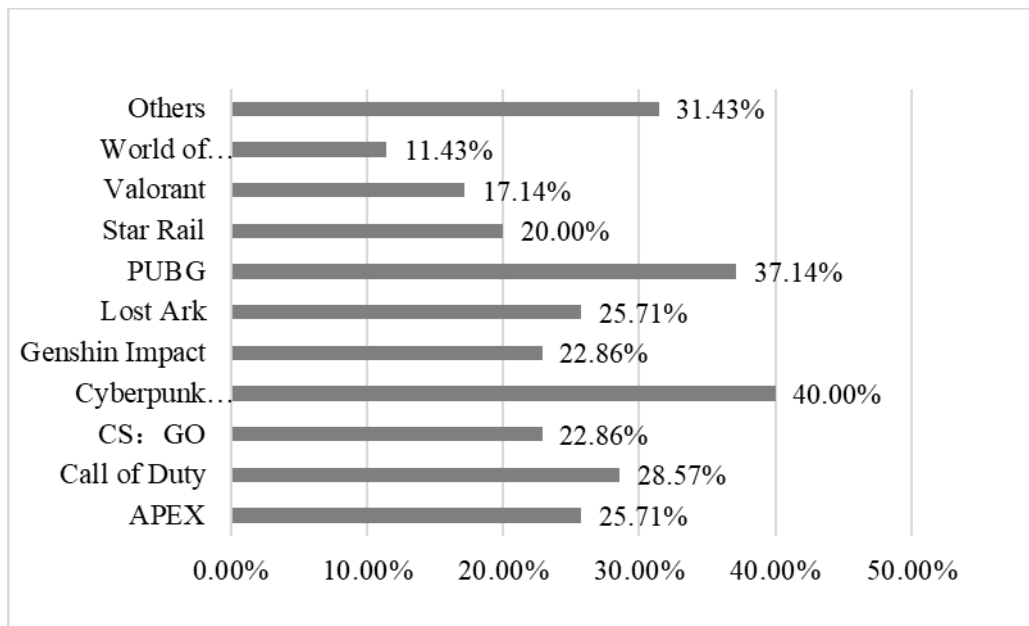


Figure 4: MOBA players' preference for other types of games.

This paper surveyed the gaming preferences of players in the MOBA category that DOTA2 belongs to in this bar chart (Figure 4). Try to find out if these groups of players are also more interested in MMORPGs simultaneously. Of the MOBA players surveyed, Cyberpunk 2077 and PUBG are favored by a maximum of 40,00 percent and 37.14 percent, respectively, while a minimum of 11.43 percent favors World of Warcraft. APEX, Call of Duty, Ark of the Lost, and the Genshin impact are distributed about 25%, which looks approximate. MMORPG games are an essential choice for MOBA players.

Among the RPG player groups in Figure 5 with the fewest MMORPG players choosing the Genshin impact, in addition to the games collected in this questionnaire, RPG players will choose other games more, accounting for 40%, ranking the first place in the preference statistics of RPG players. Among the known games collected, CS: GO is the preference of RPG players, followed by PUBG, Valorant, Call of Duty, and DOTA2. All of the top five are FPS games except DOTA2. RPG players and FPS players are highly aligned.

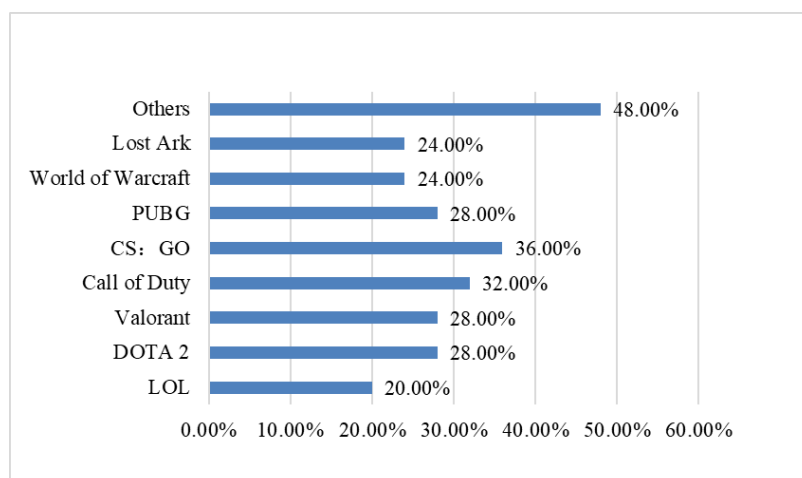


Figure 5: RPG players' preference for other types of games.

Among FPS players, RPG games are also the top choice, and it is clear from the chart below (Figure 6) that players are more inclined to Lost Ark, and the Genshin impact accounted for the highest percentage. The two games they played the least were Lost Ark and League of Legends.

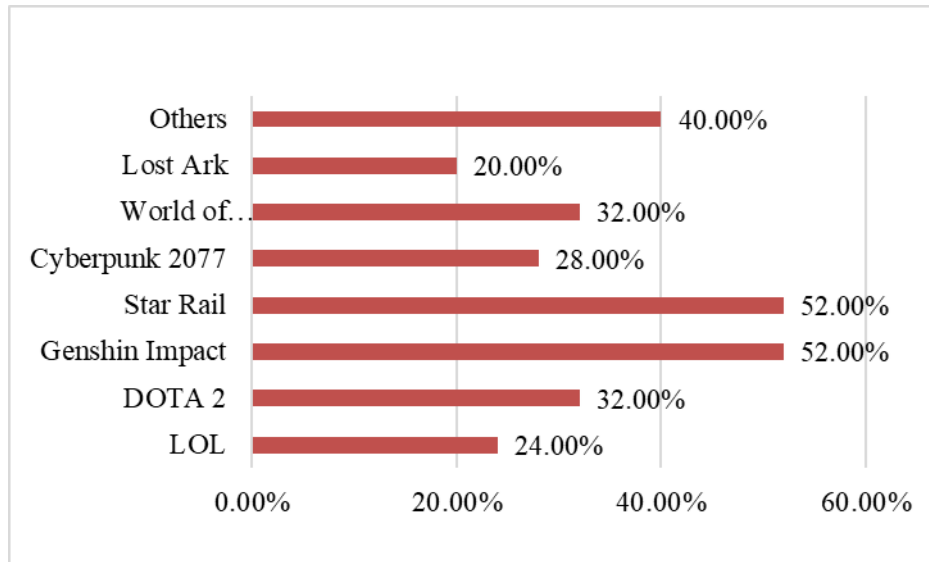


Figure 6: RPG players' preference for other types of games.

4.3. Social Media Using Situation for Players

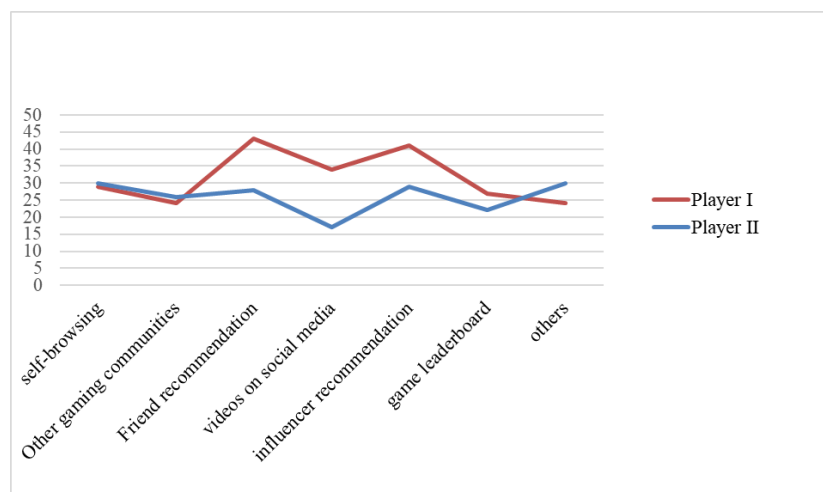


Figure 7: The path why players choose the current game.

In Figure 7, this paper finds that this information about the level of interest in the game does not affect how players choose how they are currently playing. Its path is focused on friends' recommendations and social media to see promotional videos and influencer recommendations and watch the game sheet. Figure 7 shows other gaming communities, friend recommendations, videos on social media, influencer recommendations, and game leaderboards. The other three can be realized in social media, except for friends. As a result, social media does occupy a more important position in the game. By studying the players' social media preferences, they can effectively help game companies promote their games and improve the existing heat of the game.

Table 1: The situation of usage and reason for players to choose social media.

	TikTok	Kwai	BiliBili	Huya	Weibo	Bidu-us	Others	Total
Large numbers of users and browsing times	8	3	9	6	5	3	4	38
Quality of videos are relatively high	6	5	6	3	7	6	7	40
Quality of live streaming are relatively high	3	3	6	5	6	3	4	30
The game is highly discussed	8	0	2	5	6	5	8	32
Individual habit	2	2	7	2	6	5	8	32
Others	3	4	5	4	7	3	4	30
Total	30	17	35	25	39	25	31	202

In Table 1, this paper explores why players choose these social media as the leading social media to watch videos, among which the reason for the highest number of choices is the high quality of videos. The second is a large user base and many views—the least for live quality and other high. However, in general, the number of people selected did not produce a significant difference, and the difference between the maximum and minimum values was only ten people, accounting for about 5% of the 202 people. Among them, the players who choose TikTok as the leading social software choose TikTok mainly because of the large user base, the large number of views, and the high discussion degree of related games so that they can participate in the discussion. In the second station, B, the main reason for players to choose is only a large user base and many views. Among the players who choose to use Weibo, the distribution of the above reasons is the most uniform. The choice of Weibo is relatively complete in terms of video games and can meet the needs of players for online discussion and viewing of video games in many ways.

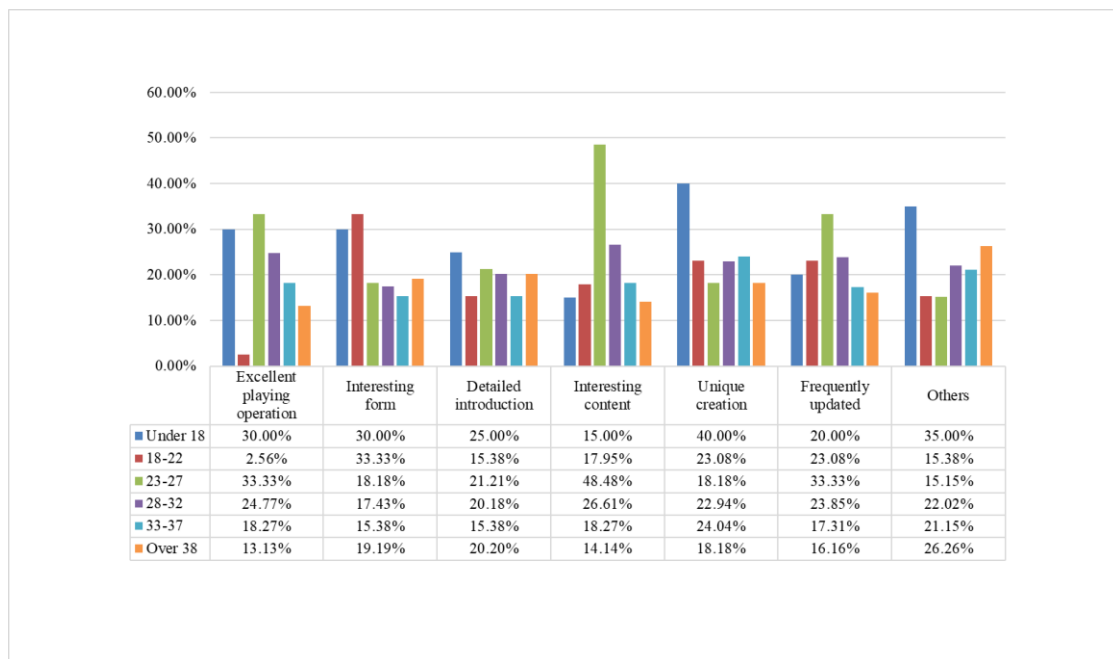


Figure 8: Analysis of reasons for viewing video game-related videos by age.

It can be seen from Figure 8 that gamers aged 23-27 are more focused on the fun of the story of the video. In contrast, players under 18 are more concerned about whether the secondary creativity of the video release meets their expectations. Players between the ages of 28 and 32 are relatively average in their requests for all aspects of the video. In contrast, players over 38 are more concerned about other issues besides the available options. In conclusion, different ages have slight differences in their watching habits.

5. Conclusion

Through research, this paper divided players into two groups based on their interests. Finally, no significant correlation exists between their average play time and their interests. After dividing the player groups into MOBA players, FPS players, RPG players, and MMORPG players according to their preferences for games, it is concluded that the reasons for domestic players to choose such games are not very different, which is in contrast to the high social tendency of foreign players. It proves that its player base has a high degree of compatibility. In the social media analysis, this paper focused more on the factors influencing players' social media choices. First, this paper determined that it had nothing to do with whether players loved games, and second, this paper found that half of all players were willing to watch video game-related videos on social media, while the other 50% were not. People choose social media because of the high quality of videos, and the second reason is the large user base and the number of views. However, the choice gap between different reasons is small, which proves that the reason why people choose social media can come from the unique characteristics of social media. After that, we made a unique analysis of some social media in the market, among which Weibo players were the most and Huya players were the least. Among them, the players who choose Tiktok as the leading social software choose Tiktok mainly because of the large user base, the large number of views, and the high discussion degree of related games so that they can participate in the discussion. The reasons for using Weibo are evenly distributed. It can be seen that Weibo is relatively perfect in terms of video games, and it can meet the needs of players for online discussion and viewing of video games in many ways.

References

- [1] China Audio-video and Digital Publishing Association (2023), *China Games Industry Report 2022* [EB/OL], 02-01, <http://www.cadpa.org.cn/3271/202302/41576.html>
- [2] *China PC Games Market Report 2023: A Comprehensive Guide to Tap into and Navigate China's Lucrative PC Games Market*, ResearchAndMarkets.com
- [3] Gustavo F. Tondello, Lennart E. Nacke, 2019. *Player Characteristics and Video Game Preferences*, *Proceedings of the 2019 Annual Symposium on Computer-Human Interaction in Play - CHI PLAY '19*, DOI:10.1145/3311350.3347185
- [4] Max V Birk, Maximillian A Friehs, and Regan L Mandryk. 2017. *Age-Based Preferences and Player Experience: A Crowdsourced Cross-sectional Study*. In *Proceedings of the Annual Symposium on Computer-Human Interaction in Play - CHI PLAY '17*. ACM, 157--170. DOI: <http://dx.doi.org/10.1145/3116595.3116608>
- [5] Rita Orji, Julita Vassileva, and Regan L. Mandryk. 2014. *Modeling the efficacy of persuasive strategies for different gamer types in serious games for health*. *User Modeling and User-Adapted Interaction* 24, 5 (Dec 2014), 453--498. DOI: <http://dx.doi.org/10.1007/s11257-014--9149--8>
- [6] Marc Busch, Elke Mattheiss, Rita Orji, Peter Fröhlich, Michael Lankes, and Manfred Tscheligi. 2016. *Player Type Models-Towards Empirical Validation*. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems*. ACM. DOI:<http://dx.doi.org/10.1145/2851581.2892399>
- [7] iResearch (2023), *The e-sports industry in China in 2023 research report* [EB/OL], 06-16, https://report.iresearch.cn/report_pdf.aspx?id=4200
- [8] Granic, I., Lobel, A., & Engels, R. C. M. E. (2014). *The benefits of playing video games*. *American Psychologist*, 69(1), 66--78. <https://doi.org/10.1037/a0034857>

- [9] Fox, C. M., & Brockmyer, J. H. (2013). *The development of the Game Engagement Questionnaire: A measure of engagement in video game playing: Response to reviews*. *Interacting with Computers*, 25(4), 290–293. <https://doi.org/10.1093/iwc/iwt003>
- [10] Markey, P. M., Ferguson, C. J., & Hopkins, L. I. (2021). *Video game play: Myths and benefits*. *American Journal of Play*, 13(1), 87–106.