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The Research on the Determinants of Users' Willingness to Pay for Chinese Paid Sports Model Based on Use and Gratification Theory

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The Research on the Determinants of Users' Willingness to Pay
for Chinese Paid Sports Model Based on Use and Gratification Theory

by

Jing Li

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts
Zimmerman School of Advertising and Mass Communication
College of Arts & Science
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Keywords: copyright consciousness, individual needs, and product variables

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The thesis ideal was inspired by an article *Changing the competitive environment for sports broadcast*, which was in the book *The ESPN Effect- Exploring the Worldwide Leader in Sports*. I was impressed by the development of the revenue system of western sports media. I seldom hear about paid sports in China. So, I started to wonder the situation of paid sports in China.

During the two and a half years of study, I really appreciate Dr. Walker, my thesis chair, who helped me perfect my research questions and sublimated my thoughts. She was the person who instructed me on how to write a complete academic paper. The first time I wrote a paper was in her class. You will never know, when I wrote the first paragraph, I cried. I am really grateful that I have finished my graduation thesis from a student who knew nothing. Thanks for her encouragement and help all the time. I still remember what she said, "I am proud of you".

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ABSTRACT

This study adopted uses and gratifications theory as a theoretical guide to explore the impact of individual needs, product variables, and copyright consciousness on audience's willingness to pay in paid sports media in China. The most important part of this study was tested whether product variables acts as a mediating factor and whether copyright consciousness plays as a moderating factor to influence the relationship between individual needs and willingness to pay. This quantitative study collects the data from a sample of 679 (valid N=568) Chinese adults who have some exposure or understanding of the paid sports model in mainland China. The results revealed that all of the dimensions of individual needs and product variables have a positive relationship with willingness to pay in paid sports. There are two regression models: (1) purchase willingness = 0.16 * interest needs + 0.176 * cognitive needs + 0.360 * affective needs + 0.273 * social interaction needs; (2) purchase willingness = 0.108* membership privilege + 0.115* video quality + 0.128* sports commentary + 0.237* exclusive broadcasting + 0.359* price setting. Furthermore, findings indicate that the effect of individual needs on willingness to pay is partially mediated by product variables. In addition, copyright can moderate between individual needs and willingness to pay. All of the results have statistical meaning.

CHAPTER ONE: INTRODUCTION AND BACKGROUND

Introduction

The “paid sports” model is an inevitable trend that had created a huge global market. This model first stemmed from the U.S. In 1983, ESPN was determined to change its solely advertising-based revenue system to a dual revenue system which included an additional revenue stream of subscriber fees per month (Fortunato, 2015). This alteration stimulated the competition of broadcasting for huge sports events and changed the media landscape and the entire sports industry. Since then, paid sports have become popular in the western world. This paid watching model marks a mature sports broadcasting ecosystem.

However, most of the eastern countries, especially China, fail to gain any benefit from this successful business model. Due to the historical development background and the political system in China, sports is not regarded as the driving force in China’s economic growth. By contrast, sports was viewed as “Juguo Tizhi(state-run system)” in China which represents the totalitarian sports system(Fu, 2017; Hong & Zhouxiang, 2012). The most essential purpose of Chinese sports is to achieve gold medals and honors in international competitions, especially in Olympic games, as a shortcut to enhance the country’s international status (Hong & Zhouxiang, 2012). Sports in China is closely tied to politics and nationalism.

When most of the western countries defined the sports as the combination of capitalized products and leisure consumption and viewed the sports as the heart of media (Rowe & Gilmour, 2010), China is more about combining politics and physical fitness with sports. The government regards sport as a public affair. It encourages and supports athletes in winning honor in international competitions to enhance the country's international status, and disseminates such culture and values through the media. Besides, government want the audience to promote sportsmanship and nationalism by providing free-to-air sports programs. China's sports program is viewed as public welfare and has long been unprofitable (Bai, 2005).

In recent years, the government is waking up to the potential of sport as a pillar of the economy. The development of China's sports industry has been boosted by the support of national policies and the development of Internet technology. Many media sports scholars emphasize that new media plays a vital role in the dissemination and consumption of sports content (Dart, 2014; Lopez-Gonzalez & Tulloch, 2015; Stavros, Meng, Westberg, & Farrelly, 2014). Its involvement in the sports industry enables users to enjoy a variety of services (Pan, Ding, Xu, & Yang, 2017). People can not only watch live-real time events without place and time limits but also enjoy high definition display and real-time communication with other viewers.

With the policy, and catching up with the Internet entrepreneurship tide, the most difficult transition to the sports industry has ushered in unprecedented changes. The media began to recognize the advantages of the western sports business model and tried to make Sports more market-oriented. The concept of "paying" for sports thus entered the Chinese sports-media complex. Today, some

online platforms for live sports events have emerged. China's sports "payment" model is gradually setting on the right track.

China's population is nearly 1.4 billion, more than four times that of the United States. However, the proportion of the sports population is only half of that in the United States. With such a huge population base and a low level of sports development, the development prospect of China's sports market is very broad. Users are the key to the development of the sports market. The key to the realization of the paid-sports content model is the user conversion rate. It is important to know how to attract users to use the paid sports model and how to increase the stickiness between users and the products. Therefore, based on uses and gratification theory, this study examined the relationship among audiences' individual needs, product variables, and purchase willingness. In addition, the moderating role of copyright consciousness between individual needs and purchase willingness was tested. Furthermore, this study also investigated the determinate factors of audience's purchase willingness of "paid sports" from both individual and products perspectives.

Background

Paid Sports

"Paid sports" model means that the audience needs to pay subscription/ membership fees to the sports media in order to watch the higher quality real-time sports programming and gain more desirable services. This model originated from the U.S. in 1983 and was initially developed and explored in China in the past five years. Based on a uses and gratifications paradigm, the audience can actively choose whether to pay or not to pay according to their psychological and physical needs, which is goal oriented.

For the media, sports programs are valuable and desirable content because they can appeal to a hard-to-reach audience demographic of males between 18 and 49 (Wenner, 1989). The broadest potential audience becomes another commodity for the media to sell to advertising, thus maximizing the media's revenue. Fortunato (2013) pointed out televised sports events provide an ideal time for advertisers to promote and spread information. In order to maximize the revenue from sports broadcasting, sports leagues began to let media organizations bid for sports broadcasting rights, which led to the increase in the broadcasting rights fee payments (Fortunato, 2013). For sports leagues, whose revenue is based on broadcast rights fees, they are excited about the huge potential of sports to generate revenue. For the media, the fierce competition for broadcast rights requires them to pay more. Therefore, it is very significant to figure out how to make more profits from the sale of sports content to make up for the consumption of broadcasting rights. Increasing the number of users and user loyalty is the key. People don't want to pay for something they don't like and need. In this case, the uses and gratifications can be regarded as a suitable theoretical guideline to analyze the needs and motivations of the audience in acquiring sports content.

By getting what viewers want, ESPN was able to persuade cable providers to charge subscribers by threatening to shut down the network. In 1983, ESPN first implemented a two-revenue-stream business model (Turner, 2016). In 1985, ESPN finally got rid of the consecutive losses from 1979 to 1984 and began to make profits (Eskenazi, 1989). This dual economic business model creates a cyclical cycle (Turner, 2016). It generates more capital and enables ESPN to strive for more sports leagues and event rights, thus providing viewers with more of the sports they want, and constantly raising monthly fees to compete for other rights.

In China, sports existed as a political tool and public welfare for a long time. This totalitarian sports system allowed the government to monopolize the rights to broadcast sporting events. Sports TV programs have been provided to the audience free of charge as a public welfare until now. The combination of high user flow and advertising sales have been the main ways for media to achieve revenue in the past. Until October 20, 2014, China News Network reported *Several Opinions of the State Council on Accelerating the Development of The Sports Industry and Promoting Sports Consumption (File No. 46)*. The sports industry began to reform and commercialize. It specifies that all TV stations and digital media can purchase or transfer all kinds of sports events from domestic and abroad except the Olympic Games, Asian Games, and World Cup (Guo, 2014). Since then, the competition among the major commercial media for the sports broadcasting rights to top events has become increasingly fierce.

In January 2015, Tencent, the giant digital media corporation in China, and the NBA jointly announced that the two sides were going to sign a five-year cooperation agreement for \$500 million (Tong, 2018). The price was five times more than the previous one. It means that Tencent will have the exclusive network broadcast rights for NBA sports events in the mainland. In the same year, PPTV has signed the exclusive right for all media in La Liga, a Spanish football league, in China for five years at the price of 250 million euros, which is the first time that a domestic Internet video enterprise has won the all media IP of the world's top football matches (Solberg, 2016). In February 2016, LeSports (another digital sports media) announced the acquisition of the exclusive new media rights of Chinese super league (CSL) in mainland China, Hong Kong, Macao, and Taiwan for the two seasons of 2016-2017 with a record-breaking \$392 million (2.7 billion yuan) (Josh, 2017). China's

sports media rights market is booming. While “when the river rises, the boat floats high”, these digital media need to think about how to monetize content and achieve more revenue with the right fees soaring. They began to seek advantage from the western sports economic model and tried to promote the paid sports model. The era of completely free-to-air sports gradually passed since the Tencent-NBA agreement, and was replaced by a new free-premium hybrid business model (Tong, 2018). Sports media, for example, provides a percentage of free games per day, with the rest of the games only accessible by the audience who paid the membership/subscription fee. In addition, paid sports users can get a better viewing experience and desirable services, such as the playback function, skip ads, and high definition display. At present, the combination of paid sports and free-to-air sports has become the primary choice of Chinese digital media enterprises.

Historical Development of Paid Sports

In retrospect, from 1958 to now, China's paid sports have gone through four stages (Luo, 2017; YutangSports, 2017), which are closely related to the development of sports media. This also combined with the revolution of sports media development. The development of paid sports is full of twists and turns, and there is still a long way to go in expanding and developing the Chinese sports industry (Fang, Gu, & Zhu, 2018).

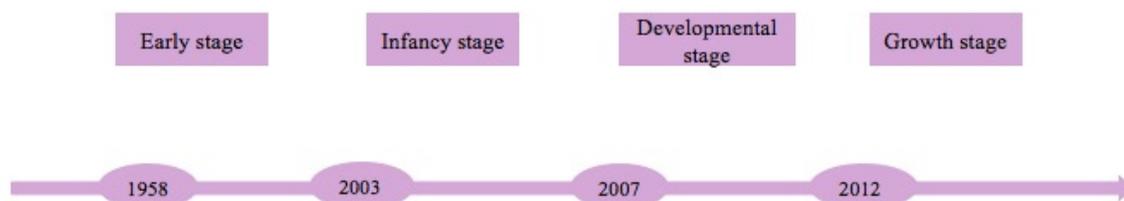


Figure 1. The process of Chinese paid sports development (YutangSports, 2017).

From 1958 to 2003, China was in an early stage development. This stage was in the period of live broadcast on cable TV. The government only charged users a small amount for cable's maintenance, and there was no real "paid TV" or "paid live sports". In this period, the sports industry was in a relatively backward and closed state, the public attention to sports was also very low. At that time, football was the main sport broadcast on CCTV (Chinese center television), which caused Chinese people to have an unusual emotional attachment to football. In 1978, CCTV began to record the semi-finals and finals of the World Cup. In 1982, when CCTV began to broadcast the World Cup live, viewers did not need to pay anything to watch live broadcasting on CCTV. However, the number of sports video was still too small, and there were big obstacles in the negotiation of price between Chinese media and sports organizations or western sports media. With the popularity of the dual-model in western sports media, the competition for broadcasting rights was becoming increasingly fierce. Sports media engage to compete for the broadcast rights of the popular games in order to retain and attract more sports users. This has caused the broadcast fee to be higher and higher. China's sports, as a public welfare, cannot afford to broadcast the world's major sporting events with the profits which only earns from advertisers. This is why CCTV and ESPN, the mainland broadcaster of the English Super League, announced their separation in 2004. The main reason was that ESPN's broadcasting fees were too far above the psychological price of CCTV (Luo, 2017).

The second is the infancy stage between 2003 and 2007. As cable went digital, the concept of "pay TV" began to spread, and cable digital TV began to run paid channels and launched paid sports channels.

In 2003, in order to promote the digitalization of China's cable TV and accelerate the establishment of a new cable digital TV technology system, the State Administration of Radio, Film and Television (SARFT) promulgated the “timetable for the transition of cable TV to digitalization” in accordance with the “tenth five-year plan for radio, film and television technology and the 2010 vision plan”, which marks the beginning of China's digital media era.

Digital television spawned the paid video. The high-definition channels, parts of sports channels and game channels need to pay extra. On New Year's Day in 2004, CCTV launched a paid TV channel, "CCTV-Storm Football". It was one of the first digital paid TV channels in China and the first professional paid channel for the football program. In January 2005, CCTV Golf & Tennis channel was launched, which was the first non-football themed paid sports channel in China. In 2006, Win TV, the operator of the European football channel, announced that it had gained the exclusive broadcasting rights in mainland China for the premier league in mainland China.

The developmental stage was between 2007 and 2012. In this period, the “pay sports” in China was really launched. It gradually broke the Chinese reliance on free sports and marked a period when audiences began to recognize and understand the new business model of paying for sports content. In 2007, Sports Media Inc., WinTV, bought the rights to broadcast the English premier league on the Chinese mainland exclusively for nearly \$50 million(Luo, 2017). WinTV announced a high-profile change from the free nature of Chinese sporting events, requiring viewers to pay to watch premier league games. Since then, China has officially entered the era of the paid Premier League.

However, as it was the initial stage of the industry, the strategy of "monopoly + paid" form boycotted by fans, and ended in Win TV's bankruptcy. There was large space for improvement in

service quality, exploring audience's preference and motivations, and increasing market strategies.

This also reflects the audience's initiative in choosing sports media. When Win TV started the paid sports model, it did not consider the psychological and social needs of the audience, nor the gratifications of the audience, leading to the potential audience refusing to pay for this monopolistic and paid broadcasting model. Despite the small number of subscribers and the failure of paid-sports on TV, Chinese people were beginning to understand that they could get better services for extra payment during this period. These changes brought the concept of paid video to the Chinese mind.

In 2010, IDG, the investor, still hoped to develop and explore the sports industry, and then joined hands with the new Yadi media Inc. to re-innovate Win TV and re-named it Super Sports Media Inc. Based on the previous experience, Super Sports Media Inc. had better market information, start-up background, and clearer start-up ideas. In the past two years, through various improvements and efforts, Super Sports has gained a firm foothold in the live broadcasting industry of paid sports events in China. At the same time, a growing number of companies also now view China's paid live sports as a potential gold mine.

The growth stage in Chinese sports is from 2012 to the present. The development of the Internet and internet mobile technology has created favorable conditions for the Chinese paid sports model. More and more enterprises are engaged in the industry of live broadcast of paid sports events. After Super Sports, the sports media companies such as Tencent sports, Letv sports, and Suning PPTV have appeared. The rapid development of "Internet + sports" has given new vitality to sports.

According to *the 42nd Statistical Report on Internet Development in China* which was released by China Internet Network Information Center in Beijing, as of June 2018, China has 802

million Internet users and 788 million mobile Internet users, respectively (Xinhuanet, 2018). The Internet penetration rate had reached 53.2%, equivalent to the total population of Europe. With such a broad audience background, the internet mobile sports event broadcasting has more possibilities. An increasing number of people have started paying attention to sports events. People no longer have to watch sports in the traditional platform-TV. The booming of the private and commercial sports media enables sports fans to watch real-time sports broadcasting anywhere through mobile internet terminals. Mobile technologies play a vital role in the "sports content economy", which changed the commercial and legal arrangements between sports organizations, media companies, and fans (Hutchins & Rowe, 2012). Wang (2017) pointed out that the sports industry has achieved comprehensive upgrading with the help of the Internet(Y. Wang, 2017). The integration of the Internet into sports entities, the dual revenue model, and the popularity of mobile APP are all new models. The entry of Internet giants into the sports industry has promoted the development of value chain in sports events broadcasting rights. According to survey data from iResearch consulting, 52.8% of the users watched the sports online(YutangSports, 2017), namely PC, mobile and PAD. The use of mobile terminals enables users to make full use of the fragmented time, break the previous restrictions on watching matches and make sports payment more possible.

According to the latest version of "the Blue Book China Internet Development Report 2018", China's 4G user penetration is ranked in the top five in the world (Nicole, 2018). The development of internet technology provides perfect conditions and opportunities for communication channels and approaches to sports media. Some scholars pointed out that the combination of "Internet + Sports," unceasingly excavates the potential value of the sports industry and accelerated its process of

commercialization and innovation (Pan et al., 2017). They also introduced some representative sports event live broadcasting apps, which sports fans can use to watch real-time sports events without time and place restriction.

Nowadays, China's paid sports model has received more financial support, technical support and policy support. In order to promote its further development. In order to promote its further development, we also need to be audience-oriented, and carefully consider what the audience needs and what factors will affect the audience's willingness to pay for paid sports from the perspective of uses and gratifications paradigm.

CHAPTER TWO: THEORETICAL FRAMEWORK

Uses and Gratifications Theory

Based on the research purpose of this study, the most appropriate theoretical framework to be applied is the uses and gratifications theory (UGT) which fully consider the audience's initiative in participating in the media. UGT is a different theoretical framework from other mass communication theories. It states that the media audience can initiatively look for, consume and engage in media rely on their own needs and preferences (Baran & Davis, 2006; Hamari & Sjöblom, 2017; Q. Wang, Fink, & Cai, 2008). The driving question of UG is to determine what people do with the media rather than how the media affects people (Klapper, 1963). UGT views the audience as an individual rather than mass because of the significant individual differences(Katz, Blumler, & Gurevitch, 1973). It focused on various audience motivations, needs, and goals for using media, including social media (Rubin, 2009).

In the 1940s, UGT was first developed in research related to the effectiveness of radio communication. Katz (1959) penetrated the essence of UGT experimentally that various individuals satisfy their different physical and social attributes through the same media product or platforms. In this process, people usually use the same media for different goals. The individual interest, value, and social-economic status play a key role in participating in media (Katz, 1959). Katz, Blumler, and Gurevitch (1974) defined the principle of UG: (a) to interpret the process of how the audience makes

use of various media platforms to meet their requirements.; (b) to comprehend the audience's motivations for using multiple media content, and; (c) to prove the capable outcome and functions that could be revealed from the media use process. According to Katz et al. the UGT has five unique assumptions: 1). Individuals who use the media are supposed to be positive and they possess clear and definite using purpose; 2). Individuals who use media content have the initiative to choose the specific media product that meet their directional needs; 3). Media content persuing to demand audiences' gratification, therefore, the competition between the media industry and other resources is habitus; 4). The audience can sharply judge their media use motivation and inclined position so that they can offer a precise research blueprint for mass media investigators; 5). No one can assess the value of media content, except for the audience. (Katz et al., 1973).

UGT was applied to catch on the intention of using conventional media resources. Early investigators of media gratifications aimed at exploring why people use specific media content, such as radio quiz programs, radio daytime serials (Herzog, 1940), and newspapers (Berelson, 1949). At the very beginning of the 1970s, scholars vigorously pursued the needs of the individuals who were used to media, the core question related to how people use media to satisfy their social and psychological demands (Katz et al., 1973). Lull (1980) proposed the connections between individuals and intermediary communication through the observation of families watching TV behaviors (Lull, 1980). Bantz (1982) pointed out the deviation between the viewing motivation of standard media content and specific TV contents (Bantz, 1982). Ostman and Jeffers (1980) asserted the links between television viewing motives and latent lifestyle characteristics and television attitudes to infer the motives for watching television (Ostman & Jeffers, 1980). The development of technology and the

Internet has further expanded the research scope. The scholars have begun to investigate the new media, such as the usage of social media (Chen, 2017; Cheung, Chiu, & Lee, 2011), eSports (Hamari & Keronen, 2017), e-government engagement (Kaye & Johnson, 2002), live-stream (Hamari & Sjöblom, 2017; Hilvert-Bruce, Neill, Sjöblom, & Hamari, 2018), and sports media (Luo, 2017).

In this study, the author will study the "paid sports" on the new media, which means that the audience needs to pay an extra subscription/membership fee in order to get higher services. The competitiveness and unpredictability of sports live broadcast has a considerable attraction to the audience (Shapiro, Reams, & So, 2018). While Chinese citizens are less aware of paying for sports and other media content, it is meaningful and urgent to study how to cater to the preferences of the audience and stimulate the audience's live sports consumption to the greatest extent. Individual interest, value, and social, economic status play a vital role in determining participation in media (Katz, 1959). Besides, the quality of the paid services also influenced the audience purchase willingness. Therefore, uses and gratification theory is very appropriate to guide the researcher in studying the individual preference and needs for pay sports from the users' perspective. This will break the perspectives of past research.

Willingness to Pay

Willingness to pay is highly correlated with actual behavior. Measuring purchasing willingness is more effective than behavioral measurement in capturing consumer psychology (Liao & Hsieh, 2013). Phau et al. (2009) used the construction of purchase willingness as an alternative to purchase intention, and further enhanced purchase willingness as an indicator of actual purchase

behavior. This is why the researcher uses consumer's willingness to pay as an indicator to measure the acceptance of paid sports in China.

Copyright Consciousness

As the internet has become a more important part of our life, much research is focused on the copyright consciousness that is caused by free circulation. Brown (2003) indicated that the internet is a useful marketing tool to stimulate sports online consumption. He suggested that sports marketers pay more attention to the internet's potential value and consumer/seller relationships, which could create more profit(Brown, 2003). Birmingham and David (2011) pointed out that the expansion of internet access can stimulate free circulation on digital media, which may result in the commercial broadcaster's revenue decline and bankruptcy. Although the sports leagues create their live streaming services at a lower price, and the policy and legislation released to protect the copyright monopolies, the crackdown on the free circulation of the Internet has never abated(Birmingham & David, 2011). Cesareo and Pastore (2014) state that there is a negative relationship between audience opinion toward internet piracy and the enthusiasm to purchase membership fees for music media platform. While the attitude toward online illegal access is positively influenced by the remunerative and epicurean and negatively by ethical assessment (Cesareo & Pastore, 2014). The use of the Internet is good or bad for the development of the sports live broadcast market, depending on the developmental level of a country and region as well as the maturity of the sports market. In countries where the sports market is relatively mature, people may be more concerned about the piracy problem. The free circulation of live sports videos on the Internet has become a big problem. In areas where sports are

less commercialized, the enormous business opportunities and opportunities on the Internet are even more attractive.

Individual Needs

Concerning the audience's motivations for using media, although there are several of articles that are focus on the audience's demands for and gratifications in using media, the research regarding sports fans' consuming behavior and preferences for paid sports are relatively sparse.

Raney (2006) states that people select specific media to fulfill and deal with their daily psychological and sociological needs. Media serves an important role in mood-management, which can reduce the intensity of bad mood and increase it of good mood(Knobloch & Zillmann, 2002). M. Lee, Kim, Williams, and Williams (2016) also indicated that sports fans' gratification was strongly associated with their affective state.

Hilvert-Bruce et al. (2018) conducted survey research to investigate the factors that would influence people's engagement in live-streams on the internet based on the uses and gratification theory. They trailed a socio-motivational model (entertainment, information seeking, meeting new people, social interaction, social support, sense of community, social anxiety, and external support) to explain four aspects of live-stream viewer engagement (emotional connectedness, time, subscriptions, and donations). The results showed that audience who engage in the live stream have a strong motivation in social and community base than those that engage in other mass communication (Hilvert-Bruce, Neill, Sjöblom, & Hamari, 2018). This research provided an evident understanding of the motivation for live-stream engagement. However, the research object is a little bit different from this study.

In this study, the author focuses on the paid sports model. For paid sports users, the consumption of sports can provide more sports content and programs, which help them avoiding cognitive dissonance. Sports fans aspire to be a walking encyclopedia of sports. Their sports knowledge can not only become a conversation fodder for them to talk with friends, but also establish communication between sports strangers, because they can share useful sports information and knowledge (Melnick, 1993). Gratification is the customer's post-purchase evaluation of a product or service(Hunt, 1993).

Ko, Cho, and Roberts (2005) found that an interrelationship between the motivations for using the internet and the perspective to the brand and purchase willingness. They said information needs are positively related to human-message interaction; social interactive motivation is positive to interpersonal interaction. Besides, human-message interaction and interpersonal interaction could lead to a positive attitude to brand consideration and willingness to pay(Ko, Cho, & Roberts, 2005). Quan-Haase and Young (2010) adopted interviews and surveys to discover why people use multiple social media to communicate with each other. In their research, the authors compare the motivations for using Facebook and instant message. The findings showed that Facebook was mainly used to fulfill people's entertainment needs and information needs, whereas instant message focuses on user's relationship maintenance and development(Quan-Haase & Young, 2010). In general, this study predict that the uses of paid sports were connected with sports fans' interest, cognitive, affective, and social interaction needs.

Product Variables

Birmingham and David (2011) emphasized that it is crucial to maintain the existing customer base through improving service and higher broadcasting quality instead of monopoly. Sports fans willingness to pay for sports depends on their loyalty. The sports media industry need to consider more about how to maintain fan loyalty. However, Birmingham and David did not figure out how to maintain the fan's loyalty and the relationship between users' willingness to pay and the quality of broadcasting services.

Many scholars indicate that the range of price would influence audience consumption behavior (Lambrecht & Misra, 2016; Shapiro et al., 2018). Companies can maximize their benefits by adjusting the proportion of paid video. Providing more free content in a period of high demand can maximize revenue. Lambrecht and Misra (2016) term this phenomenon as “countercyclical offering”. Stephen, Reams and So (2018) examined the relationship among perceived value, purchase intention and perceived financial risk in using pay-per-view broadcasts of combat sports. The consumers may be disappointed because of the poor performance of teams or players they are following and the level, speed, quality, and characteristics of the game. The results showed that perceived value was directly related to purchasing intentions and influencing the relationship between identification and purchase intentions(Shapiro, Reams, & So, 2019).

To some extent, the subscription model reduces the media’s pressure on financial revenue. The dual economic model of subscription fee and advertising sponsorship fee broadens the media’s income channels. According to the previous research (Peitz & Valletti, 2008), the advertising intensity under free-to-air media is higher than underpaid media. In Tong (2018)’s survey research, 22% of

Tencent sports members said their main reason of paying for the Tencent membership fee is to skip ads. This dual business model provides more choices both for media and audiences. iResearch pointed out that 58.5% of paid sports users are eager to pay for smoother and clearer video quality, and nearly half of users are willing to open a membership because of the free of advertising and exclusive game rights(iRsearch, 2016).

The sports commentary is also an essential factor that determines the level of excitement of the sports programs(Han & Ahn, 2010; G. Lee & Bulitko, 2010). Their job not only to provide audiences descriptive information but also use emotional or color worlds to improve the enjoyment, which can influence audiences' emotional responses and involvement. Lee, Kim, Williams, and Pedersen (2016) did an empirical study to research the relationship between sports commentary, satisfaction, and re-viewing intentions. The results showed that the sports commentary and satisfaction significant associate with each other, which in turn intensify audiences' re-viewing intention. Therefore, it is appropriate to assume that that sports commentary can influence audiences' willingness to pay for paid sports.

According to the above review, this study classified the product variable into five dimensions: membership privilege (such as skip ads and playback function), video quality, sports commentary, exclusive broadcast, price setting. These product factors are likely to affect the audience's willingness to pay.

Since the development of the "paid sports" model in China, the vast majority of Chinese studies on paid sports are mainly focused on four aspects: 1). research on the development strategies, technologies, and supporting factors from government and society; 2). research on different sports

media, including online apps or TV channel. The online paid sports mainly focus on Tencent, Super Sports Media Inc., and LeSports; 3). research on the content of pay sports; 4). Research on the broadcast right of pay sports. Most of these studies are limited to the development studies from the perspective of media. The needs and preferences of consumers or sports fans have not received much attention from these scholars.

Luo (2017) conducted a case study using Win TV Sports as an example to analyze its failure and rebirth and summarized the process of paying for live sports in China. He pointed out that the lower consciousness on paying for sports, exorbitant subscription fees, low program quality, weak awareness of copyright protection, and complicated payment methods resulted in the failure of Win TV(Luo, 2017). Tong (2018) used quantitative research methods to investigate the influence of Tencent's exclusive broadcasting contract with the NBA, specifically, the change in Tencent's operation strategy and in Chinese audience viewing habit. Tencent broke the deadlock of Chinese sports market and made a great contribution to the development and prosperity of sports market economy. Tencent's free-premium hybrid business model, which offers both free and paid games, has cultivated the audience's awareness of sports content consumption to a certain extent(Tong, 2018). Zeng and Liu (2012) conducted a content analysis to discussed the specialization and personalization of Pay TV Channel. They state that the traditional free TV channel gives up personalization and specialization and try to cater to public taste in order to achieve the maximization of audiences and profit. Because for free TV channel, the primary revenue is raised from advertisements. While the paid TV should clarify the target audience and subdivide the market and products in order to meet the audience needs more accurately and effectively. The revenue of the free-to-air media program usually

based on the advertisement's sponsorship. Therefore, in order to satisfy the taste of the public, free TV tends to provide less differentiated content, while pay TV channels tend to maximize the differentiation of content to help the target audience build loyalty and adherence to the product (Peitz & Valletti, 2008).

Thus, how to satisfy the audiences' preference and match their expectation is a key point. Peitz and Valletti (2008) stated that viewers are the key to the success of broadcasting media. They could help broadcasting companies bring revenue from advertising and from charging viewers. While even as a sports media giant, ESPN has faced significant challenges in the last two years. On the one hand, ESPN is losing subscribers; on the other, ESPN's subscription prices are rising (Andrew, 2018). While we are not sure if it is a good situation, we can make sure that it is increasingly necessary to consider users usage behavior and motivation of using paid sports. Simultaneously, it is significant to study sports fans engagement in the paid sports and the determinates factors for purchase.

CHAPTER THREE:
RESEARCH QUESTIONS AND HYPOTHESES

Based on the aforementioned research, the paid for sports is a very new model in China. Recently, both the government and media companies have expressed their intention to market sports and view the sports industry as a pillar of the economy. Little research has been investigated from the audience's perspective. In addition, the Chinese sports industry is in the developing stage, there are still lots of obstacles that influenced the sports fan's consumption behavior. Therefore, the author puts forward four research questions.

Research Questions

RQ1: What is the relationship between individual needs (interest needs, cognitive needs, affective need, and social interaction needs) and audiences' willingness to pay for sports?

RQ2: What is the relationship between product variables (membership privilege, video quality, sports commentary, exclusive broadcast, and price setting) and willingness to pay for sports?

RQ3: Does the product variables mediate the relationship between individual needs and audiences' willingness to pay for sports?

RQ4: Does the copyright consciousness moderate the relationship between individual needs and audiences' willingness to pay for sports?

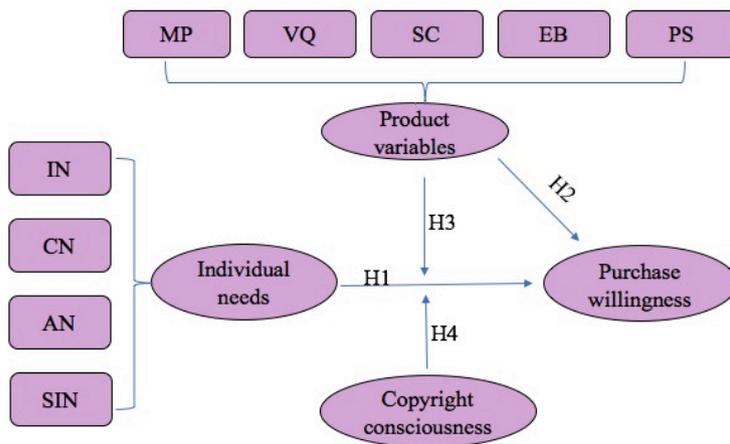


Figure 2: The structure of the independent variables and dependent variables.

Hypotheses

The first group of hypotheses will explore the relationship between audience’s individual needs and purchase willingness.

H1.a: There is a positive relationship between interests needs and purchase willingness.

H1.b: There is a positive relationship between cognitive needs and purchase willingness.

H1.c: There is a positive relationship between affective needs and purchase willingness.

H1.d: There is a positive relationship between social interaction needs and purchase willingness.

The second group of hypotheses will address the correlation between purchase willingness and product variables (membership privilege, video quality, sports commentary, exclusive broadcast, price).

H2.a: There is a positive relationship between membership privilege and purchase willingness.

H2.b: There is a positive relationship between video quality and purchase willingness.

H2.c: There is a positive relationship between sports commentary and purchase willingness.

H2.d: There is a positive relationship between exclusive broadcast and purchase willingness.

H2.e: There is a positive relationship between the price setting and purchase willingness.

The third group of hypotheses test the mediating role of product variable and moderating role of copyright consciousness.

H3: Product variables will mediate the relationship between individual needs and willingness to pay for paid sports.

H4: Copyright consciousness will moderate the relationship between individual needs and willingness to pay for paid sports.

CHAPTER FOUR:

METHODOLOGY

An online survey was conducted to investigate the aforesaid research questions and hypotheses during August 2019. Survey is a systematic method that the researchers build “Statistics” of the characteristic of the large group by collecting information from elites (samples) in this group (Groves et al., 2011). Statistics is a quantitative summary of observations of a group of factors. The statistics can help the researcher to describe, compare, or explain the target group's knowledge, attitudes, behavior and causal relationship (Fink, 2003). Not only can a survey produce "descriptive statistics" describing basic information about the various attributes of a group, such as the gender or age distribution of paid sports users, but it can also produce "analytic statistics" investigating casual relationships between variables, such as measuring how economics and paid sports use are related (Groves et al., 2011). Although the proportion of paid sports users is small and China has a large population, the number of paid sports users should not be underestimated. Online survey methods can reach a large number of sample data in a short time, so it is particularly suitable for describing the characteristics of large groups. Moreover, the use of online tools makes conducting and analyzing surveys easier than ever before. Therefore, the author is going to use an online survey as a research method.

Design& Sample

The study employed the online survey on AskForm (www.askform.cn, an enterprise-level questionnaires survey platform). The researcher created a questionnaire (see Appendix 1) and described it as a research about "a study of your motivation and satisfaction with paid sports model". The 5-10 minutes survey was consisting of five parts and was posted on WeChat, QQ, Weibo, Baidu PostBar, and some sports BBS. Every participant and viewer will be asked to forward this survey link to their social media and attract more people to join in the study. Since most people under 18 years old do not have the ability to control the economy freely, the target participants should be over 18 and have some exposure or understanding of paid sports model in China. To guarantee the research generality, the desired sample size was over 200 people.

Of those who completed the survey (N=679), 111 respondents were removed because some respondents had never used paid sports and answered randomly, which was judged as invalid questionnaires (final N=568). The table 1, table 2, table 3 and table 4 showed the detail demographic information of the sample.

Among the valid questionnaires collected, female respondents were slightly more than male respondents (Female= 51.8%, Male=48.2%); Respondents aged 18-45 were evenly distributed, accounting for 75.4% of the total respondents. The 18-25 age group has the largest number of respondents, accounting for 29%, and only 7.4% of respondents aged over 56 years old. For income, those with incomes of 3,001-6,000-yuan account for 30.1%, followed by 6,001-9000 yuan (26.9%). Those above 12,000 yuan were the fewest, accounting for only 3.5% of the total respondents. For the educational level, undergraduate/Junior college group accounted for the highest proportion of

respondents, reaching 83.1%. The groups of doctoral degree and junior high school or below accounted for the lowest proportion, 2.1% and 3.2% respectively.

Table 1. Sample Gender.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	274	48.2	48.2	48.2
	Female	294	51.8	51.8	100.0
	Total	568	100.0	100.0	

Table 2. Sample Age.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	165	29.0	29.0	29.0
	26-35	141	24.8	24.8	53.9
	36-45	122	21.5	21.5	75.4
	46-55	98	17.3	17.3	92.6
	≥ 56	42	7.4	7.4	100.0
	Total	568	100.0	100.0	

Table 3. Sample Income.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3000yuan or less	104	18.3	18.3	18.3
	3001-6000yuan	171	30.1	30.1	48.4
	6001-9000yuan	153	26.9	26.9	75.4
	9001-12000yuan	120	21.1	21.1	96.5
	Over 12000 yuan	20	3.5	3.5	100.0
	Total	568	100.0	100.0	

Table 4. Sample Educational level.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Junior high school or below	18	3.2	3.2	3.2
	High school/ technical secondary school	27	4.8	4.8	7.9
	Undergraduate/ Junior college	472	83.1	83.1	91.0
	Master Student	39	6.9	6.9	97.9
	doctoral Student	12	2.1	2.1	100.0
	Total	568	100.0	100.0	

Survey Instrument

As the participants are from China, the self-administrated questionnaire was first designed in English and then translated into Chinese. The concept of "paid sports" model is still a little bit vague and uncommon, therefore the researcher gave some instructions and at the beginning of the questionnaire in order to help the participant to understand the research purpose. Moreover, informed consent was provided. The researcher discussed the survey questions with the committee and did a pilot test to ensure the rationality of questionnaire design, especially the reliability and validity. Moreover, this study applied to the Institutional Review Board (IRB).

Measurement

The questionnaire is made up of five parts. The first part focuses on the audience's basic information. The second part identifies the individual needs such as interest needs, cognitive needs, affective needs, and social interactive needs. The third part is about the product's variables that relate to sports media, such as the membership privilege, video quality, sports commentary, and exclusive broadcast. The fourth part is the measurement of audiences' willingness to purchase. The last part is to investigate audiences' copyright consciousness.

Individual Factors

Four types of gratifications of paid sports use were measured, including interest needs, cognitive needs, affective needs, and social interaction needs. The Likert-scaled (1-strongly disagree, 5-strongly agree) items adapted from Dhir and Tsai (2017), Lee and Downie (2004) and Liao and Hsieh (2013) used to measure these gratifications were as follows. For the interest needs, the author changes some words in order to fit this study, such as "passionate about sports" replaced "musically".

Interest needs

1. I watch paid sports because I am a fan of a particular team/player
2. I watch paid sports because I like it.
3. I am passionate about sports or some sports events.

Cognitive needs

4. I can get more sports information through watching paid sports.
5. Through paid sports, I can find some sports teams or games which cannot be found

under free sports

6. Through paid sports, I can access more sports program that I am interested in

Affective needs

7. I enjoy watching paid sports more than free sports
8. I am more excited when I am watching paid sports
9. Watching paid sports is more immersive than watching free sports

Social interaction needs

10. I usually communicate with others about information from paid sports
11. Paid sports give me more topics to discuss with my friends and family
12. Watching paid sports makes it easier for me to fit in with my friends

Product Variables

The author conducted an interview study on the audience attitude and degree of acceptance of paid sports in the class *Sports Issues & Media*. This interview research provides a basis and a pillar for selecting independent variables related to service providers, which also influence the sports fans' paid

sports purchasing behavior. To measure the services factors, this study uses self- administration items for each independent variable. All of the items are Likert-scale (strongly disagree, disagree, neutral, agree, or strongly agree).

Membership privilege

13. I paid the sports membership fee because I want to skip the ads

14. Without ads, I can get a more comfortable view experience

15. The privilege that paid sports can skip ads has a positive effect on my willingness to purchase membership fee.

16. The playback function of the sporting broadcasting is one of the reasons I choose to subscribe the paid sports

17. I enjoy watching paid sports without time or place restrictions

Video quality

18. The paid sports video has high definition

19. Paying for sports is a better option because it has a high video quality

20. Paid sports media usually offer higher video quality, which drives me to use paid sports

Sports commentary

21. Excellent sports commentary can let sports competition more exciting

22. The sports commentators will influence my choice to select sports program.

23. I purchase sports membership fee on a platform because I prefer its sports commentators

Exclusive broadcast

24. The items I want to see can only be viewed for a fee

25. I paid the membership fee because of the sports streaming is exclusive broadcast in this media.

26. Exclusive broadcast of video sports will prompt me to purchase a sports membership

Price setting

27. I think I have the ability to buy sports members

28. The current price setting for paid sports membership fees on the market has no effect on my choice of paid sports

29. I think the current price setting is appropriate

Willingness to Pay

To measure the willingness to purchase, this study will use Five Likert-scale (strongly disagree, disagree, neutral, agree, or strongly agree) items adopted from Wang et al. (2005).

30. I prefer paid sports programs to regular sports programs

31. It is likely I will subscribe sports program in the future.

32. I think select paid sports is a good choice for me

33. I am willing to recommend my family and friends to subscribe paid sports.

Copyright Consciousness

To measure audience's copyright consciousness, this study will use Likert-scale (strongly disagree, disagree, neutral, agree, or strongly agree) items adopted from Wang et al. (2005).

34. I think we need to protect copyright

- 35. I don't like watching pirated sports programs
- 36. I seldom or never watch pirated sports programs
- 37. I think it is not a good choice to watch sports programs through some illegal channels

Reliability and Validity

This study tested the reliability and validity of the questionnaire. The reliability was the degree of internal consistency of the results measured by the questionnaire. In order to verify the consistency of the questionnaire, the Cronbach's Alpha of the questionnaire needs to be tested. In general, when the Cronbach's Alpha value is greater than 0.7, the reliability requirement is achieved. The Cronbach's Alpha value of the questionnaire was calculated by SPSS software to be 0.978, which was greater than 0.8, indicating a very high reliability and very good consistency of measure (Malhotra, 2004). At the same time, the reliability of the internal items of each influencing factor was determined. It shows that the consistency of internal items of each influencing factor is high and the reliability is good.

Table 5. Reliability Statistical Analysis.

Variables	N	Cronbach' alpha	N of Items
Individual needs	568	0.953	12
Product variables	568	0.967	17
Purchase willingness	568	0.893	4
Copyright consciousness	568	0.763	2

The validity is to measure whether the designed questionnaire can accurately reflect the characters to be measured. The higher the validity is, the more the results of the questionnaire can represent the measured characteristics, and vice versa. The researcher conducts a factor model adaptive analysis on the questionnaire, and use the SPSS to calculate the KMO value and the Bartlett Sphericity test for the items inside each influencing factor. In general, when the KMO value is greater

than 0.7, it is suitable for factor analysis. We conduct KMO and Bartlett Sphericity tests on individual needs scales, product factors scale and all scales separately.

Table 6. KMO and Bartlett's Test-Individual Needs

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.969
Bartlett's Test of Sphericity	Approx. Chi-Square	5246.560	
	df	66	
	Sig.	.000	

Table 7. KMO and Bartlett's Test-Product Variables

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.985
Bartlett's Test of Sphericity	Approx. Chi-Square	7923 · 228	
	df	136	
	Sig.	.000	

Table 8. KMO and Bartlett's Test-All Scales

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.988
Bartlett's Test of Sphericity	Approx. Chi-Square	18653.314	
	df	666	
	Sig.	.000	

The KMO test and Bartlett Sphericity test value of the personal needs scale, product variable scales, and all scales was 0.969(chi-square value=5246.560, df=66), 0.985 (chi-square value=7923.228, df=136), and 0.988 (chi-square value=18653.314, df=666) separately, which is much larger than the standard of 0.7. The significance probability is 0.000 ($p < 0.001$). It passes the Bartlett Sphericity test, indicating that there was a strong correlation between all items.

CHAPTER FIVE:

RESULTS

Correlation Analysis

The researcher tested the correlation among the factors under individual needs, product variables and purchase willingness using Pearson's Correlation test. The findings showed that interest needs, cognitive needs, affective needs, cognitive needs and willingness to pay are significantly positively correlated ($p < 0.001$) (Table 9). From Table 10, we found that membership privilege, video quality, sports commentary, exclusive broadcast, price setting and willingness to pay are significantly positively correlated ($p < 0.01$).

Table 9. Correlations.

		Interest need	Cognitive need	Affective need	Social interaction need	WP
Interest need	Pearson Correlation	1	.831**	.752**	.761**	.784**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	568	568	568	568	568
Cognitive need	Pearson Correlation	.831**	1	.787**	.804**	.811**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	568	568	568	568	568
Affective need	Pearson Correlation	.752**	.787**	1	.836**	.847**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	568	568	568	568	568
Social interaction need	Pearson Correlation	.761**	.804**	.836**	1	.837**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	568	568	568	568	568
WP	Pearson Correlation	.784**	.811**	.847**	.837**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	568	568	568	568	568

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

Table 10. Correlations.

		WP	Membership privilege	Video quality	Sports commentary	Exclusive broadcast	Price setting
WP	Pearson Correlation	1	.817**	.793**	.809**	.827**	.846**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	568	568	568	568	568	568
Membership privilege	Pearson Correlation	.817**	1	.857**	.850**	.840**	.844**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	568	568	568	568	568	568
Video quality	Pearson Correlation	.793**	.857**	1	.827**	.811**	.801**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	568	568	568	568	568	568
Sports commentary	Pearson Correlation	.809**	.850**	.827**	1	.829**	.830**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	568	568	568	568	568	568
Exclusive broadcast	Pearson Correlation	.827**	.840**	.811**	.829**	1	.834**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	568	568	568	568	568	568
Price setting	Pearson Correlation	.846**	.844**	.801**	.830**	.834**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	568	568	568	568	568	568

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

Regression Analysis

Regression analysis is a statistical analysis method that determines the quantitative relationship between two or more variables. In the study, we made a logical assumption and verification of the relationship between the variables, so we chose the entry method (Enter) for regression analysis.

1). Regression analysis between individual needs and purchase willingness

Table 11. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.895 ^a	.801	.800	1.80601	.801	568.126	4	563	.000

a. Predictors: (Constant), Social interaction need, Interest need, Affective need, Cognitive need

Table 12. ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7412.153	4	1853.038	568.126	.000 ^b
	Residual	1836.319	563	3.262		
	Total	9248.472	567			

a. Dependent Variable: Willing to purchase

b. Predictors: (Constant), Social interaction need, Interest need, Affective need, Cognitive need

Table 13. Coefficients^a

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
	(Constant)	.844	.322		2.623	.009
	Interest need	.213	.047	.160	4.488	.000
1	Cognitive need	.238	.053	.176	4.470	.000
	Affective need	.451	.046	.360	9.707	.000
	Social interaction need	.348	.049	.273	7.116	.000

a. Dependent Variable: Willing to purchase

From the results of the above regression analysis, the standardized regression coefficient of interest need is 0.16 ($t=4.448$, $p<0.05$). The standardized regression coefficient required for cognition need is 0.176 ($t=4.470$, $p<0.05$). The standardized regression coefficient for affective needs was 0.360 ($t=9.707$, $p<0.05$). The standardized regression coefficient for social interaction needs was 0.273 ($t=7.116$, $p < 0.05$). All coefficient tests are generally considered significant. In the F test of all independent variables, $F = 568.126$, $df = 4$, $p < 0.05$. The R squared is 0.801, and the adjusted R squared is 0.800. From this, we can get a regression model about the dimensions of individual needs and willingness to pay: $\text{purchase willingness} = 0.16 * \text{interest needs} + 0.176 * \text{cognitive needs} + 0.360 * \text{affective needs} + 0.273 * \text{social interaction needs}$.

2). Regression analysis between product variables and purchase willingness

Table 14. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change

Table 14 (Continued)

1	.885 ^a	.782	.780	1.89240	.782	404.103	5	562	.000
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a. Predictors: (Constant), Price setting, Video quality, Exclusive broadcast, Sports commentary, Membership privilege

Table 15. ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	7235.844	5	1447.169	404.103	.000 ^b
1	Residual	2012.628	562	3.581		
	Total	9248.472	567			

a. Dependent Variable: Willing to pay

b. Predictors: (Constant), Price setting, Video quality, Exclusive broadcast, Sports commentary, Membership privilege

Table 16. Coefficients^a

Model	Unstandardized Coefficients		Standardized	t	Sig.	
	B	Std. Error	Coefficients			
	(Constant)	.356	.349		1.020	.308
	Membership privilege	.090	.040	.108	2.250	.025
	Video quality	.157	.058	.115	2.720	.007
1	Sports commentary	.177	.060	.128	2.930	.004
	Exclusive broadcast	.322	.058	.237	5.582	.000
	Price setting	.470	.056	.359	8.449	.000

a. Dependent Variable: Willing to pay

From the results of the above regression analysis, the coefficient test among all product variables and purchase willingness is generally considered significant. The standardized regression coefficient for membership privilege, video quality, sports commentary, exclusive broadcast, and price setting is 0.108($t=2.250$, $p<0.05$), 0.115($t=2.720$, $p<0.05$), 0.128($t=2.930$, $p<0.05$), 0.237($t=5.582$, $p<0.05$), 0.359($t=8.449$, $p<0.05$) separately. In the F test of all independent variables, $F=404.103$, $df=5$, $p<0.05$. R squared is 0.782, and the adjusted R squared is 0.780.

Therefore, we can get the regression equation of product variables and willingness to pay: purchase

willingness =0.108* membership privilege +0.115* video quality +0.128* sports commentary
 +0.237* exclusive broadcasting +0.359* price setting.

3). Regression analysis between individual needs and purchase willingness: analysis of the mediating effect based on product variables

Table 17. Mediating Effect Test

Direct effect of X on Y					
Effect	SE	t	p	LLCI	ULCI
.2098	.0206 ^a	10.1780	.0000	.1693	.2503
Indirect effect of X on Y					
	Effect	Boot SE	BootLLCI	BOOTLLCI	
Product variables	.1058 ^a	.254	.0584	.1588	

According to the bootstrap method proposed by Preacher and Halers (2004), the SPSS plug-in process was used to analyze the mediating effect. It mainly analyzes the prediction relationship and intermediary effect of individual needs, purchase willingness, and product variables. From the table, we can know the mediation effect test did not contain 0 (LLCI=0.0584, ULCI=0.1588), indicating that the mediation effect of product variables was significant. In addition, after controlling the mediating role of product variables, the influence of the individual needs on willingness to pay is also significant (LLCI=0.1693, ULCI=0.2503). Therefore, product variables do play a mediating role in the impact of individual needs on willingness to pay, but it is a partial mediation. The product variables as a mediator variable has a direct effect of 20.98%(p<0.05) and indirect effect of 10.58% (p<0.05).

4). Regression analysis between individual needs and purchase willingness: analysis of the moderating effect based on copyright consciousness.

Table 18. Moderating Effect Test

Test(s) of highest order unconditional interaction(s):						
	R2-chng	F	df1	df2	p	
X*W	.0017	4.7783	1.0000	564.0000	.0292	

Focal predict: In	(X)
Mod var: CC	(W)

Conditional effects of the focal predictor at values of the moderator(s):

CC	Effect	se	t	p	LLCI	ULCI
6.0000	.2909	.0123	23.6394	.0000	.2668	.3151
8.0000	.3085	.0150	20.5836	.0000	.2791	.3380
10.0000	.3261	.0207	15.7764	.0000	.2855	.3667

From the table, we can see that copyright awareness is a moderator in the relationship between individual needs and purchase willingness, and its interaction effect -- individual demand * copyright awareness -- is significant, $F=4.7783$, $df1=1$, $df2=564$, $p<0.05$. From the table, we can know that copyright awareness plays a moderating role and can enhance audience's purchase willingness.

Hypotheses Testing

This part will answer the research questions and present the result of hypotheses testing. The RQ1 is asking about the relationship between individual needs and audience purchase willingness. H1.1 to H1.4 state that there is a positive relationship between interests needs, cognitive needs, affective needs, social interaction needs, and purchase willingness. The hypotheses were supported by the significant and positive regression coefficient, and get a regression equation: purchase willingness = $0.16 * \text{interest needs} + 0.176 * \text{cognitive needs} + 0.360 * \text{affection needs} + 0.273 * \text{social interaction needs}$ ($p < 0.001$).

Another determinant of willingness to pay to consider is RQ2: what is the relationship between product variables (membership privilege, video quality, sports commentary, exclusive broadcast, and price setting) and purchase willingness? H2.1 to H2.5 predicted that there is a positive relationship between membership privilege, video quality, sports commentary, exclusive broadcast, price setting, and purchase willingness. The results supported the hypothesis, and the regression result showed an equation between product variables and willingness to pay: purchase willingness = 0.108* membership privilege + 0.115* video quality + 0.128* sports commentary + 0.237* exclusive broadcasting + 0.359* price setting, $p < 0.05$.

H3, which predicted that product variables (PV) would mediate the relationship between individual needs (IN) and purchase willingness of paid sports (PW), was supported. The product variables as a mediator variable has a direct effect of 20.98% ($p < 0.05$) and an indirect effect of 10.58% ($p < 0.05$). H4, which posits that copyright consciousness is a mediator between individual needs and purchase willingness, was supported.

Additional Findings

This study also conducted a demographic difference test about the channels of watching sports programs, the time spent, the payment frequency, and monthly expenses.

In the gender difference test, we found that there was no significant difference in the channels of watching sports programs, the payment frequency, and the monthly expense, but there was a significant difference in the time spent, $p < 0.05$ (Table 20). As shown in Table 19, Male

respondents(M=2.82) usually spend more time watching sports program than female respondents(M=2.61).

Table 19. Descriptive Statistics.

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Have many have you paid for the sports program in total?	Male	274	2.82	1.259	.076
	Female	294	2.61	1.118	.065

Table 20. Independent Samples Test.

Independent variables: Gender		Levene's Test for Equality of Variances								
		Equality of Variances								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
The channels of watching sports programs	Equal variances assumed	1.877	.171	-.357	566	.721	-.023	.064	-.149	.103
	Equal variances not assumed			-.358	565.460	.721	-.023	.064	-.149	.103
The time have you spend	Equal variances assumed	4.334	.038	2.092	566	.037	.209	.100	.013	.405
	Equal variances not assumed			2.083	546.539	.038	.209	.100	.012	.405
The payment frequency	Equal variances assumed	.896	.344	.369	566	.712	.032	.086	-.137	.200
	Equal variances not assumed			.370	565.705	.711	.032	.086	-.137	.200
The monthly expenses	Equal variances assumed	1.216	.271	-.238	566	.812	-.025	.105	-.231	.181
	Equal variances not assumed			-.238	559.228	.812	-.025	.105	-.231	.181

Table 21 presents a difference test of age groups via Anova pertaining to the channels of watching sports programs, the time spent, the payment frequency, monthly expenses. However, these four items did not have statistically significant differences between different age groups.

Table 21. ANOVA.

Age		Sum of Squares	df	Mean Square	F	Sig.
The channels of watching sports programs	Between Groups	.553	4	.138	.234	.919
	Within Groups	332.341	563	.590		
	Total	332.894	567			
The time have you spend	Between Groups	4.055	4	1.014	.713	.584
	Within Groups	801.013	563	1.423		
	Total	805.069	567			
The payment frequency	Between Groups	5.180	4	1.295	1.244	.291
	Within Groups	586.100	563	1.041		
	Total	591.280	567			
The monthly expenses	Between Groups	2.739	4	.685	.440	.780
	Within Groups	876.754	563	1.557		
	Total	879.493	567			

Results pertaining to the channels of watching sports programs, the time spent, the payment frequency, and monthly expenses among respondents at different income are presented in Table 22.

We found that only a significant difference in payment frequency, $p < 0.05$. Table 23 & 24 showed that the respondents whose income in the 9001-12000 RMB group have the highest frequency of watching paid sports (mean=3.15) and significant difference between other income groups.

Table 22. ANOVA.

Income		Sum of Squares	df	Mean Square	F	Sig.
The channels of watching sports programs	Between Groups	1.826	4	.457	.776	.541
	Within Groups	331.068	563	.588		
	Total	332.894	567			
The time have you spend	Between Groups	2.292	4	.573	.402	.807
	Within Groups	802.776	563	1.426		
	Total	805.069	567			
The payment frequency	Between Groups	12.673	4	3.168	3.083	.016
	Within Groups	578.607	563	1.028		
	Total	591.280	567			
The monthly expenses	Between Groups	3.470	4	.868	.558	.694
	Within Groups	876.023	563	1.556		
	Total	879.493	567			

Table 23. Descriptive Statistic.

How often do you pay for sports? (The payment frequency)

Income	Mean	N	Std. Deviation	Std. Error of Mean
3000 yuan or less	2.73	104	.937	.092
3001-6000 yuan	2.91	171	1.013	.077
6001-9000 yuan	2.85	153	1.031	.083
9001-12000 yuan	3.15	120	1.050	.096
Over 12000 yuan	2.60	20	1.046	.234
Total	2.90	568	1.021	.043

Table 24. Multiple Comparisons.

Dependent Variable: How often do you pay for sports? (The payment frequency)

LSD

(I) Income	(J) Income	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.176	.126	.164	-.42	.07
	3	-.119	.129	.356	-.37	.13
	4	-.419*	.136	.002	-.69	-.15
	5	.131	.248	.597	-.36	.62
2	1	.176	.126	.164	-.07	.42
	3	.057	.113	.615	-.16	.28
	4	-.244*	.121	.044	-.48	-.01
	5	.306	.240	.201	-.16	.78
3	1	.119	.129	.356	-.13	.37
	2	-.057	.113	.615	-.28	.16
	4	-.300*	.124	.015	-.54	-.06
	5	.250	.241	.301	-.22	.72
4	1	.419*	.136	.002	.15	.69
	2	.244*	.121	.044	.01	.48
	3	.300*	.124	.015	.06	.54
	5	.550*	.245	.025	.07	1.03
5	1	-.131	.248	.597	-.62	.36
	2	-.306	.240	.201	-.78	.16
	3	-.250	.241	.301	-.72	.22
	4	-.550*	.245	.025	-1.03	-.07

*. The mean difference is significant at the 0.05 level.

1. 3000 yuan or less 2. 3001-6000 yuan 3. 6001-9000 yuan 4. 9001-12000 yuan 5. Over 12000 yuan

We examined the difference in education level for the channels of watching sports programs, the time spent, the payment frequency, and monthly expenses. Although no significant difference was found in the channel, time across education levels, significant differences were found in payment frequency and monthly expense, $p < 0.05$ (Table 25).

For the frequency of payment, as shown in Table 26 & Table 27, the only significant difference was found between the Undergraduate/Junior college group (mean = 2.96) and those who are or were a master student (mean = 2.49). For monthly expense, Table 28 & Table 29 showed that there were significant differences between the high school/technical secondary school group (mean=2.89) and master (mean=2.15, $p=0.018$) and doctoral group (mean=2.00, $p=0.038$). At the same time, the undergraduate/junior college group (mean=2.80) also has a significant difference from those respondents who were in the master (mean=2.15, $p=0.002$) or doctoral education levels (mean=2.00, $p=0.026$).

Table 25. ANOVA

Education level		Sum of Squares	df	Mean Square	F	Sig.
The channels of watching sports programs	Between Groups	3.338	4	.835	1.426	.224
	Within Groups	329.556	563	.585		
	Total	332.894	567			
The time have you spend	Between Groups	1.935	4	.484	.339	.852
	Within Groups	803.133	563	1.427		
	Total	805.069	567			
The payment frequency	Between Groups	11.606	4	2.902	2.818	.025
	Within Groups	579.674	563	1.030		
	Total	591.280	567			
The monthly expenses	Between Groups	22.574	4	5.643	3.708	.005
	Within Groups	856.919	563	1.522		
	Total	879.493	567			

Table 26. Descriptive Statistics

How often do you pay for sports? (The payment frequency)

Education	Mean	N	Std. Deviation	Std. Error of Mean
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Table 26 (Continued)

Junior high school or below	2.89	18	.832	.196
High school/ technical secondary school	2.67	27	.784	.151
Undergraduate/Junior college	2.96	472	1.027	.047
Master Student	2.49	39	1.048	.168
Doctoral student	2.50	12	1.087	.314
Total	2.90	568	1.021	.043

Table 27. Multiple Comparisons

Dependent Variable: How often do you watch paid sports?

LSD

(I) Education	(J)Education	Mean Difference		Sig.	95% Confidence Interval	
		(I-J)	Std. Error		Lower Bound	Upper Bound
1	2	.222	.309	.472	-.38	.83
	3	-.069	.244	.778	-.55	.41
	4	.402	.289	.165	-.17	.97
	5	.389	.378	.304	-.35	1.13
2	1	-.222	.309	.472	-.83	.38
	3	-.291	.201	.148	-.69	.10
	4	.179	.254	.480	-.32	.68
	5	.167	.352	.636	-.52	.86
3	1	.069	.244	.778	-.41	.55
	2	.291	.201	.148	-.10	.69
	4	.470*	.169	.006	.14	.80
	5	.458	.297	.123	-.12	1.04
4	1	-.402	.289	.165	-.97	.17
	2	-.179	.254	.480	-.68	.32
	3	-.470*	.169	.006	-.80	-.14
	5	-.013	.335	.969	-.67	.65
5	1	-.389	.378	.304	-1.13	.35
	2	-.167	.352	.636	-.86	.52
	3	-.458	.297	.123	-1.04	.12
	4	.013	.335	.969	-.65	.67

*. The mean difference is significant at the 0.05 level.

1.Junior high school or below 2.High school/ technical secondary school 3.Undergraduate/Junior college
4.Master Student 5. Doctoral Student**Table 28. What is the average amount of money you spend on watching online sports program every month (RMB) ?**

Education	Mean	N	Std. Deviation	Std. Error of Mean
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Table 28 (Continued)

Junior high school or below	2.83	18	1.425	.336
High school/ technical secondary school	2.89	27	1.219	.235
Undergraduate/Junior college	2.80	472	1.242	.057
Master Student	2.15	39	1.014	.162
Doctoral student	2.00	12	1.279	.369
Total	2.75	568	1.245	.052

Table 29. Multiple Comparisons

Dependent Variable: What is the average amount of money you spend on watching online sports program every month (RMB) ?

LSD

(I) Education	(J) Education	Mean Difference			95% Confidence Interval	
		(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1	2	-.056	.375	.882	-.79	.68
	3	.030	.296	.918	-.55	.61
	4	.679	.352	.054	-.01	1.37
	5	.833	.460	.070	-.07	1.74
2	1	.056	.375	.882	-.68	.79
	3	.086	.244	.725	-.39	.57
	4	.735*	.309	.018	.13	1.34
	5	.889*	.428	.038	.05	1.73
3	1	-.030	.296	.918	-.61	.55
	2	-.086	.244	.725	-.57	.39
	4	.649*	.206	.002	.25	1.05
	5	.803*	.361	.026	.09	1.51
4	1	-.679	.352	.054	-1.37	.01
	2	-.735*	.309	.018	-1.34	-.13
	3	-.649*	.206	.002	-1.05	-.25
	5	.154	.407	.706	-.65	.95
5	1	-.833	.460	.070	-1.74	.07
	2	-.889*	.428	.038	-1.73	-.05
	3	-.803*	.361	.026	-1.51	-.09
	4	-.154	.407	.706	-.95	.65

*. The mean difference is significant at the 0.05 level.

1.Junior high school or below 2.High school/ technical secondary school 3.Undergraduate/Junior college
4.Master Student 5. Doctoral Student

CHAPTER SIX:

DISCUSSION

This study mainly studied the relationship between individual needs, product variables, and purchase willingness of paid sports in mainland China. It also examined the mediating effect of product variables and the moderating effect of copyright consciousness between the individual needs and purchase willingness. In particular, this study considered four individual needs that users might have when they decide to pay for a sports media: interest needs, cognitive needs, affective needs, and social interaction needs. In addition, based on previous research, the product variables are membership privileges, video quality, sports commentary, exclusive broadcasting rights, and price setting. The following table is a summary of hypotheses tested.

Table 30. Summary of Hypotheses Tested

Hypothesis group	Hypothesis	Relationship	Rationale	Results
1	1.a	interests need- purchase willingness	Direct Effect	Support
	1.b	cognitive needs - purchase willingness	Direct Effect	Support
	1.c	affective need - purchase willingness	Direct Effect	Support
	1.d	social interaction needs- purchase willingness	Direct Effect	Support
2	2.a	membership privilege- purchase willingness	Direct Effect	Support
	2.b	video quality- purchase willingness	Direct Effect	Support
	2.c	sports commentary- purchase willingness	Direct Effect	Support
	2.d	exclusive broadcast- purchase willingness	Direct Effect	Support
	2.e	Price setting- purchase willingness	Direct Effect	Support
3	3	Individual needs-product variables-purchase willingness	Indirect (mediated) Effect	Support

Table 30 (Continued)

4	4	Individual needs- copyright consciousness- purchase willingness	Indirect (moderated) Effect	Support
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The first model focuses on exploring the relationship between individual needs and willingness to pay. The researcher conducted two phases in this part. First, the researcher used Pearson's Correlation test to explore whether all variables under individual needs have a relationship with purchase willingness. The finding revealed that all dimensions under individual needs are positively and significantly correlated with willingness to pay for sports. Second, the researcher did a regression analysis to get a regression equation about the dimensions of individual needs and willingness to pay. For paid sports, affective need makes an enormous contribution to the audience's willingness to pay. For every 1 point increase in affective needs and social interaction needs, the willingness to pay will increase by 0.360 points and 0.273 points respectively; However, the contribution of cognitive needs and interest needs to the willingness to pay for paid sports is relatively small. For every 1 point increase in cognitive needs and interest needs, the willingness to pay only increases by 0.176 and 0.16 points, respectively.

The results were as expected, but with a little surprise. Initially, the researcher believed that cognitive needs might have the most significant contribution to the willingness to pay because paid sports can provide more opportunities to watch one's desired sports program. In fact, from the results of the research, the affective need is the main driving force. There are three explanations for this. 1). The traditional media that is, CCTV, compared with paid sports, the amount of sports content has a large limit, reducing the possibility that people can watch the video of their favorite sports team or players. However, the most popular sports games are broadcasted on CCTV. Therefore, for most

ordinary sports fans, there is not much cognitive difference in the amount of information received. 2). Paid sports have not yet been fully popularized in China, and the circulation of the Internet has also increased the channels for audiences to choose free sports. So, the audience is able to see paid sports content for free on the Internet. 3). Although free sports videos are still available on the web, the viewing experience is very different. These are why the contribution of affective needs is the largest. Paying allows the audience to enjoy a higher quality of viewing experience and service. The most important thing is that hedonic purpose is the main reason to watch sports programs(Hirschman & Holbrook, 1982). The sports fans' consumption is based on the emotional experience (such as enjoyment, thrill), rather than the outcome of the game (M. Lee, Kim, Williams, & Pedersen, 2016).

The second model tested the relationship between product variables and purchase willingness. First, the Pearson's Correlation test was used to investigate the relationship between purchase willingness and membership privileges, video quality, sports commentary, exclusive broadcasting rights, and price setting. After confirming that each product factor has a significant correlation with the willingness to pay, the researcher conducted a regression analysis on each product factor and the willingness to pay, and obtained a regression equation: purchase willingness =0.108* membership privilege +0.115* video quality +0.128* sports commentary +0.237* exclusive broadcasting +0.359* price setting.

This means that the more reasonable the price, or the closer to the desired price, the greater contribution to the willingness to pay. Moreover, when the video that the audience wants to watch is played exclusively, and they have to pay for it, their willingness to pay will be improved. Lin, Hsu, and Chen (2013) stated that people have a strong belief that everything online should be free. Because

the public think that the media providers can make large profits from ads company, they name this belief as "free mentality"(Lin, Hsu, & Chen, 2013). It also applies to Chinese sports consumers. As sports was viewed as public welfare for a long time, although some audience gradually accepted the idea of paying for sports content, it is still far from the ideology of audiences in western countries. Paying for sports content is an extra expense for the public. Therefore, the rationality of paid sports price setting is particularly important. For this reason, the sports media Tencent adopts a free-premium hybrid business model to gradually cultivate the public's payment habits and awareness(Tong, 2018).

In addition, sports commentary is also an important factor for audiences to consider when choosing media. It is very matched with previous scholar's research. The level of excitement of the sports video is as important as it of the commentary(Han & Ahn, 2010; G. Lee & Bulitko, 2010). The professional knowledge, commentary style and commentary skills of the commentators can greatly intensify the sense of joy and involvement. The sports commentators inject added value and points into the sports video(Bryant, Comisky, & Zillmann, 1977).

Video quality and membership privileges also have a significant impact on the willingness to pay. Buffer interruptions and low bit rate greatly affect the perceived quality and viewing experience of video(Tan, Gustafsson, & Heikkilä; Zhu, Heynderickx, & Redi, 2015), resulting in the audience's low satisfaction and willingness to pay for paid sports. In the iResearch survey, 65.1% of respondents believe that the fluency and clarity of paid sports broadcasts are the most in need of improvement(YutangSports, 2017). When viewers watch sports videos, they are more care about emotional needs. The quality of the video affects the audience's immersion, pleasure, and sense of

involvement. Therefore, from the technical point of view, to improve the audience's willingness to pay, the sports media needs to optimize the video transmission chain and make more effort to improve the broadcasting quality and services to enhance users' experience. For example, Tencent Sports has subverted the original broadcast form after winning the NBA live broadcast rights. Both the live broadcast equipment and the quality have a qualitative improvement. At the same time, Ke Fan, Yang Yi and Su Qun, three famous basketball commentators in China, were employed. This also laid the foundation for the Tencent era of NBA.

The findings also revealed that sports video's exclusive right to broadcast and price rationality contribute more to the willingness to pay than other product factors, which may also be related to the popularity and acceptance of the payment model in China. Maybe in the future, when people get used to and fully accept the model of paying for sports, people will think more about the service and quality of products when choosing media.

The third model focuses on testing whether product factors mediate the relationship between individual needs and willingness to pay. Based on uses and gratification theory, when users choose media, they will have a great initiative from their own needs. But now there are countless media platforms, and there is a phenomenon of high homogenization. At this time, the services and quality of the product should play a mediating role when choosing media based on personal needs. That is to say, individual needs may influence the willingness to pay through the mediating effect of product factors. The results revealed that product variables play a mediating role in the impact of individual needs on willingness to pay, but it is not a partial mediation.

This study proposed the fourth model in which the copyright consciousness, moderate the effects of individual needs on willingness to pay for sports media. Although the paid model has entered Chinese sports media, free circulation on the Internet has provided channels for viewers to watch for free. According to the result, copyright consciousness does have a significant positive moderating effect in this process. This result is also consistent with the findings of the second model, that is, the exclusive right to broadcast can increase respondents' willingness to pay. From a practical point of view, people with lower copyright consciousness are more likely to choose piracy or sports video online rather than pay for sports. It calls for greater action from government and the sports media industry. It is necessary for the society and government to make more effort in educating the public about the importance of protecting copyright, the illegality, and unethicity of piracy.

The additional finding part is a demographic difference test about the channels of watching sports programs, the time spent, the payment frequency, and monthly expenses. The finding showed that males usually spend more time watching sports programs than females. In real life, when it comes to sports, females seem to be underrepresented compared to male. That is because females usually have lesser interest in sports than males(Deaner, Balish, & Lombardo, 2016). This study finds that men seem to be more representative than women.

Regard to the sports involvement, income is an essential variable(Thibaut, Eakins, Vos, & Scheerder, 2017). In the income difference test, we found that respondents whose income in the 9001-12000 RMB have the highest frequency to pay for sports and significant differences between other income groups. For paid sports, there is no absolute positive correlation between income and paid frequency. It may be because the respondents of this income group have enough income and more

stable work intensity. The respondents who have high income may have unstable working hours and intensity, and lower sensitivity to sports than their job. In addition, low-income mainly focus on material consumption and has less investment in spiritual and cultural consumption. This phenomenon also happened in the education difference test. The respondents whose educational level is undergraduate/Junior college has the highest frequency to pay for sports than other respondents. The respondents in high school/technical secondary group and undergraduate/junior college group usually spend more money on sports than other respondents who were educated higher or poorer. There are two possible reasons for this phenomenon. 1). Undergraduate/Junior college group accounts for the largest proportion of the educational level of the sample. 2). Respondents in undergraduate/junior college group are usually upper-middle income in the society. They have certain economic base and leisure time to develop sports hobbies. For people with higher education, more attention is paid to the accumulation and research of his/her relevant professional knowledge.

Limitations and Future Research

Although all of the research questions were answered and hypotheses were tested, this study comes with a number of limitations. First, the representativeness and pertinence of the sample need to be strengthened. The researchers mainly invited their friends to fill out and forward questionnaire through social media. They have tried to enter some sports Tieba and BBS to randomly invite people who have high enthusiasm for sports, but failed, because they have strict requirements on the level of visitors and identity. Second, the proportion of male and female respondents was almost equal, thus it is hard to see whether there may be a gender differences in attraction to paid sports. Additionally, there are some defects in the design of copyright consciousness scale. In the pillar study, the

reliability of this part was not found due to too few samples collected. However, in the final large sample analysis, it was obviously found that the reliability of the scale was not satisfactory. In order to ensure the reliability, two scale items had to be moved. In the end, only two scale questions were left to verify the copyright awareness, which has certain influence on the analysis of the moderating effect of copyright.

Furthermore, this preliminary study provides the groundwork for those people interested in Chinese paid sports. The results also give the government and the sports media industry some advice. In terms of research content, future research can make a deeper and more detailed analysis focusing on copyright consciousness and behavior. Because in this study, we found that there is a gap in copyright awareness and behavior. Although most people agree that they need to protect copyright, they often ignore copyright when it comes to behavior. In terms of research methods, this research conducted quantitative as the main research method, which provide us many interesting and meaningful findings and implications. Based on these findings, future research can conduct qualitative research, such as in-depth interviews, focus interviews, etc., to collect richer information and get more nuanced insights, which can give more detailed answers about why and how these situations exist.

CHAPTER SEVEN:

CONCLUSION

Using uses and gratification theory to explore the relationship between individual needs, product variables and purchase willingness in the context of paid sports media in mainland China, the study was in line with the theoretical expectation that audience's needs among interest, affective, cognitive, and social interaction needs will lead to high willingness of paying for sports media. More specifically, the study revealed that users' willingness to pay has a significant and positive relationship with product variables. It emphasizes that the sports media industry has to make more effort on enhancing the service quality of paid sports. The results show that when choosing paid sports, sports fans pay more attention to exclusive broadcasting rights and appropriate membership fees than the service quality. This implicates that the quality gap between paid and free sports is not particularly large in the minds of users. Additionally, this study found that product variables mediate the relationship between individual needs and willingness to pay. Product variables determine whether the user's individual needs can be gratified to some extent. Furthermore, copyright consciousness is a moderate factor in the process of individual needs affecting purchase willingness. The more copyright-conscious people are, the more willing they are to pay.

Based on the above findings, this study contributes to academic researchers. There is no previous research that examined the product variables and copyright consciousness as mediate factors

and moderated factors in the relationship between media users' personal preference and willingness to pay. One valuable piece of information is that for copyright, there is a huge gap between consciousness and behavior. In other words, Chinese people's awareness of copyright will affect their behaviors to protect copyright, but it is not highly relevant to their actual behaviors.

This study also provides some practical implications for Chinese sports industry. Sports is an attractive content to media, and its consumption or usage of sport is often much higher than other entertainment activities. According to Kim (2017), users pay most attention to sports video regardless of whether it is paid or free. The key to the realization of the Internet paid-sports content model is the user conversion rate. This study revealed that the affection and social interaction needs are the main needs when users watch paid sports. Except the consider on exclusive broadcast and price setting, users pay more attention on sports commentary and video quality. It is important for sports media to enhance or adjust their services quality and strategy in order to attract users to use the paid sports model to the greatest extent and increase the stickiness between users and the products.

Additionally, this study also has some practical implications for Chinese government. The State Council proposed to take the sports industry as an essential force for promoting the unceasing growth of the economy and society, to develop the enormous potential market space of the sports industry, to use the sports industry to expand domestic demand and promote consumption, and to set the goal of creating a 500 million scale sports market by 2025(Josh, 2017). It is the responsibility and obligation of governments to support the achievement of this goal. Paying for sports content is a very new model for China. The long-term public welfare of sports makes the audience form the habit and psychology that sports content should be watched for free. The government needs to loosen up and

give more freedom to the sports media. In addition, the government should make more efforts to educate people to protect copyright from behavior.

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APPENDIX A:

QUESTIONNAIRE: ENGLISH VERSION

Hello:

We sincerely invite you to participate in the research of " The research on the audience's purchase motivations and determinants factors of paid sports." If you are 18 years old or older and has the experience of using paid sports, and agree to participate in this survey, you will complete the following questionnaire through the online platform. This investigation is not registered and your personal information will be kept confidentially. You have the right do not to participate in this survey, and you also have the right to exit during the process.

Basic Information

1. How do you watch sports event? 1.offline 2.online 3. traditional media
2. Have many have you paid for the sports program in total? 1. 1 hour or less 2. 1-3hours 3. 3-5hours 4. 5-7hours 5. over 7 hours
3. How often do you watch paid sports? 1. Never pay 2. Sometimes pay 3. Often pay 4. Usually pay 5. Always pay
4. What is the average amount of money you spend on watching online sports program every month (RMB) ?
.0-15Yuan 2. 16-30 Yuan 3. 31-45 Yuan 4. 46-60 Yuan 5. Over 60 Yuan

Individual Needs

This part is a study of the motivations and needs of purchasing paid sports. Each question has five grades. (1: strongly disagree, 2: disagree, 3: neutral, 4: agree, or 5: strongly agree)

Interest needs

5. I watch paid sports because I am a fan of a particular team/player
6. I watch paid sports because I like it.
7. I am passionate about sports or some sports events.

cognitive needs

8. I can get more sports information through watching paid sports.
9. Through paid sports, I can find some sports teams or games which cannot find under free sports
10. Through paid sports, I can access to the more sports program that I am interested in.

affective needs

11. I enjoy watching paid sports more than free sports
12. I am more excited when I am watching paid sports

13. Watching paid sports is more immersive than watching free sports

social interaction needs

14. I usually contact with others about information from the paid sports

15. Paid sports give me more topic to discuss with my friends and family

16. Watching paid sports makes it easier for me to fit in with my friends

Products Variables

This part related to the factors that affect your willingness to pay membership fees and watch paid sports events from a product perspective. Each question has five grades. (1: strongly disagree, 2: disagree, 3: neutral, 4: agree, or 5: strongly agree)

membership privilege

17. I paid the sports membership fee because I want to skip the ads

18. Without ads, I can get a more comfortable view experience

19. The privilege that paid sports can skip ads has a positive effect on my willingness to purchase membership fee.

20. The playback function of the sporting broadcasting is one of the reasons I choose to subscribe the paid sports

21. I enjoy watching paid sports without time or place restrictions

Video quality

22. The paid sports video has high definition

23. Paying for sports is a better option because it has a high video quality

24. Paid sports media usually offer higher video quality, which drives me to use paid sports

Sports commentary

25. Excellent sports commentary can let sports competition more exciting

26. The sports commentators will influence my choice to select sports program.

27. I purchase sports membership fee on a platform because I prefer its sports commentators

Exclusive broadcast

28. The items I want to see can only be viewed for a fee

29. I paid the membership fee because of the sports streaming is exclusive broadcast in this media.

30. Exclusive broadcast of video sports will prompt me to purchase a sports membership

Price setting

31. I think I have the ability to buy sports members

32. The current price setting for paid sports membership fees on the market has no effect on my choice of paid sports

33. I think the current price setting is appropriate

Willingness to purchase:

This part is related to your willingness to pay the membership fee to watch paid sports. Each question has five grades. (1: strongly disagree, 2: disagree, 3: neutral, 4: agree, or 5: strongly agree)

34. I prefer paid sports programs to regular sports programs

35. I think select paid sports is a good choice for me
36. It is likely I will subscribe sports program in the future.
37. I am willing to recommend my family and friends to subscribe paid sports.

Copyright consciousness

This part is related to your copyright consciousness. Each question has five grades. (1: strongly disagree, 2: disagree, 3: neutral, 4: agree, or 5: strongly agree)

38. I think we need to protect copyright
39. don't like watching pirated sports programs
40. I seldom or never watch pirated sports programs
41. I think it is not a good choice to watch sports programs through some illegal channels

Personal Information

42. Your gender: 1: male 2: female
43. Your age: 1. 18 ~ 25 2. 26 ~ 35 3. 36 ~ 45 4. 46 ~ 55 5. 56 or over 56
44. Your monthly income: 1. 3000 yuan or less 2. 3001-6000 yuan 3. 6001-9000 yuan 4. 9001-12000 yuan 5. Over 12000 yuan
45. Your highest education : 1. Junior high school or below 2. High school/ technical secondary school
3. Undergraduate/ Junior college 4. Master Student 5. doctoral Student
46. Your occupation: 1 Full-time Students 2 Production 3 Sale 4 Marketing/PR 5
Customer Service 6 Administration/ Support 7 Human Resources 8 Finance/Audit 9
Civilian 10 Technology 11 Management 12 Professor or Teacher 13 Consulting
14 Professionals (Accountants, Lawyers, Architects, and Healthcare etc.) 15. media worker 16.
Other

Thank you for participating in this survey. Have a good day! Goodbye!

APPENDIX B:

QUESTIONNAIRE: CHINESE VERSION

你好:

我们诚邀您参与“付费体育受众的购买动机及其决定因素研究”。如果您年满 18 岁，对中国付费体育模式有一定的了解或了解，并同意参与本次调查，您将通过在线平台完成以下问卷。本次调查未登记，您的个人信息将被保密。您有权不参与本次调查，并有权在调查过程中退出。

基本信息

1. 您一般通过什么渠道收看体育节目

1. 线下（现场观看） 2. 线上（互联网，移动客户端） 3. 传统媒体（电视，广播，报纸等）

2. 您一般每周有多少小时在线上观看体育节目

1. 1 小时或以下 2. 1-3 小时 3. 3-5 小时 4. 5-7 小时 5. 7 小时以上

3. 您付费观看体育节目的频率如何？

1. 从未付费 2. 偶尔付费 3. 有时付费 4. 经常付费 5. 总是付费

4. 您平均每月观看互联网付费赛事所花费的金额

1. 0-15 元 2. 16-30 元 3. 31-45 元 4. 46-60 元 5. 60 元以上

个人需求：

这部分是关于购买付费体育的动机及需求的研究。每个问题有五个等级。(1:非常不同意, 2:不同意, 3:中立, 4:同意, 5:非常同意)

兴趣需求

5. 我看付费体育是因为我是某个运动队或者运动员的粉丝

6. 我选择付费体育是因为我喜欢某项体育运动

7. 我对体育或者某体育项目充满了热情

认知需求

8. 通过观看付费体育节目，我可以获得更多的体育信息。

9. 通过付费体育，我可以看到一些在免费体育节目中看不到的体育节目

10. 通过付费体育，我可以接触或者了解到更多我感兴趣的体育项目。

情感需求

11. 和观看免费体育节目相比，看付费体育节目更让我享受

12. 和观看免费体育节目相比，观看付费体育节目更让我感到愉悦。

13. 和观看免费体育节目相比，观看付费体育能让我更沉浸其中

社交需求

14. 我可以和他人讨论付费体育中的节目信息

15. 付费体育给我提供了更多的与朋友和家人聊天的话题

16. 观看付费体育节目可以让我更容易融入朋友的圈子

产品因素：

这部分是对你支付会员费和观看付费体育赛事的产品权益因素的研究。每个问题有五个等级。

(1:非常不同意, 2:不同意, 3:中立, 4:同意, 5:非常同意)

付费特权

17. 我购买付费体育的会员, 是因为我想跳过广告

18. 没有广告, 我可以得到一个更舒适的观看体验

19. 付费体育可以跳过广告这一特权对我购买付费体育有积极影响

20. 付费体育节目的主动选择权是我购买付费体育会员的原因之一

21. 我很享受看观看付费体育比赛没有时间和地点限制的这一特点
视频质量

22. 付费体育的视频画面更加清晰流畅

23. 购买体育付费会员是一个更好的选择, 因为它有高质量的视频

24. 付费体育媒体通常提供更高的视频质量, 这促使我使用付费体育
体育解说

25. 优秀体育解说能让体育比赛更加精彩

26. 体育解说员会影响我对体育节目的选择。

27. 我购买某一平台的付费体育会员是因为我更喜欢它的体育解说员
体育视频独播权

28. 我想看的体育节目需要付费才能看

29. 我支付了会员费, 因为我喜欢的体育节目在这家媒体独家播放。

30. 体育视频的独家播放会促使我购买这家媒体的体育会员

价格

31. 我认为我有能力购买体育会员

32. 当前市场上付费体育会员费的价格设置对我选择付费体育没有影响

33. 我认为当前付费体育的会员费设置是合理的

支付意愿：

这部分与您愿意支付会员费观看付费体育节目有关。每个问题有五个等级。(1:非常不同意, 2:不同意, 3:中立, 4:同意, 5:非常同意)

34. 和一般的体育节目相比, 我更愿意观看付费体育节目

35. 我认为购买付费体育会员对我来说是一个很好的选择

36. 将来我很可能会继续选择付费体育节目

37. 我愿意推荐我的家人或朋友选择付费体育节目。

版权意识：

这部分与您对版权的态度有关。每个问题有五个等级。(1:非常不同意, 2:不同意, 3:中立, 4:同意, 5:非常同意)

38. 我认为我们需要保护版权

39. 我不喜欢观看盗版体育节目

40. 我很少或者从来不看盗版体育节目

41. 我认为通过一些非正版渠道观看体育节目, 不是一个好的选择

个人信息：

42. 您的性别: 1. 男 2. 女
43. 您的年龄: 1. 18-25 2. 26-35 3. 36-45 4. 46-55 5. 56 或以上
44. 您的月收入: 1. 3000 或以下 2. 3001-6000 3. 6001-9000 4. 9001-12000 5. 12000 以上
45. 您的最高学历: 1. 初中及以下 2. 高中 / 中专 3. 大专 / 本科 4. 硕士研究生 5. 博士研究生
46. 您的职业方向 : 1. 全日制学生 2. 生产人员 3. 销售人员 4. 市场/公关人员 5. 客服人员 6. 行政 / 后勤人员 7. 人力资源 8. 财务 / 审计人员 9. 文职 / 办事人员 10. 技术 / 研发人员 11. 管理人员 12. 教师 13. 顾问 / 咨询 14. 专业人士 (如会计师, 律师, 建筑师, 医护人员) 15. 媒体工作者 16. 其他

APPENDIX C:

IRB APPROVAL LETTER



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

May 24, 2019

Jing Li
Zimmerman School of Advertising and Mass Communications
Tampa, FL 33612

RE: Exempt Certification

IRB#: Pro00040472

Title: The research on the audience's purchase motivations and determinants factors of paid sports

Dear J. Li:

On 5/24/2019, 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,

A handwritten signature in black ink, appearing to read 'Kristen Salomon', followed by a horizontal line.

Kristen Salomon, Ph.D., Chairperson USF Institutional Review Board