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# A Research on eSports Users' Motives and Satisfaction in China

The Case of League of Legends

by

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A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts Zimmerman School of Advertising and Mass Communications College of Arts and Sciences University of South Florida

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#### ABSTRACT

This research mainly explores the motives and satisfaction of Chinese eSports users. Due to the changing role of eSports in China this year, the attitude of Chinese society towards eSports has changed from depreciation to praise, and the identity of belonging sense of game players has become one of the motives for them to continue playing League of Legends (LOL). In addition, as a milestone in eSports field, the playability of LOL itself and its pastime and social functions as a mass media will affect the motives and satisfaction of players. This survey used online survey to investigate the satisfaction of LOL players (N=209), the result indicated that the recognition of players' identity has a significant effect on the satisfaction and the other two variables are not significantly associated. In the future development of eSports localization, eSports professionals can confirm and optimize the characteristics and direction of eSports according to the motivation of the players.

## **CHAPTER ONE:**

#### **INTRODUCTION**

#### **Research Background**

The creation of video games can be traced back to the 1960s and 1970s. For example, Spacewar! Was built at institutions such as the Massachusetts Institute of Technology (Lowood, 2009). With the continuous development of technology and the Internet, video games themselves are undergoing changes. The earliest games, such as Space Marines (1962) and Pong (1972) belong to standalone mode (Bányai, Griffiths, Király, & Demetrovics, 2018). Now, video games have become a large online multiplayer battle mode with the features of collaboration and competitiveness (Bányai et al, 2018).

There are many debates about eSports definition from various scholars. The most commonly accepted definition is that eSports is professional video game. Players compete against each other in the form of playing video games within a professional environment (Wagner, 2006).

In recent years, a group of video game products with the above characteristics stand out and become the pioneering work of eSports. At present, eSports has entered the stage of professionalization and has become a new occupation (Faust, Meyer, & Griffiths, 2013). eSports are gradually recognized, accepted, valued by the general public. eSports are growing rapidly around the world, and more and more individuals are engaged as players and audiences (Hallmann, 2018). eSports is complex due to it is a novel industry that blends culture, sports, business, and technology (Jin, 2010).

#### eSports Industry Enters the Golden Period

eSports was officially launched by General Administration of Sport of China as the 99 formal sports in 2013 in China (Yang, Ye, & Kang, 2011). eSports debuted as an exhibition sports at the Asian Games (Wade, 2018), which means eSports has been recognized by the Olympic Committee and the world as a formal sport program (Hallmann, 2018).

According to Newzoo's 2018 report, the global game market value has reached \$137.9 billion dollars. In 2018, there are over 23 billion active video players all over the world, of which 1.1 billion have in-game purchase behavior (Newzoo, 2018). The 2018 China Game Industry Report provides a set of data display that Chinese game users reach 626 million and among them, the number of eSports users in China reached 428 million in 2018, a year-on-year increase of 17.5%. These data show that eSports have reached great research significance as a sports program that can stimulate economic development. At present, China's eSports industry is getting on the right track essentially.

#### The Significance of the Topic

In China, eSports were banned by the government in 2004. The General Administration of Radio, Film, and Television of China also carried out policy pressure on eSports. In the view of traditional Chinese, video games are spiritual opium (Reuters, 2008), which will affect the physical and mental health and academic development of young people. For a time, video games were even banned from spreading in the media, and many people's attitudes toward video games were negative. The vagueness of eSports and video games, policy pressures and social disapproval and misunderstanding of eSports caused difficulties in their development.

The research questions in this paper are related to the development process of China's eSports industry. Because of the long-term bias and misunderstanding of Chinese video game

players, some players could have self-doubt. However, when China's eSports industry is being recognized, players may have a higher motivation to play games, and their satisfaction with the game will increase.

As a necessary product of the Internet era, eSports has become gradually familiar and accepted by people in China. 2010 was a breakthrough year for eSports in China. In this year, China's first eSports stadium officially settled in Beijing, followed by China's first eSports league (Yang, Huang, & Zhang, 2014). Gradually, with the popularity of mobile media, the media value of eSports is forming and starting to benefit. As a professional competitive sport, eSports provides a new path for China's economic development. eSports has established a relatively complete industrial chain, which has driven some Chinese young people's employment to some extent.

eSports are causing huge economic and social changes. It cannot be denied that eSports can bring huge economic benefits. Therefore, in-depth research on eSports users can better understand the users' use needs, find the connection and problems between eSports and users, which can make suggestions for the eSports industry, and seek better development in the future.

## **CHAPTER TWO:**

#### LITERATURE REVIEW

#### **eSports Definition**

The origin of the word 'eSports' can be traced back to the 1990s. In 1999, the Online Gamers Association (OGA) used the word eSports in their press releases (Wagner, 2006). Hamari (2017) proposed that eSports is a version of sports. This kind of sports is driven by electronic means. The first eSports event named Intergalactic Spacewar Olympics was held at Stanford University on October 19, 1972 (Parshakov & Zavertiaeva, 2015).

eSports is an electronic network game activity between people with modern sports connotation and competitive spirit (Zhou, 2012). eSports is a kind of sport that uses information technology as the core of software and hardware as a device in the virtual environment it creates, in accordance with the uniform rules of the game and improve teams' competition results, which played a role in people's reaction and coordination ability (Li, 2004). Zhou (2016) believed that the essence of eSports is the confrontation between intelligence and physical strength.

Hemphill (2005) believed that some forms of video games can be considered as sport. In the world of eSports represented by digital, human players use computers in an interactively immersive way. Furthermore, eSports is also a general term for video game competitions (Whalen, 2013). In addition, eSports is similar to traditional sports because eSports have superstars, competitive events, fans, comebacks, uniforms so on and so forth (Jenny, Manning, Keiper, & Olrich, 2017).

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There are two main reasons for the rapid growth of eSports: technical accessibility and elite competition events (Jenny, et al., 2017). Technical accessibility includes computers, mice, gaming consoles and gaming chairs. To host eSports events, it is necessary to have large stadiums, hosts, and directors. All these objective conditions constitute a valuable eSports industry chain. Yao (2005) also summarized the operational steps of eSports products: Professional equipment and professionalized staff for the eSports events, and finally delivered to the audience and users. eSports players are also defined as 'professional players' who fights for the competition, rather than relax or seek fun to play video games (Bányai, et al., 2018). Brock (2017) provided a more specific definition of eSports players: Video game players play in a professionalism for bonuses and awards. Consequently, it is not difficult to speculate that this kind of 'professionalized background' can be reflected by a large number of funds flowing under the current eSports competitions (Brock, 2017).

To sum up, so far, there is still debates about whether eSports belongs to sports in the academic world. It is undeniable that eSports has the same competitive spirit and teamwork as traditional sports. The development of the eSports industry belongs to the objective needs of the market and is also the result of regularity. The eSports professional players and audiences are growing, various eSports events with rich bonuses are emerging. The eSports industry has a very broad space for development. These objective conditions represent a huge consumer base and new consumer demand.

#### eSports industry in China

The eSports industry chain is very long, covering game developers, game operators, event operators, communication media platforms, audience users and so on (Yun, 2016). Similarly, Yang (2018) believe that the core of the eSports industry is composed of organizers, players, clubs and

sponsors. The huge industrial chain of eSports plays a momentous role in promoting the national economy. Zhang & Zhu (2011) analyze the commercial value of the eSports industry. The eSports industry has a huge output value and a large number of communication platforms. The disadvantages are short of Professional managers, athletes, operators and the Chinese society's stereotype of eSports.

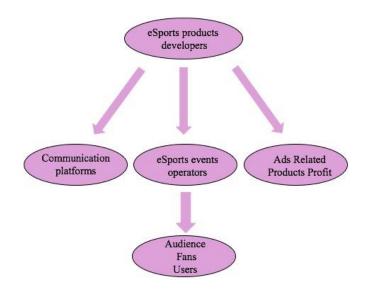


Figure 1. eSports Industry Chain

Zhou (2016) concluded that eSports relying on the 'economy of fandom' became mature in 2016 and attracted a lot of capital. The attitude of investors has also turned into a sustainable investment. Moreover, he clarified the development model of the eSports industry. The eSports industry development model is shaped by several important aspects: Professionalized players, team management, eSports events, event broadcasts, content creation and 'economy of fandom'. The eSports events are split into regional events to ensure that each team has a fixed competition to participate.

The purpose of the split is to maintain attention and audience engagement. This method has successfully improved the broadcast copyright fee, the popularity of the event and the brand value of the eSports events.

Yang (2018) believed that the eSports industry has brought about a tremendous shock to the traditional sports industry. eSports has the characteristics of availability, convenience and economic applicability which occupies a lot of time for young people to carry out normal physical sports (Yang, 2018). He believed the traditional sports program is facing severe challenges. However, people should not ignore the progress of science and technology and communication means caused by eSports.

#### **Introduction of LOL**

Today, many excellent works have emerged in eSports. At present, the most common eSports products on the market are DOTA2, League of Legends, Hearthstone, Overwatch so on and so forth. Among them, the most popular is LOL.

LOL is a team-focused game with the characteristic of competitiveness. There are ten players in total, and there are five people on each of the red and blue (Ferrari, 2013).

From Newzoo's statistics, it is obvious that in the Top 10 most played PC games, League of Legends tops the list.

IMAGE	RANK	GAME TITLE	PUBLISHER	CHANGE
	1	League of Legends	Riot Games	-
cstoo	2	Counter-Strike: Global Offensive	Valve Corporation	2
FORTNITE	3	Fortnite	Epic Games	1 🔻
	4	Hearthstone: Heroes of Warcraft	Blizzard Entertainment	1 🔻
an a	5	Minecraft	Mojang	117
	6	PLAYERUNKNOWN'S BATTLEGROUNDS	Bluehole Studio	1 🔺
0	7	Overwatch	Blizzard Entertainment	1 🔻
Rainedwsk. Siege	8	Tom Clancy's Rainbow Six: Siege	Ubisoft Entertainment	1 🔺
	9	World of Warcraft	Blizzard Entertainment	1 🔻
	10	Grand Theft Auto V	Rockstar Games	3 🔺

Figure 2. Top 20 Most played PC Games (Newzoo, 2018)

The above data shows that the LOL is still the most influential in eSports products. If a good game product wants to be remembered by the user and forms its own brand effect, and make users have their perceptions of the brand, it is necessary to use multi-dimensional communication means to promote the work. LOL uses this way to be the leader in the eSports industry.

#### **Communication mode of LOL**

After nine years of change, LOL has formed its own complete system of events. According to The Game Awards (TGA) 2018, LOL world championship won the best eSports event award (Enricofairme, 2018). The relatively mature event system of LOL attracts the largest user group and forms its own unique eSports culture. The producers of the LOL events also play the role of communicator. In China, Tencent obtained the proxy of LOL in 2011 (Dent, 2015). Therefore, Tencent hosts the LOL events in China: LOL Pro League (LPL). At the same time, Riot still hosts the world championship finals. They are both producers and communicators because they are not only the creators of the product, also they have their own communication platforms which can promote and disseminate product. In addition, there is a group of individuals who also act as the communicators of the LOL event: professional players, famous streamers, and celebrities who are LOL in China. For instance, Jay Chou, a Chinese megastar bought a professional LOL gaming team TPA (Custer, 2016). They reproduce the content of eSports products through multiple communication means. As for professionalized players, many of them play the role of streamers, they explain some events and use them to get attention.

The vagueness of eSports and video games, policy pressures and social disapproval and misunderstanding of eSports caused difficulties in the development of eSports. No one wants to be misunderstood, and LOL players are no exception. Individuals who hold the common perception and values can be recognized as a social group, they desire self-identity and gain selfesteem (Stets & Burke, 2000). eSports users in China always seek identity. They are eager to get rid of the 'addiction to video games'. In 2018 LOL World finals, the Chinese team Invictus Gaming won the Championship (Lee, 2018), which is the first time China won the LOL World Finals in the past seven years. Chinese mainstream media, such as CCTV News official Weibo, China Youth League official Weibo has reported the results of the game.



Figure 3. CCTV Official Weibo Post (CCTV Weibo, 2018)

eSports events use a ritualized communication method to convey symbols to the audience, media has a ritualized influence on sports events (Wang, 2012). Wang re-examined the production of sports meaning by media, he believed that TV sports are quietly replacing people's personal

experience of sports and reproduce the surplus value of the sports consumer culture. After the audiences interpret the information, they will gain the meanings. Sports allow people a sense of unity and collective consciousness (Cho, 2009), they recognize, construct and confirm their identities, and maintain the identities of the group sense (Cho, 2009). Hence, the mainstream media reports promote the position of eSports in China in a positive direction. In the positive report of the mainstream media, eSports players and users have re-established their identity, they are gradually accepted by the public, eSports is no longer a savage or a beast, but an official sport that is as competitive and fair as traditional sports.

#### **Uses and Gratification theory**

Uses and Gratification theory (U&G) was brought forward by Katz, Blumler, and Gurevitch in 1974 (Musa, Azmi, & Ismail, 2015). Scholars have devised an approach to study the audience's gratifications with the media, explore how to attract the audience, how the media content meets the audience's demand on social function and nonphysical plane (Ruggiero, 2000). U&G theory was used in early communication studies during 1950s and 1960s to probe into the audience's consumer behavior and the social and psychological variables that led to the use of such media content (Gudelunas, 2012). In short, U&G theory is used to explore why audiences use the media and what benefits they can get from the media.

U&G also interpret audience's gratifications after using certain media content and the multiple reasons why people can get various gratifications. (Gallion, 2010; Wimmer & Dominick, 2014). As it was originally proposed, it is used to explore the reasons why people use the mass media (Katz 1959; Katz, Blumler & Gurevitch, 1974). Katz (1974) put forward the major needs that why individuals use certain media: perceived demand, social functional needs, individual concordance needs, sentimental needs and pressure relief demand. U&G emphasizes the initiative

of the audience and examines the psychological behavior that media content brings to people (Gudelunas, 2012). Individuals will choose different media to meet their own various needs. If the demand is met, the audience will be more willing to use the media again. If the demand is not met, people will give up using the media (Katz, 1974).

U&G mainly refers to the degree of satisfaction (Dobos, 1992). Mcleod and Becker (1981) claimed that motivations are the pursuit of higher satisfaction by individuals in a particular situation. The main purpose and motivation of the audience to use media content is to seek a higher sense of satisfaction. The audience will be satisfied by using certain media. When the media can satisfy the satisfaction that the audience expects, the audience will rely more on this media and continue to use it (Mcleod & Becker, 1981).

The core of this research is the eSports user's demand level for the LOL, which is in line with the main content of the U&G theory. Human needs will become more complicated as the media environment changes, the audience will be satisfied with the media based on specific motivations. That is to say, the user selects specific media content among a plurality of media products, and the content satisfies their certain needs.

Users choose to use LOL in order to meet their own needs, LOL can make users feel satisfied. This research explores the factors that influence users' satisfaction with LOL and collect users' feedback to optimize related eSports products.

#### Social identity

The emergence of the concept of social identity can be traced back to 1972. Tajfel first proposed the definition of social identity (Hogg & Terry, 2000). Each individual belongs to different social groups, and themselves have specific perceptions and values for members of the group (Tajfel, 1972). Tajfel mainly explored how the self is conceptualized and how to create and

define individuals' positions in society. Social identity depends on a comparison between social groups due to potential self-esteem needs (Turner, 1975). Operario and Fiske (1999) argued that individuals will conceptualize their self-identity zealously. People's self-identity mainly comes from the identity of the social groups they belong to individuals build up their social groups and create their social identity actively in order to confront external groups.

In the previous research, social identity theory can be concluded for three major features. (a) Social identity recognizes the oneness with a group of social individuals. (b) The classification of individuals, the uniqueness of social groups and the prestige of social groups constitute social identity, and social identity leads to activities that are identical to individuals' identity, support for organizations that can reflect individuals' identity (Ashforth & Mael, 1989).

Individual behaviors embody larger social organizations, individual identification with social organizations constitutes social identity (Padilla & Perez, 2003). The thoughts of members of different social groups influence and determine individual behavior (Markus, Kitayama, & Heiman, 1996). Hence, social identity theory believes that mankind does not exist as an independent individual, but as a collective group, think and act (Padilla & Perez, 2003). The previous literature referred to eSports is a negative image in traditional Chinese ideas. The stigmatization of eSports, the misunderstanding of parents and the suppression of the country make the users of eSports eager to get recognition and build their own identity group.

Two main human motives lead to social identity: the need to belong and the need to have identities (Brewer, 1991). Individuals' social group membership and group classifications are important parts of people's self-concept. People strive to obtain social identity positively, thereby enhancing self-esteem (Zhang, Li, & Liu, 2012).

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LOL can provide many chances for users to build friendships and help them construct a sense of belonging. Many young people gain social capital through LOL and achieve the identity so that they can get the satisfaction (Scholtes, Hout, & Koppen, 2016).

The combination of the game experience and the event communication brings together the players, builds a collective sense of emotion and identity, and helps the players achieve self-worth which corresponds to the social identity theory. When players participate in and watch eSports events, eSports products also convey common emotions and collectives, emphasize the player's self-esteem, pride, and build a group for players. The identity of eSports users is not only a hobby of the game but also a competitive spirit. eSports, like traditional sports, it emerged with the spirit of struggle, fairness, and justice. In the aforementioned literature, eSports has become a performance event for the Asian Games. eSports professionalized players not only represent players, games, and sports but also represent the national glory. When users use lol or participate in related events, they will get a sense of identity and reuse related products.

#### **Flow theory**

The item 'flow theory' was coined by Csikszentmihalyi (Shernoff, Csikszentmihalyi, Schneider, & Steele, 2014). Flow theory is often used to observe the mental state of students (Shernoff, et al, 2014), climbers (Cowley, Charles, Black & Hickey, 2008) and artists (Sherry, 2004) when they are absorbed in doing something. Flow theory can be defined that when people engage in pleasing things, they are engrossed, and they will create an excitement. Positive emotions such as pleasure and excitement are complementary to flow (Shernoff, et al, 2014).

Flow is a profitable mental state (Nakamura & Csikszentmihalyi, 2002). When people have an intrinsic motivation to accomplish what they love, they can evoke more positive emotions (Jones, 1998). In the survey 'Toward an Understanding of Flow in Video Games', authors combined flow theory and video games to interpret the association between flow and players' feedback. The authors pointed out that the most momentous interact between game players and video games is 'enjoyment'. Once players got gratifications, they would be more attracted by the game. The authors aimed to optimize the game mechanics and deepen players' interactive immersions (Cowley, Charles, Black & Hickey, 2008). Drawing on flow theory, when players complete what they are interested in, they will feel satisfied, excited, and have a sense of accomplishment. It is not hard to fathom the relationship between flow theory and LOL players' satisfaction. This is still because of the long-term bias against players in Chinese society, leading to some young gamers belonging to low self-esteem groups. 'Enjoyment' is the cornerstone of flow theory, and through Cowley's eight elements of flow theory, we can know that players' sense of identity will be strengthened after they get enjoyment. It is not can be solid theoretical basis for this research.

When LOL could bring Chinese young players' respect, pride, honor, recognition and even national glory, these positive emotions would lead the higher motives for them to keep playing the game or play the game again. Thus, how can the game producer make 'enjoyment' endure for long time and how do they continuously attract the players' affection are the issues to be discussed in this study.

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#### **CHAPTER THREE:**

#### **RESEARCH HYPOTHESES**

Based on the aforesaid materials, it is not difficult to perceive that the eSports industry has great economic value and cultural connotation. Consequently, it is indispensable to find the motives that why eSports users play LOL and watch LOL events and what factors will affect the motives. Moreover, understanding the relationship between the audience's motives and satisfaction is crucial. This research can provide assistance related to employees to grasp the discipline of the eSports market and establish effective marketing strategies of the eSports industry.

RQ1: What is the relationship between the three motives and satisfaction of the LOL players?

RQ2: What users' characteristics are associated with eSports users' motivation to play LOL and watch related LOL events?

#### Motive

Players have been misunderstood and blamed for a long time before the recognition of eSports, and they cannot be unified in their identity. When eSport is reported as a formal sport or professionalization of eSport, players realized that their behavior may be the same as that of professional athletes.

When players seek the same social group as themselves, they have an unprecedented unity in spirit and collective consciousness. Players actively build their own identity and realize selfconfirmation. It is clear that players will get more gratifications if they achieve the identity of belonging sense. Thus, H1 is proposed:H1: The identity of belonging sense of will be positively associated with eSports users' satisfaction when the play LOL or watch related events.

The definition of pastime is that people use their free time actively without a specific purpose (Khang, Kim, & Kim, 2013). Playing video games and watching video game streaming on the Internet have substituted for physical activities in people's pastime (Hasan, Jha, & Liu, 2018).

Pastime includes escaping from real life (Lee, An, & Lee, 2014), social interaction and relationship building (Chen & kim, 2013), companionship (Ryan, Chester, Reece, & Xenos, 2014).

The function of pastime is to make people kill time, relax, shirk some of the responsibilities and pressures and put off something they need to do (Quan-Haase & Young, 2010).

H2: Pastime will be positively associated with eSports users' satisfaction when they play LOL or watch related events.

Due to the gameplay of LOL itself, eSports audience is always attracted by its fairness, drama, and team attachment (Lee, An, & Lee, 2014).

The plot of LOL is full of contradictory dramatic elements. The story conflict of LOL is that two different teams confront each other with different goals. In the game, the conflict comes from the competition. Such a plot has dramatic tension and attracts a large number of users (Winn, 2015).

Yang (2018) proposed that eSports has the characteristics of fairness. eSports does not favor any participants, and any entrant is subject to standardized rules. The reason why LOL can become the best in eSports products is that it maximizes the characteristics of fairness. For a long time, cheating service have led the decline of many video games. However, Riot games have always been a zero-tolerance attitude in combating cheating service. Riot games sued the largest LOL cheating service company 'LeagueSharp' for disrupting the game balance. In addition to suing the cheating service company, Riot also said that they spent a lot of money updating the software regularly to ensure that the cheating service cannot be available in the LOL (Crecente, 2016). The strict attitude of Riot towards the cheating service makes LOL game environment fair and pure, and its public praise is booming in the eSports world. It is the reason why LOL stands out in eSports products. Therefore, Riot's approach not only ensures the fairness of the game but also attracts a lot of players and users.

Team attachment is considered to be one of the important factors affecting sports consumption (Alexandirs & Tsiotsou, 2012). It is one of the motives that affect how the audience use LOL. When a person assigns emotions to sports products, sports attachment brings a strong psychological emotion, which is a persistent and unchangeable emotional relationship (Alexandirs & Tsiotsou, 2012). In this research, team attachment refers to users' thrill when they work in teams and social interaction brought by the team. The association between team attachment and users' motives will be predicted.

H3: Gameplay of LOL itself will be positively associated with eSports users' satisfaction when the play LOL or watch related events.

Different personalities, psychological factors, and background of eSports users are the reasons that influence their motives.

Low self-esteem is a perception of rejection, aversion by others and neglect from other people (Leary & MacDonald, 2003). The Internet overuse of low self-esteem people reflects selfcontrol failures (Kim, & Davis, 2009). In the study of loneliness and low self-esteem groups, it is found that such users are more likely to use media products (Kim, & Davis, 2009). So low selfesteem and loneliness can be used as potential causal variables to predict the motives of lol users. The hypothesis is proposed:

H4: Lack of self-control and low self-esteem are associated with eSports users' motive for playing LOL and watching LOL events.

# **CHAPTER FOUR:**

#### METHODOLOGY

# Procedure

A survey was conducted on Weibo. There is a Weibo account named 'Talking to the LOL players' of which users almost players of LOL.

The questionnaire was put on this specific Weibo with 200,000 followers on August, 2019. The data collection period last for two weeks to ensure sufficient samples are obtained. According to IRB requirements, investigators are not allowed to conduct money-related experiments. Therefore, in order to ensure that the sample meets the requirements, it is necessary to conduct the survey for two weeks. Only the LOL users can complete the survey otherwise the result will be considered invalid.

The Weibo account 'Talk to the LOL players' posts content related to LOL. On the home page of a Weibo account, daily reading quantities and visiting quantities are displayed. The average daily reading quantities of this account has reached 100,000, and there are more than one thousand active responses per day. Since the account is for LOL players, the followers (ie participants in this study) are almost the LOL users.

Participants have a wealth of experience in LOL of watching LOL events, and they often use this Weibo account to tell about their social experience in LOL. The followers of this account meet the requirements of this research very well.

# **Participants**

Variable	Category	Frequency	Percent (%)
Conta	Male	97	46.4
Gender	Female	112	53.6
	Elementary education	15	7.2
	Middle school education	18	8.6
Education	Undergraduate students	159	76.1
	Graduate students	10	4.8
	PhD and above	7	3.3
	Yesterday or Today	36	17.2
	Within one week	57	27.3
The last time of playing LOL	Within one month	55	26.3
	Within half year	42	20.1
	Within one year and above	19	9.1
	10-18	21	10.0
A ~~	19-25	82	39.2
Age	26-35	72	34.4
	35 and above	34	16.3

Table 1. Demographic characteristics of the sample (N=209)

A total of 209 valid questionnaires were collected. An online questionnaire was posted on the Weibo account 'Talk to the LOL players' to collect data. Female participants participated at a higher rate in this survey (n=112, 53.6%) the proportion of male participants is slightly lower (n=97, 46.4%). From the education background, the number of undergraduates is the largest (n=159, 76.1%). The number of middle school educated players is the second (n=18, 8.6%).

Users reported ages of 19-25 frequently accounting for 39.2%; followed by users aged 26-35, accounting for 34.4%. In terms of gameplay frequency, people who played LOL within one week accounted for the most (n=57, 27.3%). The number of players who have not played for more than one year is the least (n=19, 9.1%).

#### Survey instrument and measures

The questionnaire was comprised of 31 questions and provided a brief introduction to the participants (See Appendix). The survey used a 5-point Likert-scale (5=strongly agree; 1=strongly disagree).

Measures of the study can be divided into the following parts:

First, the questionnaire put forward demographic questions to get the sample basic straight. Then the participants were asked the motives for playing LOL. Motives can be interpreted as the players' reasons for playing this game. In this study, LOL players' motives are:

Social identity (Hogg & Terry, 2000). Gameplay of LOL itself (Lee, An, & Lee, 2014). Pastime (Khang, Kim, & Kim, 2013). Finally, participants were asked about their traits and other background variabilities.

# Reliabilities

The reliability analysis is analyzed making use of the Cronbach's alpha, which is the correlation coefficient between the scale and all scales containing other possible items.

This questionnaire used SPSS 25.0 software to analyze the identity of belonging sense, gameplay, pastime, player personality and the entire questionnaire reliability analysis. The reliability analysis results are shown in Table 2.

The results were shown on Table 2 that the reliability coefficient of Sense of belonging is 0.961>0.9, the reliability coefficient of Gameplay is 0.925>0.9, the reliability coefficient of Pastime is 0.951>0.6, and the reliability value of Player character traits is 0.880>0.6. The total reliability coefficient value of the questionnaire variable is 0.985>0.9. The overall items' reliability

is higher than 0.6, indicating that the data reliability is believable and can be conducted for further

analysis.

Table 2. Reliability statistical analysis

Variable	Items	Cronbach's alpha
Sense of belonging	10	0.961
Gameplay	5	0.925
Pastime	8	0.951
Player character traits	3	0.880
Whole questionnaire	27	0.985

# **Factor analysis**

This study selected LOL players' motive as a factor analysis variable for validity analysis.

Table 3. KMO and Bartlett test

KMO value		0.985
	Approx. Chi-square	5174.936
Bartlett test of sphericity	df	253
	p value	0.000

KMO and Bartlett tests were applied to ascertain whether the study was appropriate for factor analysis. Table 3 gave the test results of KMO and Bartlett.

If the KMO value is closer to 1, it reveals that the more appropriate this study is for factor analysis. The KMO value is 0.985 which indicating that this survey is appropriate for factor analysis. The null postulation of the Bartlett sphericity test is supposed to be the correlation coefficient matrix which is a unit matrix, the p-value is 0.000 less than the significant level of 0.05, so the null hypothesis was rejected, implicating that there is a correlation between the variables, the study is relevant to be carried out the factor analysis.

Based on the factor extraction information, Table 4 demonstrated three factors were collected by factor analysis. The interpretation rate of the initial eigenvalue variance of these three factors was 76.563%.

Componen		Initial Eigenv	values	Extracti	on Sums of Sq	uared Loadings
t	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.67 3	72.492	72.492	16.67 3	72.492	72.492
2	0.483	2.101	74.593	0.483	2.101	74.593
3	0.453	1.97	76.563	0.453	1.97	76.563
4	0.422	1.835	78.398			
5	0.399	1.735	80.132			
6	0.392	1.704	81.836			
7	0.357	1.554	83.39			
8	0.349	1.517	84.907			
9	0.321	1.394	86.302			
10	0.306	1.331	87.632			
11	0.303	1.316	88.949			
12	0.281	1.222	90.17			
13	0.275	1.195	91.365			
14	0.265	1.154	92.519			
15	0.25	1.087	93.607			
16	0.24	1.045	94.651			
17	0.21	0.914	95.565			
18	0.198	0.861	96.427			
19	0.179	0.778	97.204			
20	0.174	0.756	97.96			
21	0.167	0.724	98.684			
22	0.155	0.672	99.356			
23	0.148	0.644	100			

Table 4. Total variance of interpretation

Table 5 shows that the load on factor 1 for each question of LOL players' motive is greater than 0.7, indicating that each question about players' motive had a greater explanatory power on factor 1, due to questionnaire data. This study still divided LOL players' motive into three dimensions: identity of belonging sense, gameplay, and pastime for conducting correlation and regression analysis. Due to pattern of findings of the factor analysis and inflated correlations among the independent variables, the results reported next should be interpreted with caution. A conservative alpha level was adopted for the tests as a result.

	Component				
	1	2	3		
Q6	0.828	0.198	0.215		
Q7	0.861	-0.271	0.016		
Q8	0.856	0.059	-0.168		
Q9	0.847	-0.085	0.141		
Q10	0.861	0.063	-0.207		
Q11	0.852	-0.035	-0.143		
Q12	0.873	-0.128	-0.158		
Q13	0.831	0.308	-0.07		
Q14	0.852	0.206	0.2		
Q15	0.86	0.054	-0.086		
Q16	0.83	-0.125	0.182		
Q17	0.856	-0.145	-0.059		
Q18	0.837	-0.01	0.087		
Q19	0.868	-0.073	-0.139		
Q20	0.861	0.085	0.074		
Q21	0.848	0.047	-0.179		
Q22	0.843	0.284	-0.042		
Q23	0.844	0.012	0.272		
Q24	0.849	-0.049	0.074		
Q25	0.842	-0.238	0.134		
Q26	0.867	-0.059	-0.13		
Q27	0.869	-0.031	0.032		
Q28	0.847	-0.051	-0.02		

Table 5. Component matrix

# **CHAPTER FIVE:**

#### RESULTS

#### **Descriptive statistics of variables**

This study scores the questions of the three dimensions of eSports users – identity of belonging sense, gameplay, pastime, and descriptive statistics on players' traits and satisfaction. Descriptive statistics for each variable are shown in Table 6. The scores of the three dimensions of motivation need to be computed. This study divides the score as follows: Strongly disagree=1, disagree=2, neutral=3, agree=4, strongly agree=5. Descriptive statistics for each variable are shown in Table 6.

Participants revealed a little bit greater than the medium level of all variables, indicating that despite the deviations exist in the samples, they generally agree on each dimension of variables. Table 6. Descriptive statistics table for variables

Variable	Ν	Minimum	Maximum	Mean	Std. Deviation
Satisfaction	209	1.00	5.00	3.78	1.29
Sense of belonging	209	1.30	4.80	3.78	1.07
Gameplay	209	1.20	5.00	3.78	1.09
Pastime	209	1.38	4.88	3.83	1.08
Weak self-control	209	1.00	5.00	3.73	1.21
Loneliness	209	1.00	5.00	3.83	1.25
Introversion	209	1.00	5.00	3.72	1.29

#### Correlation analysis of motives and satisfaction

This study calculates the correlation between the three dimensions of LOL players' motives: identity of belonging sense, gameplay, pastime and the players satisfaction. The Pearson correlation calculation method is used. The results are shown in Table 7.

	Satisfaction	Sense of belonging	Gameplay	Pastime
Satisfaction	1			
Sense of belonging	0.844**	1		
Gameplay	0.828**	0.939**	1	
Pastime	0.839**	0.960**	0.943**	1

Table 7. Pearson correlation calculation results table

Note: **\*\*** Correlation is significant at the 0.01 level (2-tailed).

Table 7 shows that sense of belonging has a significant positive correlation with satisfaction, gameplay has a significant positive correlation with satisfaction, and there was a significant positive correlation between recreation and satisfaction.

#### **Regression analysis of motives and satisfaction**

This study used regression analysis to verify the causal relationship between the three dimensions of LOL players' motives: identity of belonging sense, gameplay, pastime with the players' satisfaction with LOL.

Taking identity of belonging sense (X1), gameplay(X2), pastime(X3) as independent variables and satisfaction (Y) as the dependent variable, a multivariate linear regression model was established as follows: Y=a0 a1X1 a2X2 a3X3 e

In the formula, a0 is a constant, a1-a3 is a regression coefficient, e is a residual, Y is satisfaction, and X1-X3 are identity of belonging sense, gameplay, pastime.

Table 8. Regression model result table
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Variable	Unstandardized coefficients t		р		
(Constant)	-0.146	-0.835	0.405		
X1	0.485	2.881	0.004		
X2	0.257	1.851	0.066		
X3	0.294	1.699	0.091		
$\mathbb{R}^2$	0.727				
F	182.074				
р	0.000				

It can be seen from Table 9 that the goodness-of-fit coefficient R2 of the regression model is 0.727, which indicates that the regression model has a very good fitting effect. The regression model has a significant p-value = 0.000 < 0.05, indicating that the model independent variable can well explain the variation of the dependent variable.

The result manifested that the identity of belonging sense is positively associated with LOL players' satisfaction. In the regression model, the statistical significance coefficient of identity of belonging sense is p=0.004<0.05, indicating that identity of belonging sense has a significant impact on satisfaction, and the coefficient of identity of belonging sense is 0.485>0, indicating that identity of belonging sense has a significant positive impact on satisfaction. That is, the greater the degree of identity of belonging sense, the higher the degree of satisfaction, H1 is established.

In the regression model, the statistical significance coefficient of pastime is p=0.091>0.05, indicating that pastime has no significant effect on satisfaction, and H2 is not established.

The statistical significance coefficient of gameplay is P=0.066>0.05, indicating that gameplay has no significant effect on satisfaction, and H3 is not established.

#### Correlation analysis of players' traits and motives

The survey conducted correlation analysis of players' traits (Weak self-control, loneliness, low self-esteem and introversion) and players' motives of playing LOL. This study used the Pearson correlation analysis method and the results are shown in Table 9.

According to Table 9, weak self-control and identity of belonging sense Pearson correlation significance p<0.01, r>0. Therefore, Weak self-control has a significant positive correlation with the player's identity of belonging sense. Similarly, Weak self-control has a significant positive correlation with the gameplay and pastime.

	Sense of	Game	Pasti	Weak self-	Lonelin	Introver
	belonging	play	me	control	ess	sion
Sense of belonging	1					
Gameplay	0.939**	1				
Pastime	0.960**	0.943* *	1			
Weak self-control	0.794**	0.790* *	0.783 **	1		
Loneliness	0.827**	0.820* *	0.827 **	0.662**	1	
Low self-esteem and Introversion	0.838**	0.828* *	0.825 **	0.729**	0.741* *	1

Table 9. Players' traits and motives Pearson correlation results table

Note: \*\* Correlation is significant at the 0.01 level (2-tailed).

# **CHAPTER SIX:**

#### DISCUSSION

The survey aims to explore the association between eSports satisfaction and players' motivation. The research method mainly adopts statistical methods to verify the factors that may affect the satisfaction of LOL players. This research uses U&G theory as the cornerstone to provide some reference for the development of China's eSports industry. It was informed of U&G theory that audience's gratifications after using certain media content and the multiple reasons why people can get various gratifications. (Gallion, 2010; Wimmer & Dominick, 2014). In simple terms, individuals randomly use multiple media and they will get different gratifications. According to factor analysis, this study divided the LOL players into three dimensions: players' group cognition after eSports professionalization, the gameplay of LOL itself and the pastime function provided by LOL as it is severed as a social media platform. These three dimensions were classified as motive and they had a high correlation. Motive help game designers understand player' satisfaction and improve product quality.

The study showed that players' identity of belonging sense has a significant effect on satisfaction. If they obtain more identity-recognition, they are more inclined to play LOL since LOL is a carrier that could help them get recognition and praise. Today, many top players appear in front of the media as 'Professional players,' some of them even received the same kind of courtesy as Olympic champions. In recent years, eSports events are becoming more and more cosmopolitan and professional, Especially the S League from LOL has attracted the attention of the world. eSports comes from video games, and it is higher than video games. eSports accumulate

sports competition and fairness, and it is the sublimation of every Chinese players' dream. Ten years ago, in their parents' eyes, they had no honest job; they were the bad kids who were addicted to video games. Nowadays, under the efforts of China's eSports men and the government's vigorous expansion and regulatory easing, eSports is becoming the economic hub of the Internet era, and gradually get rid of the traditional stereotype and stigma. Young players gather to share emotions, feel glory, and even explore eSports careers. The attribution of identity allows players to increase cohesion and pride, and as a result, the eSports players' group is integrated and sublimated. When identity is recognized, their satisfaction with LOL will become higher.

Pastime is not significantly related to satisfaction. The sociability of LOL is not intense. The characteristics of LOL as a social game are not distinct, although it has a simplistic system. According to the result, most of the players are not attracted to its social functions. They are not inclined to build relationships and get companionship in the game. Team attachment is one of the pastime's dimensions and has no significant impact on satisfaction. Nevertheless, team attachment is still an important issue to be explored in sports or games. Team attachment is an integral part of sports consumption behavior research. It can detect players' recognition of a team (Gencer, Kiremitci, & Boyacioglu, 2011). When the team's success takes the place of individual success, the player will get praise and self-achievement. Players subtly establish a special team attachment (Gencer et al., 2011). LOL is a very typical team game, five people cooperating, and no one can be omitted. Players will gain self-satisfaction in LOL, self-achievement, and prestige are crucial motives in sports consumption (Schwarz & Hunter, 2008). Although this study did not detect the significant impact of pastime on player satisfaction, game designers still cannot ignore the benefits that team attachment can bring to the game. Mass media itself is a consumption culture that promotes consumer spending and entertainment. When team attachment can bring consumption

impulse to players, the media can become the founder of consumer culture. Designers can still build mature dating systems in subsequent developments to replace the single friend adding and chatting interface. In terms of game content, after each game, the system will issue MVPs to the best players. These players usually are from the DPS position. Designers could optimize the system so that some support players and tank players can win honors as well. Long-term recognition and self-satisfaction will bring in much in-game consumption.

Gameplay is not prominently associated with satisfaction. Essentially, today's big games are all well-made, which means gameplay is not the only one for attracting an audience. For example, when the game Overwatch was released at the very beginning, almost everyone was playing this game because its graphics, music, and 3D modeling were excellent. However, it loses one million active users per month now (Carpenter, 2018). LOL has a history of ten years. Ten years ago, there were not many video games for Chinese players. For many Chinese young players, LOL may already become part of their youthful memories. LOL is a carrier of pleasant memories to some extent. The identity of the player has changed from juvenile to youth, from campus to work. Perhaps for many players, the time spent with friends in LOL is what attracts them to continue playing, and the content of the game itself may not be that important. That is, nostalgia could be the reason for keeping old players. Designers can also use 'youth', 'memory', 'friendship' as a selling point and promotional slogan. After all, the endless stream of video games will no longer be part of the memory of the former players. Of course, the optimization of game content is still the most important.

Finally, players who are weak self-controlled, and low-esteemed will get more motives to play LOL. The group of low-esteemed and lonely people is more likely to construct relationships, express themselves, and make friends on the Internet, and they do not like face to face offline. Virtual network platforms are very friendly and helpful to shy people (Myers, 1987). As a virtual online game, LOL is very friendly to those shy and unsociable people. They can find pleasure and achieve self-achievement in the slaughter of the game.

This study started with the motive of the LOL players for the game and discovered the factors that Chinese LOL related practitioners can refer to during the localization process in China. Before 2010, due to hardware constraints, lack of advertising, government policy suppression, and other reasons, China's eSports industry was stagnant and backward. But after 2010, China's eSports industry has exploded and proliferated, and many young players have appeared in public as 'professional players of eSports.' They received the same praise and applause as formal sports stars and became the idols of Chinese young LOL players. The recognition of the mainstream media and the professionalization and competition of eSports have made young players rise to a sense of collective identity and patriotism in terms of value recognition. The communication of eSports has enabled young people to have an 'eSports dream'. Nowadays, China's eSports industry is gradually standardizing, and significant clubs are in desperate need of talented eSports athletes. The positive and glorious national athlete image is the focus of attracting resources and attracting new gamers. Old games like LOL, they still need to consider how do draw newcomers in and keep former players.

However, eSports have a different impact on young people. After getting their identity, they are more willing to participate in it. Some of them may even drop out of school to pursue to become an eSports star. When teenagers seek the identity and composition of social identity, they also need to identify themselves. The difference between self-identity and other people or other groups is the difference between 'I' and 'He.'

In today's situation and the overwhelming publicity of eSports, if the government and the school do not give proper guidance and encouragement to the young men who are eager to make eSport as a career, it could cause many children who are not suitable for eSports to fall into the wrong path.

The aura and glory of these eSports stars have inspired the collective consciousness and patriotism of Chinese youth gamers. They are more inclined to tell others that they are not playing simple video games, they do eSports. They are reluctant to accept the long-standing stigma of eSports. More and more young people are engaged in this young industry, not only eSports athletes but also game streamers, game event commentators, eSports event planners, and other related practitioners. However, behind the bright and beauty is the infinite anxiety about the future, and dreams often strike a reef as more and more young people devote themselves to this, if the industry is saturated, where they can go.

U&G theory and Flow theory all have one thing in common is the emphasis on positive emotions of audience feedback. In this study, the player's emotional needs and social needs (Katz, 1974) were met in LOL, so they continued to play LOL without turning to other games. Similarly, players achieve self-satisfaction and self-fulfillment in LOL, they will think that LOL is a pleasant thing, players will be attracted by LOL and will not quit, which is in line with the definition of Flow theory. The motivations presented in this study are the reasons that may cause players to have continuous satisfaction and positive emotions. This study aims to explore the behavior and feedback of players based on these two theories, so as to help the game industry get some optimization suggestions.

The study still has many shortcomings, such as the small number of samples, data in this study is insufficient and not convincing enough. The investigators have not ruled out other possibilities. For example, some people are very outgoing, but they still like to play games at home. Although eSports are recognized, some players still have no confidence in themselves, and they are still low self-esteem, and so on. This study inevitably incorporates the author's subjective feelings, and it still needs more scientific and convincing data. Sometimes the raw data cannot reflect the real thoughts of players. In future research, it is necessary to add some qualitative research to obtain some subtle ideas. Furthermore, it is a breakthrough to explore the question of what the proportion of female players in eSports has exceeded that of male players, but this study did not do much discussion of gender differences in video games. In a similar survey design in the future, investigators need to exclude some variables as much as possible to obtain more accurate conclusions.

## **CHAPTER SEVEN:**

### CONCLUSION

This research starts with the motivation and satisfaction of LOL players and proposes some suggestions for the Chinese eSports industry based on U&G theory.

As a representative of eSports, LOL has numerous loyal players. It has great research value in the field of e-sports. For eight years, LOL has been flourishing, LOL has not declined, and it is getting better and better. Taking LOL as a research object can get more feedback as much as possible. In the early days, due to the limitations of objective conditions, the suppression of policies, the stereotype of eSports made the development of China's eSports a blank. After several generations of Chinese eSports people's unremitting efforts, China's eSports industry has finally begun to grow explosively. Many young people appear in the media as 'professional players'. They also hold trophies and honors to win world-class honors for China. The professionalization of eSports has made LOL players have an impact on self-awareness and group cognition. In terms of identity value recognition, the LOL events have risen to a collective honor and patriotic sentiment. The communication of eSports has had a positive impact on the identity of LOL players, and eSports dreams have begun to emerge among young players. eSports enable LOL players to share emotions, which promotes a high degree of unity among members of the community in terms of beliefs, emotions and willingness, and integrates individuals into groups, thereby forming an identity that is identified from individual identity to group identity which is a formal of integration and confirmation.

Collective carnival makes the 'sports spirit' become the consensus of the players and even the belief in eSports. In the process of LOL localization in China, designers can make full use of identity to attract and retain players. For example, LOL China should vigorously promote professional leagues to attract young players to enter professional team training. In the related media such as LOL official website and Weibo, relevant propaganda copy can be combined with the victory of the Chinese team in the world competition, with the 'national honor' as the entry point, which is in line with China's national conditions and can also gain publicity.

In terms of the design of the game itself, LOL is already the industry benchmark, that is why it can last for so long. In LOL's relationship construction system, many Chinese young players have some emotional relationships in the game more or less. Therefore, simple friends and chat systems may not be able to meet the needs of these players. The game interface can add features like the profile home page and photo albums to satisfy the players. This is actually one of their motivations.

Overall, technology is still the primary productivity of the eSports industry. The core of eSports is electronic equipment based on information technology, high-quality network environment and advanced direct broadcast technology. Specifically, the network technology will provide a high-quality environment for the eSports industry and ensure the smooth streaming of eSports. At the same time, the hardware facilities continue to evolve, providing a stable basic operational guarantee for the event. Officials can continue to deepen cooperation with well-known equipment manufacturers to get sponsorship. In recent years, several eSports equipment vendors such as Autofull, Dxracer, Razer, etc. have gained a lot of exposure through sponsored streaming eSports events. In addition, with advanced direct broadcast technology, eSports enthusiasts can

watch high-definition stable events through streaming. The eSports people need to make full use of streaming technology and hardware and software equipment to achieve eSports popularization.

Bias will never erase an industry that should be existed, the tortuous development of China's eSports has made Chinese eSports people cherish the hard-won recognition.

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## **APPENDIX A:**

## SURVEY QUSTIONNAIRE

Thank you for participating the survey. This survey is called: The motives and satisfaction of LOL users in China. The investigator of the study is Qianyin Sun. Please make sure that you are as accurate as possible in answering the questions. The purpose of the study is to explore the LOL users' motives and their feedbacks of eSports products and help developers to improve the user experience and services of related products. Your personal information will be kept strictly confidential. If you feel uncomfortable when answering questions, you can quit immediately, which will not affect you. If you have any questions, please feel free to contact Qianyin Sun.

Q1. What's your gender?

- 1. Male
- 2. Female

Q2. What's your education background?

- *1. Elementary education*
- 2. *Middle school education*
- *3. Undergraduate students*
- 4. Graduate students
- 5. *PhD and above*

Q3. What was the last time you play LOL?

- 1. Yesterday or Today
- 2. Within one week

- *3. Within one month*
- *4. Within half year*
- 5. Within one year and above

## Q4. What is your age?

- 1. 10-18
- 2. 19-25
- 3. 26-35
- 4. 35 and above

Q5. So far, I am very satisfied with lol.

[1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree

Q6. I feel like LOL is as important as other traditional sports.

[1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree

Q7. I think LOL is a formal sports program.

[1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree

Q8. LOL is a part of my everyday life.

[1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree

Q9. I am very proud to tell other people I am a LOL Player.

[1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree

Q10. I feel excited when I watch LOL events.

[1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree

Q11. I feel honored when my favorite Chinese LOL team win the world game.

[1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree

Q12. The victory of the Chinese team brings me a sense of national honor.

- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q13. I hope eSports can be recognized by China's mainstream society.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q14. I feel eSports players group should be treated equally as other sports fans.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q15. I think eSports is a formal occupation.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q16. I think lol is fairer than other video games.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q17. I play LOL for entertaining.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agreeQ18. I like the LOL background story.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q19. I am attracted by LOL visuals and music.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q20. I like the feeling of working with teammates.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q21. I like making friends in LOL.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q22. LOL is a good platform for me to build relationships.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q23. I have romantic relationships in LOL.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree

Q24. I hang out with my LOL friends offline.

- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q25. I feel depressed in real life.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q26. LOL can help me get away from my everyday life.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q27. LOL can help me relaxed.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q28. I cannot live without LOL.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q29. I can control myself very well.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q30. I always feel lonely in my real life.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree
- Q31. I am an introvert.
- [1] strongly disagree [2] disagree [3] neutral [4] agree [5] strongly agree

#### **APPENDIX B:**

#### SURVEY QUSTIONNAIRE (CHINESE VERSION)

感谢您参与这项调查。我是美国南佛罗里达大学大众传播系的研究生,这是我的毕 业论文调查。这项研究名称为:一项关于中国电子竞技用户的动机和满意度调查----以 《英雄联盟》为例。在您回答问卷的过程中,请确保尽可能准确的回答问题。这项研究的 目的是探索中国英雄联盟用户的使用动机并且获得相关电子竞技产品的反馈用来帮助开发 者提高产品使用感受和相关的产品服务。如果你在问答问题的过程中感到有任何不适,你 可以随时退出调查,并且这不会影响到你。如果你有任何疑问请联系调查员。Email: qianyin@mail.usf.edu

1. 您的性别是?

男性 女性

2. 你的教育背景是?

小学教育 中学教育 本科生 研究生 博士及以上

3. 你最近一次玩英雄联盟是什么时候?

昨天或者今天 一星期以内 一个月以 内半年以内 一年以以上

4. 你的年龄是?

10-18 19-25 26-35 35 以上

5. 到目前为止,我对英雄联盟非常满意

强烈不同意 不同意 中立 同意 强烈同意

6. 我认为英雄联盟(电子竞技) 是一项正式的体育项目

7. 我认为英雄联盟(电子竞技)和其他体育项目一样重要

强烈不同意 不同意 中立 同意 强烈同意

8. 我认为英雄联盟是我每天日常生活的重要一部分

强烈不同意 不同意 中立 同意 强烈同意

9. 我可以非常自豪的告诉别人我是一名英雄联盟玩家

强烈不同意 不同意 中立 同意 强烈同意

10. 我在观看英雄联盟赛事的时候非常激动

强烈不同意 不同意 中立 同意 强烈同意

11. 在中国队赢得英雄联盟世界赛冠军的时候我感到非常骄傲和有荣誉感

强烈不同意 不同意 中立 同意 强烈同意

12. 中国队在英雄联盟世界赛上的胜利给我带来了一种国家荣誉感

强烈不同意 不同意 中立 同意 强烈同意

13. 我希望电子竞技可以被中国主流社会认可

强烈不同意 不同意 中立 同意 强烈同意

14 我认为电子竞技玩家群体应该被像其他体育粉丝一样平等的对待

强烈不同意 不同意 中立 同意 强烈同意

15. 我认为电子竞技是一项正式的职业

强烈不同意 不同意 中立 同意 强烈同意

16. 我认为英雄联盟比其他网络游戏更公平

17. 我玩英雄联盟是为了娱乐

强烈不同意 不同意 中立 同意 强烈同意

18. 我喜欢英雄联盟的背景故事

强烈不同意 不同意 中立 同意 强烈同意

19. 我被英雄联盟的画面和音乐所吸引

强烈不同意 不同意 中立 同意 强烈同意

20. 我喜欢和队友一起团队合作的感觉

强烈不同意 不同意 中立 同意 强烈同意

21. 我喜欢在英雄联盟里交朋友

强烈不同意 不同意 中立 同意 强烈同意

22. 英雄联盟对于我来说是一个构建社会关系(交友)的好平台

强烈不同意 不同意 中立 同意 强烈同意

23. 我在英雄联盟里有过网恋经历

强烈不同意 不同意 中立 同意 强烈同意

24. 我和英雄联盟里认识的朋友线下出来见过面并且约会过

强烈不同意 不同意 中立 同意 强烈同意

25. 我对我的真实生活感到沮丧

强烈不同意 不同意 中立 同意 强烈同意

26. 英雄联盟可以帮助我逃离我的真实生活

27. 英雄联盟可以帮助我放松

强烈不同意 不同意 中立 同意 强烈同意

28. 离开英雄联盟我将无法生活

强烈不同意 不同意 中立 同意 强烈同意

29. 我自控能力很强

强烈不同意 不同意 中立 同意 强烈同意

30. 在我的真实生活中我经常感到孤独

强烈不同意 不同意 中立 同意 强烈同意

31. 我是一个内向的人

# **APPENDIX C:**

# **IRB EXEMPTION**



RESEARCH INTEGRITY AND COMPLIANCE Institutional Review Boards, FWA No. 00001669 12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799 (813) 974-5638 • FAX(813)974-7091

Qianyin Sun Zimmerman School of Advertising and Mass Communications 4208 Monticello gardens 201 apt Tampa, FL 33613

RE: Exempt Certification IRB#: Pro00040552 Title: A research on eSports users' motives and satisfaction in China---The case of League of Legends

Dear Ms. Sun: On 6/10/2019, the Institutional Review Board (IRB) determined that your research meets criteria for exemption from the federal regulations as outlined by 45 CFR 46.104(d):

(2) Research that only includes interactions involving educational tests(cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:(i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7).

As the principal investigator for this study, it is your responsibility to ensure that this research is conducted as outlined in your application and consistent with the ethical principles outlined in

the Belmont Report and with USF HRPP policies and procedures.

Please note, as per USF HRPP Policy, once the exempt determination is made, the application is closed in ARC. This does not limit your ability to conduct the research. Any proposed or anticipated change to the study design that was previously declared exempt from IRB oversight must be submitted to the IRB as a new study prior to initiation of the change. However, administrative changes, including changes in research personnel, do not warrant an Amendment or new application.

We appreciate your dedication to the ethical conduct of human subjects research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

Meluso MSlood

Melissa Sloan, PhD, Vice Chairperson USF Institutional Review Board