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Willingness to Pay for Online Sport Broadcasting Platforms in China: Monopoly and Shared Content

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Abstract

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The purpose of the current research was to examine viewers' willing to pay (WTP) for online sport streaming platforms in China. Categorization of WTP on monopoly platform and shared-content platform is explored, which can be used as the theoretical basis for online sport platform development. Adapting contingent valuation method (CVM), the viewers' monetary evaluations between online platforms have exclusive sport contents and shared sport content were examined. Both sport viewers and none sport viewers' WTP were analyzed. According to the results, a platform's exclusive sport contents generates more WTP. Respondents who value exclusive content and respondents who have subscribed online sport contents before have high intention to pay more subscription fee. Respondents who does not care about exclusive contents or who have not yet subscribed any online sport platform, the willingness to pay the fee is the lowest.

Keywords: Sports Media Consumption; OTT Sport Platform; Willingness to Pay;

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I. Introduction

1.1 Background

1.1.1 Popularization of digital sport media

Television is no longer the only screen delivering footage and news to people about sport. Computers, the Internet, Web, mobile and other digital media are increasingly important technologies in the production and consumption of sports media. Rapid developments and advances in media technology have now reached a level where online television sources called Over The Top networks (OTT) is able to exceed the traditional television, from the perspective of convenience, customizability and content availability without the cost of leading cable and satellite providers (Pepper, 2017). With the entry of Web 3.0 era, online channels is a feasible platform to offer access to full-game or highlight reports to a broad audience (Theysohn, 2006). Moreover, the quick distribution of broadband as well as the growing popularity of paid content and particularly video streaming services could turn online sports media into a viable alternative to traditional media channels (Boumans, 2004).

An expanding array of popular sports media – industry, user, club, athlete and fan produced – is now available and accessible in networked digital communications environments. This change is confounding the thinking of major sports organizations that have lived off the generous revenue flowing from exclusive broadcast contracts with free-to-air and subscription television networks for the last five decades. These developments are creating commercial and policy confusion, particularly as sports audiences and the advertising market fragment in line with the proliferation of niche channels and sources of digital sports media (Hutchins and Rowe, 2012).

1.1.2 Digital sport media in China

In the recent years, the pragmatic advancement and widespread popularity of internet technology and the convenience of smart phones fully embraced the dynamic lifestyle of Chinese people. Consumption and demand of sports play a significant part in between

(Zhang, 2017). In 2018, published Government Performance Report shows that 1% of China’s GDP is from sport industry. However the distribution of overall sports industry chain is abrupt, with 79% of the income from sports goods manufacture, less than 18% from sports services (including event operation, sports training, sports broadcast right and etc.). The structure of China’s sports industry is the opposite of that in the United States, where sports services account for 57%, sports goods manufacturing for 30% and other sports industries for only 13%.

Starting from 2016, local online network and OOT companies like Tencent Vedio, iQiyi, Youku Vedio and PPTV together have carved up the sport broadcast market in China, also as an expectation of meeting the State Office’s plan of “Internet Plus[1]”.

In the future, China's sports service has huge development potential. Thus, the sports event industry, sports video, and other

[1] http://www.sport.gov.cn/n16/n1077/n1227/6052579.html.

service industries will rely on the Internet platform to develop many new models to escalate the development of sports industry in China (Zhang, 2017).

1.2 Purpose of study

The purpose of this paper is two-fold. First, how the number of platforms broadcasting the same sport contents will effect on consumers' WTP is analyzed. On the other hand, the average WTP for OTT sports streaming platforms among both potential and regular consumers is investigated. Generally speaking, digital products such as live sport contents on the internet are characterized by high fixed and low variable costs, making it difficult to apply traditional cost-based pricing strategies (Theysohn, 2006). Thus, pricing strategies based on consumers' WTP plays a vital importance and the knowledge of WTP is prominent for each OTT company to evaluate the profitability of such a product.

If WTP decreases when multipole OTT platforms broadcast same sport contents, the decentralized sales of sports broadcast right could widen the financial gap between OTT platforms in China while purchasing various sports broadcast rights, which could in turn lead to increasingly unbalanced competition (Haan et al, 2002). Therefore, the WTP among viewers subscribing different OTT platforms is assessed.

Moreover, sport viewers' WTP and none sport viewers' WTP are analyzed for potential product and pricing strategies for OTT sport broadcasting platforms in China. Because consumers have individual consumption preferences, the identification of market segments can make the application of product differentiation better serve consumers' preferences and grab additional consumer income.

1.3 Research questions

Sport as a corporate marketing tool provides increased flexibility, broad reach, and high levels of brand and corporate exposure. Many organizations have recognized this potential of sport as a vehicle for accomplishing many of their marketing-related objectives. In turn, this has resulted in significant growth in the sport industry, in particular in its media consumption both online and offline.

Stepping into 2020, China has yet to get into the habit of paying to watch sports on the Internet. Because of China’s particular social system, people perceive old TV sport programs as a public good provided without charging a cent. Many viewers are used to the free TV model and believe that the internet should provide free services (Zhang, 2017). Understanding this fact, this study wants to examine the actual willingness to pay for online sport contents of Chinese viewers. Because according to the research conducted by China Radio and Television Network company, comparing to 2017, there was significant increase of paying users of IPTV and OTT platform in the following year in China. The exact figure will be shown in the next chapter. As market has grown bigger and viewers started to choose IPTV and OTT service, their media consumption behavior might have been changed.

Thus, the main research questions of this study are:

1. What is general Chinese viewers’ WTP for exclusive sport

OTT platform and shared-content sport OTT platform?

2. What is the relationship between the WTP and number of platforms broadcast same sport contents?

3. Is there a correlation between sport viewer's WTP and whether a platform has exclusive contents or not?

II. Literature review

2.1 General sport broadcasting environment in China

According to the survey conducted by China Radio and Television Network co., ltd. and Beijing Meiland Media Communication Strategy Consulting co., LTD. (CMMR)[2] which released the 2018 annual Chinese household viewing market, in 2018, the national television coverage and viewing status in China was extended to 1.322 billion people nationwide. There are more than 400 million TV sets in use in all households nationwide. According to the survey data, the most important demand for 92.9 percent of the residents to use TV sets is "watching live TV programs". High-quality TV programs are still the "magic weapon" for TV channels to dominate the living room economy. On the other hand, 5.16% of the country's residents have the most important demand for TV series, movies, variety shows and other programs video. Traditional linear

[2] Doi: 10.16045/j.cnki.catvtec.2018.12.002

live TV can no longer meet the needs of this part of the audience, rich content and independent viewing is the key to improve the influence of video service providers. With the accelerated pace of life and personalized development of user demand in the future, the scale of these users will continue to expand.

2.1.1 Previous studies of broadcasting environment in China

In 2018, various telecom operators formulated and implemented various measures to speed up and cut fees, and rapidly promoted the construction and development of China's broadband network. Survey data show that in 2018, 276 million households in China had broadband installations, accounting for 74.1 percent of the total number of TV households in the country. With the increasing demand of Chinese residents for broadband network and the continuous promotion of the "Internet plus" strategy in the vast rural areas, the penetration rate of broadband network will be further improved in the future. In recent years, IPTV and OTT TV based on broadband network have achieved great development, challenging the leading position of cable TV network in living room economy, which cannot be underestimated (2018). With the rapid development of Internet technology, IPTV and OTT TV have become an important way for residents to watch TV, and the user scale has been growing rapidly. In recent years, with the rapid development of smart TV and smart TV box, more and more users are watching live TV with OTT devices to watch video programs.

In 2018, more than 50 percent (51.6 percent) of the country's cable digital TV subscribers, with more than 680 million subscribers, remained the main way of receiving TV signals. However, faced with the continuous rise of receiving methods such as IPTV and OTT TV, the subscriber scale of cable digital TV has been declining for three consecutive years since 2015, and the market share has been continuously split. IPTV and OTT TV, two new receiving ways, continue to win the favor of users by virtue of massive content resources and good interactive experience, and the user scale continues to develop. In 2018, the number of IPTV users was nearly

310 million, accounting for 23.2%, making it the second largest TV signal transmission channel in China. In recent years, many policies have laid a good foundation for the steady and healthy development of OTT TV. OTT TV has also maintained a rapid growth trend. In 2018, the scale of OTT TV users in China has exceeded 140 million, accounting for 10.8%　(see Table 1).

Table 1: Combination Distribution of Various Reception Modes of TV Signals in China in 2018 (TOP5)

Combination of Multiple Receiving Modes	Ratio (%)
Cable TV, OTT TV	45.4
IPTV, OTT TV	38.0
Cable TV, IPTV	4.2
Satellite Live TV, OTT TV	3.3
Cable TV, IPTV, OTT TV	2.3

Until the state council upgraded national fitness into a national strategy, “Internet + Sports”, the sports industry has gradually become a new investment focus. The situation that the traditional TV media monopolize the sports broadcasting right is broken. The rapidly developing Internet video began to cover sports fans, and the number of users on the platform increased. In order to seize more traffic, video began to compete for sports copyright.

At present, the state strongly supports the "Internet plus" policy, encourages new Internet technologies and social enterprises to invest in sports product research and development, sports platform establishment and sports service model innovation, and drives the national fitness with new technologies. Multi-platform mobile Internet technology has developed rapidly in China, the function gradually cover all aspects of people's life, more and more scholars to "Internet + sports", sports studies of new media platforms live events from the mode of "Internet + sports", and discusses the sports marketing of new media.

2.2 Over-the-top sport streaming in China

As Rayan and Bryant indicate, transforming the sports-media relationship are the internet and World Wide Web, which offer around-the-clock webcasts, online gambling sites, and sports blogs (2014). Michael Real offers in “Sports Online: The Newest Player in Mediasport” a comprehensive analysis of the impact of these new media technologies on the sports media industry and its fans (2012).

The 2008 Beijing Olympics represents an important moment in the evolution of the media sports cultural complex. The global appeal of the Olympics made the existing and potential value of the Internet and Web apparent, even as the relevance and role of television endured. More Internet streams were accessed in the first day of the 2008 Olympics than for the entire duration of the Athens Olympiad four years earlier (Boyle & Whannel 2010b, p. 356). A popularity threshold for online sport had been passed as growth was observed across different continents. A reported 53 million people in China watched live streaming of the Olympics on personal computers, along with 22 million users in Latin America and around 51 million in Europe. In the US, online coverage was comparatively limited, but still managed to attract approximately 18 million unique views on authorized Olympics sites.1 These numbers compare with the estimated 894 million viewers who watched on broadcast television in the host nation alone, and a daily average audience of 30 million viewers in America at the outset of the Olympics (Marshall et al. 2010, pp. 268-69). While not rivaling terrestrial television, the scale of the online audience demonstrates clearly that enough users are logging on to make the Internet a major commercial and cultural concern. These developments were factored into the planning for the 2012 London Olympics, with the BBC's Roger Mosey, the executive overseeing the corporation's coverage, determined to make the Internet 'a huge part of what we do' in the delivery of a projected 5,000 hours of overall viewing (Boyle & Whannel 2010b, p. 356; Adler 2011). In line with the IOC and the BBC, sports and media organizations around the world acknowledge that the Internet and World Wide Web occupy a key strategic position in current operations and future directions.

In China, with the change of consumption concept, the increasing awareness of copyright protection and the continuous cultivation of users' payment habits. In 2018, users' WTP has been significantly improved in various functions of national cable digital TV, IPTV and OTT TV. Specifically, as shown in figure 2, the proportion of cable digital TV users' willingness to pay for "watching live TV" was 14.6% in 2018, 2.7 percentage points higher than that in 2017. The percentage of IPTV users willing to pay for "live TV" was 9.8 percent, up 2.9 percentage points from 2017. OTT TV users' willingness to pay to watch live TV increased by 5.5 percentage points. The development of channels cannot be separated from the support of high-quality content. With the development of circle culture and the increasing trend of focus on mass, the high-quality content that is broadcast and enjoyed alone has become an important chip to attract users to pay. In view of this, the personalized "video online on-demand" feature is increasingly popular with users. Compared with 2017, cable digital TV, IPTV and OTT TV users' willingness to pay for "video on demand online" increased 0.3 percent, 1.7 percent and 3.6 percent respectively.

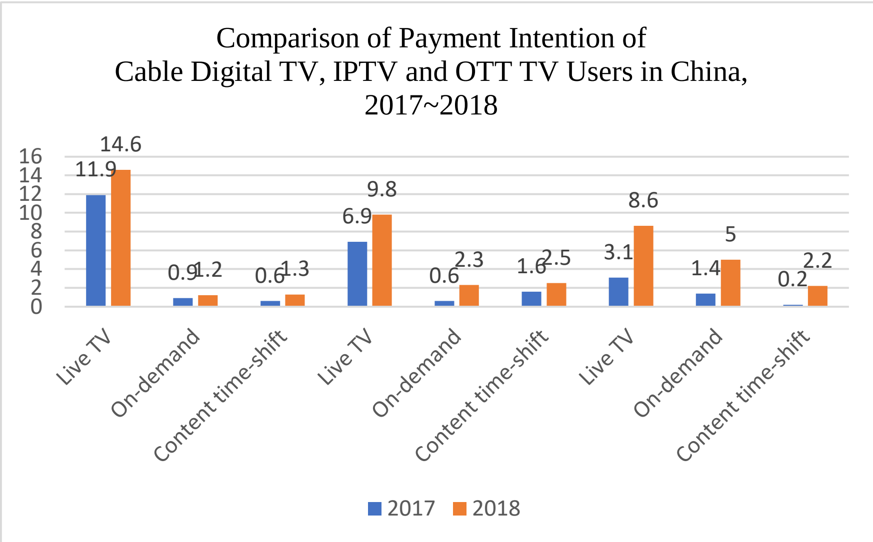


Figure 2

When we think of television, we think of the middle-aged and elderly users group. OTT users, however, are so different. Nielsen Network Report 2016 shows that in the 18-50 year old group of young and middle-aged users, high education, high income, high consumption groups are OTT diehard loyalty; Meanwhile, the core of the main users is the parent-child family (2016).

Compared to traditional TV users, this group of people is relatively small base. According to big data from All View Cloud (AVC), the daily active users of Internet TV in China were 38 million in 2016. However, the penetration rate of domestic Internet TV is increasing. Another data of AVC also suggests, the internet television (OTT) industry has maintained a high growth rate of over 30%, and it is predicted that the commercial scale of OTT market in China will exceed 600 billion after 2020. When the market is enriched, it will meet the requirements of different consumer groups.

2.2.1 Previous studies of OTT sport streaming in China

2015 is a year of great development for China's sports industry. Various policies for supporting the sports industry have been issued intensively, the approval system for sports events has been liberalized, and all kinds of capital have been pouring into various fields of the sports industry. In particular, Tencent and PPLIVE based internet enterprises compete to buy the right to broadcast new media of high-quality sports events at home and abroad, which makes this originally weak industry suddenly burst into dazzling light. In the short term, China's sports event copyright market presents a hot stage of buy-buy, and the number of people watching sports information through the Internet and mobile media in China has increased sharply. China's four major Internet portals, Wanda group and Suning appliance have participated in bidding for the broadcasting rights of domestic and international sports events.

China's special sports television industry pattern leads to the long-term low value of China's sports event broadcasting rights, and the market development has not been fully developed. Most of China's sports event market development income relies on sponsorship, while the market development income of the broadcasting rights is less than 10%. With the advent of the Internet era, on December 18, 2007, CCTV international network co., ltd. signed an agreement on the new media broadcasting rights of the Olympic Games and the International Olympic Committee. New media also officially involved in sports event broadcasting rights and became the official media of Olympic Games broadcasting, greatly accelerating the speed of sports event publicity and stimulating the rapid development of sports event industry. In October 2014, the state council on accelerating the development of sports industry, promote the sports consumption of several opinions "clearly put forward" trading platform to develop sports industry resources, market operation mechanism innovation, promote the host, the rights of the event, the athletes transfer rights have trading terms fair, just and open flow of resources ". This marks the beginning of China's policy on sports broadcast rights to loosen, relax the restrictions on sports broadcast rights, so that the monopoly of sports broadcast rights has been alleviated to some extent.

The policy on the broadcasting right of sports events has been loosened, and the restrictions on the broadcasting right of sports events have been relaxed, so that the monopoly of the broadcasting right of sports events has been alleviated to some extent. Recently, with the rapid development of the Internet, especially the mobile Internet, new media such as Sina, Letv sports and Bestv have risen rapidly and become a new force in the broadcasting of sports events. Due to the nature of most TV organizations in China, they are unable to obtain financing from the society. Their funding sources mainly rely on the allocation from the higher government and TV advertising revenue, and they do not have a large amount of funds to buy the broadcasting rights of domestic and foreign high-quality sports events. New media agencies, however, most of them are some of the network enterprise, with strong financing ability, to raise big money buyer of internal and external quality sports rights, under the new sports rights competition, sports broadcasting rights in domestic and foreign prices will sharply increase, the body the power to the Chinese super league tournament 8 billion yuan rights, 20 times the price of rights is a season, Tencent paid $500 million for all media rights, NBA is also up nearly 5 times last season. These examples fully prove that the price transaction of sports event broadcasting rights in China will increase significantly due to the opening of sports event broadcasting rights system and the active involvement of new media.

At the user level, users value OTT as "content" and "experience". China's Internet television (OTT) industry is in the golden development period, and the advertisers who are the first to test the water hold a positive and expected attitude towards the effect of large-screen launch. Tencent, which covers the most Internet users in China, launched and laid out OTT strategy in the first half of 2015. Tencent video TV terminal currently has more than 6 million hours of rich copyright content, including films, TV series, variety, animation, sports and dozens of categories. For example, in terms of films, Tencent not only covers 100% of Chinese cinema films, but also has entered into cooperation with several Hollywood film giants to import more than 2,000 classic films and the latest cinema blockbusters.

2.2.2 Current OTT providers

As a “big brother” of China’s internet technology companies, Tencent sensed and grabbed the opportunity of seizing the market early, by offering over 1 billion USD for partnership with NBA, NFL and UEFA Champions League. With this big amount of investment money, Tencent is not here for tapping the water. Before Tencent, there were around 300 NBA games broadcasted in China per year, and Tencent made this number to 1500 (Tencent, 2016). Tencent also produced a full range of sports programs and sports variety shows to expand the pan-sports crowd,, also launched a series of NBA - themed games. With widely-spread instant messaging apps WeChat and QQ, Tencent has the opportunity to reach up to 800 million users and 600 million mobile users in China. Most NBA fans are a subset of Tencent's users, which is why Tencent is able to make money from exclusive rights.

When Tencent put it effect on Basketball, the exclusive broadcasting right of major international football leagues are sold to PPLIVE (PP), an online broadcasting site belongs to a big Chinese corporate, Suning. In 2015, PPLIVE won the exclusive broadcast rights of La Liga. After several years of accumulation and brewing, PPLIVE finally achieved the "grand slam", in the 2017 season collected the copyright of the five European leagues (premier league, Spanish, German, Italian and French). In the 2017 season, more than 1,000 live matches including the champions league, Europa League, FA Cup, Dutch Liga, Scottish Premier League and Russian Super League can also be seen on PPLIVE, as well as live matches of Chinese Super League, AFC Champions League. High definition live game signals cover OTT terminal, PC terminal, mobile terminal, smart TV, tablet computer, PC and mobile phone.

The emergence of PPLIVE has dealt a severe damage to China's largest sports cable channel, CCTV5. Starting in 2015, PP bought out the exclusive media rights to La Liga for a whopping 250 million euros. This means that PP sports will pay 50 million euros a year until 2020. If CCTV wants the rights to La Liga, it will have to buy them from PP, which is certainly not cheap. CCTV, unwilling to "spend a lot of money", will have to pull out. In 2017, PP monopolized exclusive media rights to all popular football matches. CCTV, as an integrated platform, has a lot of unpopular broadcasting tasks, so it is impossible to broadcast all champions league matches live. All CCTV should want to have a choice when negotiating, such as broadcasting only after elimination. But the champions league is a total package deal, so CCTV chose to withdraw from the bidding. Many football programs that have accompanied Chinese fans for more than a decade have also had to be canceled.

Compared with Tencent and PPLIVE, iQiyi was previously with less investment in sports copyright. In its earnings report, iQiyi looked ahead to the third quarter of 2018: total revenue is expected to be between 6.7 billion yuan ($985.3 million) and 6.98 billion yuan ($1.03 billion), up between 43 percent and 49 percent year-on-year. But Most of the revenue comes from online variety shows. Sports copyright business is not as good as network variety do. According to AI financial news, the stronger the copyright library is, the more attractive it is. However, the pressure of realization always follows. Copyright distribution, advertising and member income were important components of commercial realization of sports industry in the past. It is well known that it is difficult for the current sports industry to break even.

Though iQiyi realized the significance of online sports services a little bit late, but it did not back up. The leading women's sport organization Women Tennis Association (WTA) and one of China's largest integrated video service platforms iQiyi agreed to a decade-long senior partnership in 2015 that iQiyi would become WTA's digital rights partner in China starting from 2017. In this decade, Chinese tennis fans are able to watch almost all WTA's tournaments around the world through multiple devices on iQiyi platform. Two years later, iQiyi sports reached strategic cooperation with the Association of Tennis Professionals (ATP), becoming the exclusive new media partner of the ATP in mainland China from 2017 to 2020. Audience is able to watch all the ATP World Tour tournaments through iQiyi's multiple terminals. Except from the partnership with WTA and ATP, iQiyi also holds the exclusive digital rights of top tennis events such as Australian Open, China Open and Laver Cup in mainland China.

Although tennis is a ball game with relatively high field and technical threshold, in recent years, the number of users who watch live tennis matches through the network platform has gradually increased. According to the research, the 2017 China Open alone has been watched more than 15 million times on iQiyi.

iQiyi holds all the Copyrights of ATP and WTA games on the new media terminal, and integrates these games with its huge user base, which is of great benefit to the spread of NBA culture in China. Now, every season iQiyi will broadcast hundreds of tennis games, and launched a new tennis event broadcast services and value-added services. Domestic fans can not only see the live broadcast of tennis games for the first time, but also experience the interpretation of famous commentators and participate in a variety of offline activities, which "shortens" the distance between fans and tennis venues and further promotes the global spread of tennis culture.

After iQiyi bought the international tennis copyright, iQiyi Video became a channel for Chinese tennis fans to learn about the game, and an interactive platform to discuss the game. Users can express their views through the barrage while watching various games and have a heated discussion. Interactivity of sport dissemination process is enhancement so that that audience can change from passive acquisition to active participation in information dissemination, so as to realize interactive communication between audience and media. A more participatory and interactive form of sports communication enables the audience to share information, obtain a stronger sense of presence, and ignite more people's enthusiasm for sports events.

With the development of sports culture consumption market, domestic sports fans show their desire for high-quality sports content, which not only enhances the confidence of iQiyi, but also brings pressure to it.

However, current fans are also developing a pay-per-view habit, which makes online media more profitable and gives them more confidence to wrestle with CCTV. Next, believing that CCTV's broadcast rights resources should shrink further, more and more sports fans choose to pay OTT services. There will also be fewer free lunches for Chinese fans.

According to the survey conducted by Analysys, by 2016, the number of Chinese online sports spectators has reached 52.8%, surpassing the audience who watch sports events through TV channels and becoming the most mainstream way of watching matches. Before the emergence of network broadcast platform, the audience basically watch sports events through live TV and radio broadcast. With the continuous popularization and development of the Internet and mobile terminals, the audience watching sports events has gradually shifted from live television to network broadcast. Compared with the traditional TV broadcast, the network broadcast platform has more flexibility and is better than the TV broadcast in various aspects such as the type of events, live channels and interactive ways.

OTT platforms in China, with almost 150 millions users (CMMR, 2018), has a huge potential of enhancing viewer's experience and generating greater revenues. According to the CMMR survey, with the change of consumption concept, the increasing awareness of copyright protection and the continuous cultivation of users' payment habits, users' willingness to pay (WTP) for various functions of OTT platforms in 2018 has been significantly improved compared with that in 2017, among which the willingness to pay for "live broadcast" has increased by 5.5%. By studying the current consumer habits of online sports streaming platforms and practical needs of their viewers in China, a new marketing model suitable form the perspective of viewership is explored, which can be used as the theoretical basis for online sport platform development.

2.3 Philosophy of sport media market

The broadcasting rights of high-quality sports events bring great commercial value and a series of rights including commercial sponsorship rights, broadcasting rights, derivative development rights, ticket sales rights and derivative sales rights. Sports broadcasting rights are compatible with other industries to promote the development of derivative industries. Sports also has strong ornamental, strong entertaining and interactive features, such as sanda, boxing, taekwondo, basketball and other sports entertaining, its fight fierce, the audience to appreciate the threshold low, do not need to learn too much sports rules can understand and participate in, easy to form sports enthusiasts and fans online social groups (Zhang, 2017).

High-quality sports events have high international influence and ornamental value, and the number of sports events that can attract the wide attention of sports lovers is very rare. Besides, high-quality sports events require long-term capital investment and a long cultivation period, which is a long and challenging process (Zhang, 2017).

2.3.1 Monopoly platform

Same as TV sport programs, OTT monopoly platforms have the exclusive broadcasting right of certain sport contents. For example, Tencent purchased exclusive online broadcasting right of NBA in mainland China. Tencent is the sole sites to watch NBA online legally in mainland China.

Previous TV studies show that people have demonstrated their willingness to pay much higher prices for exclusively broadcasted sporting events than previously in return for more extensive coverage and an allegedly superior product (New and Le Grand, 1999).

As this study points out the media environment is constantly changing with the advancement of technology. Therefore the previous analysis of TV sport consumption is no longer adapting online media consumption nowadays. The monopoly platform mentioned in this study is referred to OTT platforms that own the exclusive online broadcasting right of certain sport contents.

2.3.2 Shared content platform

While a TV serious can be broadcasted in two TV stations, same sport contents can also be broadcasted in multiple platforms. For example, in UK, before BSkyB started to spend enormous amount of money on biding sport league’s exclusive broadcasting right, the market was shared by BBC and ITV paternalistically (New and Le Grand, 1999).

The domestic example of OTT shared-content is tennis broadcasting market. At present, iQiyi and Tencent both have broadcasting rights on international tennis tournaments. The shared-content shared content platform in this study represents OTT platforms that broadcast sport but do not have exclusive broadcasting right of a certain sport content.

2.3.3 Willingness to pay

WTP is an important concept in microeconomics. Green (1992) stated that, WTP is a way to measure the value of goods in monetary terms and has been adopted as a way of capturing consumer evaluation of goods and values in the field of behavioral economics. Several studies examined viewer WTP for public broadcasting depending on demographic differences (e.g., Delaney & O’Toole, 2004; Schwer & Daneshvary, 1995); however, few studies have been conducted regarding viewer WTP for OTT platform's subscription. In the content market, media products are offered either for free (such as broadcast TV and radio) or for a fee (such as books, newspapers, and cable channels). In the former case, there is no need to assess WTP; in the latter case, WTP usually is taken for granted (Chyi, 2009). According to Schwer and Daneshvary (1995), possible elimination of public funding might force Public Broadcasting Services PBS stations to charge the audience for viewership. Similar to the free-to-fee transition driving the need for research on WTP for PBS, the transition of free-to-air sport broadcast to tailor-made OTT media consumption initiated the motivation of this study.

2.4 Significance of this study

With the increasing popularity of live sports broadcasts in China, the growing demand for live sports broadcasts, and the introduction of more sports copyright regulations, Chinese viewers will realize that exclusive sports broadcast online is no longer a free lunch. This study aims at systematically examining WTP for monopoly platform and shared-content platform. On the one hand, understanding the value of exclusive contents and related factors can strengthen healthy competition in the market, while platforms will bid on bringing a variety of sport contents to attract viewers and generate more advertisements revenue. On the other hand, viewers will change their perception of regarding sport contents online as a free-to-air public goods, and adapt to its payment mechanism.

2.5 Hypothesis

Methodologically, Schwer and Daneshvary (1995) measured WTP for Public Broadcasting System using contingent valuation methods, asking a hypothetical question in a survey of Las Vegas residents: "What is the most you (your household) would be willing to pay each year to keep PBS in Las Vegas?" This study first asks respondents whether they currently subscribe to any OTT sports broadcasting platforms, and, if not, asks them to estimate the likelihood of paying for it in the future.

Schwer and Daneshvary (1995) also used regression methods to examine the potential predictors of WTP, including income, television use, preference for a substitute good (i.e., look-alike cable television), and demographics. This study will include the potential factors above in questionnaires, and add the hypothetical factor “monopoly platform” or “shared content platform” to examine their relationship with viewers WTP.

It is well known from microeconomic theory that the fewer substitutes consumers are offered, the more inelastic the demand will be. Hence, it carried out three hypothesis of this empirical research.

H1: Whether the sport content on an OTT platform is exclusive or not is a factor influencing viewer’s WTP.

H2: If a platform is exclusively broadcasting a sport content, viewer’s WTP will be higher than their WTP for a shared-contents platform.

H2: Viewers who watch sport contents online will show higher WTP for monopoly platform than viewers who do not.

III. Methodology

3.1 Continent valuation

The Contingent Valuation approach (Mitchell & Carson, 1989), as one of the most popular methods to measure WTP (Voelckner, 2006), is applied to investigate the amount of money consumers are willing to pay for a OTT sport broadcasting in China.

Contingent valuation is a methodology specifically developed to estimate the value of non-marketed commodities with public good or externality characteristics. The central element of the methodology is the use of a survey mechanism to create a hypothetical market that allows respondents to state what they would be willing to pay for the non-market commodity of interest (Mitchell & Carson, 1989). In Contingent Valuation approaches, consumers are asked directly to make a buying decision for a product at a certain price (Wertenbroch & Skiera, 2002) or, as employed in this study, to state their WTP. Contingent valuation has been used extensively to estimate environmental costs and benefits (Carson et al., 1995). The popularity of the Contingent Valuation approach increased rapidly in the 1980s and it is now considered a common tool in marketing research to derive pricing strategies across multiple product spectrums (Hanemann, 1991). However, only a handful of applications have so far been reported in the fields of sports studies (e.g., Johnson and Whitehead, 2000; Johnson, Groothuis, and Whitehead, 2001; Mondello, and Whitehead, 2007; Walton, Longo and Dawson, 2008).

3.2 Data analysis

The questionnaire was designed with the purpose of testifying the influence of an online broadcasting platform's exclusive sport contents on viewer's willingness to pay and the crucial factors effect on viewers' willingness to pay on online sport contents. The CVM captures both use and nonuse values (Mitchell and Carson, 1989). Use value is the portion of WTP motivated by the exclusive sport contents or shared-contents. Nonuse value is the portion of WTP that is motivated by behavior such as a viewer is willing to only subscribe one platform whatsoever.

Firstly, the socioeconomic information of respondents was collected, including age, monthly income, education level, habit of subscribing sport platform and to what extend did they value exclusive sport content. Secondly, quantitative analysis method was applied through SPSS software. Based on the analysis of the factors affecting the willingness to pay through statistical software, the key factors affecting the WTP was found, and the amount of WTP was estimated.

WTP statistics are obtained using CVM. The most important dimensions of the CVM are: the credibility of the hypothetical scenario and the method of elicitation, which if not properly and appropriately designed can lead to credibility, precision, and bias problems identified by Diamond and Hausman (1994). For the hypothetical scenario, respondents were presented with the following information:

Online sport contents are rarely free to access. Imagine that you *are going to subscribe an online sports platform for a month. Despite any reason of subscribing, paying this amount of money would not affect your life on a daily base. Considering the benefit you get from the subscription, what is the most you would like to pay?*

The supplementary question involved asking if respondents chose YSE or NO regarding to pay a higher-than-usual price to subscribe a platform has the exclusive sport content, which was 35 RMB. This question was targeting on which group of respondents would perceive exclusive contents with a higher monetary representation.

The complete questionnaire pertaining all questions are attached in Appendix.

3.3 Instrumentation

The valuation was based on an online questionnaire survey conducted from January 1, 2020 to February 29, 2020. Participation was voluntary and all respondents from one home page participated in a draw for a 3-month subscription fee of an OTT sport broadcasting platform. The online questionnaire began with general questions regarding common demographic questions, OTT platform usage and general interest in sport broadcasting. After being familiar some general concepts of OTT sport broadcasting and the number of platforms broadcasting certain sport contents, contingent valuation question followed up. Consumers were asked if they are purchasing subscription of online sport contents, on the scale of 1 to 5 with 1 strongly disagree to 5 strongly agree, stating their perspective of subscribing exclusive sport content and shared sport content. WTP questions were based on a scale from 1-5, representing 10 RMB, 15 RMB, 20 RMB, 25 RMB and 30 RMB for respondents to choose how much do they want to pay for exclusive sport content, and shared sport content.

The survey was initially carried out in different online sport fan groups on WeChat, and was reposted throughout the fans to general population.

IV. General Findings

4.1 Viewer's perception of monopoly platform

The data analysis firstly investigated the demographic factors and viewers' general subscribing habit which might have an effect on the respondents' perspective of subscribing exclusive sport contents (SEP).

Table 3 – Significant differences of demographic factor's effect on SEP

Independent variables	F	Sig.
Gender	.709	.400
Age	1.253	.287
Education	1.946	.101
Income	1.454	.214
Use of Device (UD)	5.201	.000*
Number of Subscribed Platform(s) (NSP)	6.580	.000*
Reason of Subscribing (RS)	9.717	.000*
Subscribing Method (SM)	9.149	.000*
Annual Spend on Subscription (ASS)	10.647	.000*

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

From the analysis of variance test (ANOVA) where $p < 0.05$ shows the significance of variance, the UD, NSP, RS, SM and ASS displayed significant results for dependent variable SEP (on the scale of 1-5). The result also suggests that demographic factors such as gender, age, education level and income does not show a great difference on viewers' perception of exclusive contents.

Followed with the LSD post hoc test where each category's multiple comparisons were made within the independent variables, the reason of such significance in ANOVA test was found. In category 5 UD, mean difference was significant between option E"I don't watch sport contents at all" (n=86) and all the other options which are smart phone, computer, tablet PC and TV. Result of TV views also had significant difference between viewers use smart phone. In category 6 NSP, option D "0" (n=534) shows a significance difference between other options. In category 7 RS, option E "The fee is cheap" (n=46) displayed significant difference between "My favorite sport", "My favorite team/player" and "Watching together with friends and families". Also option F "Others" (n=114), had significant difference between every other option except option E

“The fee is cheap”. In category 8’s multiple comparisons, each 4 option shared significant difference with at least one internal option, but only option D “Pay per match” (n=239) showed significant difference with all the other options. In category 9 ASS, only option E “0” (n=284) showed significant difference with all the other options. Besides, the result indicates option A “Less than 50”(n=341) had a significant difference with option C “More than 300” (n=23).

The test result showed that, while asking viewers’ opinion about how much do they value exclusive sport contents and want to subscribe because of that, there is a great difference between people who watch online sport contents and others who do not. Hence, the following analysis on the relationship of whether viewers want to subscribe sport broadcasting platform because of its exclusive broadcast content, and how much would they want to pay for such platform, the segmentation was done between sport viewers and none sport viewers who have not yet subscribed online sport platform.

4.2 Average WTP of each platform

In the second part of questionnaire, respondents were asked the hypothetical question “if you are purchasing sport contents subscriptions, on the scale from 1-5, please choose the suitable answer”. Table 4 shows viewers’ perspective of subscribing monopoly platform and shared-content platform, as well as the overall statistic result of CVM questions.

Hypothesis 2 assumed that viewers’ WTP will differ from monopoly platform and shared-broadcasting rights platform, the results of table 4 shows that viewer’s WTPE were higher than their WTPT and WTPM.

Contingent valuation studies using a referendum format typically take the median response as the estimate of value (Papandrea, 1999). As indicated in table 4, the average WTP of monopoly sport platform is 17.34 RMB, and the median value is 20 RMB. When there are two shared-content platforms, the average WTP decreased to 16.91 RMB, the median value is still 20 RMB. When the number of shared-content platforms increased to three and more, the average WTP slightly went down to 16.68 RMB and the median value decreased to 15 RMB.

Table 4 – Opinions on types of platform and their average WTP

	I am willing to subscribe one platform when it has the exclusive sport contents. (SEP)	I will subscribe one platform when contents are broadcasted on different platforms. (OM)	I will subscribe multiple platforms when contents are broadcasted on different platforms. (MM)	Amount I am willing to pay per month for exclusive sport contents. (WTPE)	Amount I am willing to pay one platform per month for sport contents broadcasted on two platforms. (WTPT)	Amount I am willing to pay one platform per month for sport contents broadcasted on three or more platforms. (WTPM)
N	837	837	837	837	837	837
Mean	3.18	3.47	2.57	2.47	2.38	2.34
Mean of Score				17.34	16.91	16.68
Median	3	3	3	3	3	2
Std. Deviation	1.143	1.088	1.113	1.224	1.223	1.236
Variance	1.306	1.185	1.238	1.498	1.497	1.527
Minimum	1	1	1	1	1	1
Maximum	5	5	5	5	5	5

*The scale for SEP, OM and MM is determined by: 1=strongly disagree, 2=disagree, 3=normal, 4=agree, 5=strongly agree.

*In WTPE, WTPT and WTPM, the score of the scale equals to: 1=10, 2=15, 3=20, 4=25, 5=30. The unit is Chinese Yuan (RMB).

Responses to the supplementary question on whether their willingness to pay for monopoly platform increased to 35 RMB had

276 “Yes” answers and 561 “No” answers.

4.2.1 Segmentation of viewers

Hypothesis 3 assumed online sport viewers will shower higher WTP for monopoly platforms than and none-sport viewers. In Table 5, the statistic was analyzed to show group results of SEP by segmenting category 6 NSP and category 7 RS, which showed significance of difference within groups in table 3.

In table 5, the average SEP score had a positive relationship with NSP. When viewers are subscribing more online platforms, on the scale of 1-5 their opinion on monopoly platform is increasing from 3.07 to 3.7. Also, respondents who chose “favorite sport” and “favorite team/player” also had an overall higher score than others within the RS category. However, the results of “friends/families” group shows an average score of 3.34, which is higher than 3.28, the average score of “favorite sport”. Besides, “cheap” and “others” groups all showed the average score lower than 3, which means their opinion on subscribing monopoly content is negative. If segmenting

RS category to examine WTP of different groups, the result might have liability because in this study the line between sport fan and none sport fan is not very clear, since subscribing for "friends/families" can be a middle ground for categorization.

Table 5 – SEP statistics of selected groups

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
NSP=0	534	1	5	3.07	1.181	1.395
NSP=1	209	1	5	3.27	0.993	0.986
NSP=2	71	1	5	3.58	1.065	1.133
NSP>=3	23	1	5	3.7	1.329	1.767
RS=favorite sport	325	1	5	3.28	1.023	1.047
RS=team/player	101	1	5	3.43	1.043	1.087
RS=match	114	1	5	3.24	0.98	0.961
RS=friends/famlies	137	1	5	3.34	1.126	1.269
RS=cheap	46	1	5	2.89	1.479	2.188
RS=others	114	1	5	2.56	1.344	1.806

Notably, category 8 SM was excluded from the descriptive analysis because in previous chapter, it has been explained that most of the TV sport contents are public TV programs which are free-to-air broadcasted. This category share a homogeneity with category 6 and category 7, in which smart phone, tablet PC viewers can be defined as online sport contents viewers.

Accordingly, the segmentation of viewers are classified as "online sport viewers" who have already subscribed at least on platform, and "none sport viewers" who did not subscribe any sport platform. The result of average WTP of different groups is presented in table 6.

Table 6 – WTP & NSP cross analysis

		Mean of Score (in RMB)		
X\Y	Total	WTPE	WTPT	WTPM
A 1	209	18.76	18.30	17.85
B 2	71	20.28	19.93	19.72
C 3	23	20.22	20.65	20.22
D 0	534	16.26	15.80	15.66

As presented above, sport viewers who have already subscribed at least one platform had overall higher WTP for online sport platforms. When subscribing one platform, viewers' average WTP for monopoly platform is 18.76 RMB, the WTP decreased when shared content platforms increased. The viewers who subscribed two platforms had the average WTP in 20.28 RMB for monopoly platforms and 19.72 RMB for more than three shared content platform. In addition, when viewer subscribed three or more platforms, their average WTP for all types of platforms are all above 20 RMB. They showed the highest WTP on subscribing one out of two shared content platform for 20.65 RMB.

In addition, none sport viewers show an average 16.28 RMB for subscribing monopoly platform, 15.8 RMB for subscribing one out of two shared content platform and 15.66 RMB for one out of three or more shared content platform.

4.3 Predictors of WTP

4.3.1 Opinions on types of platform and WTP

Hypothesis 1 proposed an assumption that SEP has an influence on viewers' WTP. The correlation method was adapted to examine this hypothesis, and the answer was positive. The data can be found in table 7.

Table 7 – Correlations of opinion on each platform and WTP

		SEP	OM	MM	WTPE	WTPT	WTPM
SEP	Correlation Coefficient		.503**	.317**	.384**	.329**	.315**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000
	N	837	837	837	837	837	837
OM	Correlation Coefficient	.503**	1.000	0.020	.106**	0.060	0.042
	Sig. (2-tailed)	0.000		0.568	0.002	0.082	0.224
	N	837	837	837	837	837	837
MM	Correlation Coefficient	.317**	0.020	1.000	.524**	.500**	.494**
	Sig. (2-tailed)	0.000	0.568		0.000	0.000	0.000
	N	837	837	837	837	837	837
WTPE	Correlation Coefficient	.384**	.106**	.524**	1.000	.868**	.840**
	Sig. (2-tailed)	0.000	0.002	0.000		0.000	0.000
	N	837	837	837	837	837	837
WTPT	Correlation Coefficient	.329**	0.060	.500**	.868**	1.000	.921**
	Sig. (2-tailed)	0.000	0.082	0.000	0.000		0.000
	N	837	837	837	837	837	837
WTPM	Correlation Coefficient	.315**	0.042	.494**	.840**	.921**	1.000
	Sig. (2-tailed)	0.000	0.224	0.000	0.000	0.000	
	N	837	837	837	837	837	837

**. Spearman's rho correlation is significant at the 0.01 level (2-tailed).

The result in table 7 suggested that, SEP and MM both positively influenced how much would a viewer pay to subscribe one sport platform (sig.<0.01). It indicated that if viewer's opinion on monopoly platform and subscribing multiple share-content platforms had a significant correlation with their WTP towards all type of platforms.

In terms of OM result, table 7 also revealed a positive correlation between OM and WTPE. However, viewers' opinion on OM doesn't have significant correlations with WTPT and WTPM. Thus, OM is excluded from linear regression model when the independent variables are WTPT and WTPM.

4.3.2 Linear regression analysis

Based on the correlation test results which SEP and MM both had obvious significances towards WTPE, WTPT, and WTPM, and OM had significant correlation with WTPE, the linear regression models were used to analysis the degree of such significance. Sample answers were coded 1 to 5 as the number in scales, and input into SPSS analysis software.

Table 8 – Determinants of WTP for different types of platforms

Model		B	Std. Error	Beta	t	sig.	VIF
1. WTPE	(Constant)	0.479	0.137		3.498	0.000	
	SEP	0.287	0.039	0.268	7.435	0.000	1.585
	OM	-0.023	0.038	-0.021	-0.610	0.542	1.373
	MM	0.448	0.034	0.407	13.062	0.000	1.184
2. WTPT	(Constant)	0.525	0.117		4.472	0.000	
	SEP	0.225	0.034	0.210	6.557	0.000	1.175
	MM	0.443	0.035	0.403	12.588	0.000	1.175
3. WTPM	(Constant)	0.507	0.119		4.246	0.000	
	SEP	0.211	0.035	0.196	6.068	0.000	1.175
	MM	0.449	0.036	0.405	12.557	0.000	1.175

*Independent variables of model 1, 2, and 3 were set as WTPE, WTPT and WTPM.

The results of three regression analysis shows that SEP, MM both positively influenced WTP for exclusive platforms and multiple broadcasting platforms (sig.<0.05). However, OM did not have a linear correlation with WTPE (sig.=0.542). VIF values in models were all less than 5, which means there was no collinearity problem. The model has a statistical significance.

The regression coefficient value of SEP in table 8 are 0.287, 0.225 and 0.211 (p=0.000<0.01), which means that SEP had a significant positive influence on WTPE, WTPT and WTPM. The positivity has also shown in the result of MM and WTP. The regression coefficient value of MM in table 8 are 0.448, 0.443 and 0.449 (p=0.000<0.01), which means that MM had a significant positive influence on WTPE, WTPT and WTPM.

Accordingly, on the scale of 1-5, opinions on paying for monopoly platform and paying for multiple shared-content platform are all significant predictors of WTP.

V. Discussion

In the previous chapter, the results of this study were analyzed through descriptive statistics, significance of difference test and linear regression test. In conclusion, whether a sport platform is a monopoly platform or not has a positive influence on viewer's WTP. The influence is more significant towards online sport viewers. They are willing to pay higher amount of subscription fee for a monopoly platform, than the amount they are willing to pay for a multi-platform. As stated in Chapter 2, the environment of China's sport online broadcasting has just started to tap the water, thus, identifying the exclusive sport contents as a factor influencing viewers' WTP on OTT sport platform has a crucial importance for China's overall sport broadcasting market.

5.1 Summary of the study

Earlier in chapter 1 and chapter 2, it was mentioned that most of the TV stations in China are owned by the state, and TV sport programs are considered as a public goods. Additionally, the revenue of media consumption only takes 1% of the overall GDP of sport industry in China. Throughout the years, the nature of sport programs in China and Chinese viewers previous consumption behavior made them perceive sport contents as a free gift. With the increasing users of OTT platform and IPTV in China, viewers have to face various new factors when they are purchasing a subscription of OTT platform. As a result of this study, an exclusively broadcasted sport contents is a factor attracts subscription fee. Research questions of this study are answered and summarized as following:

Research question 1: “What is general Chinese viewers’ WTP for exclusive sport OTT platform and shared-content sport OTT platform?”

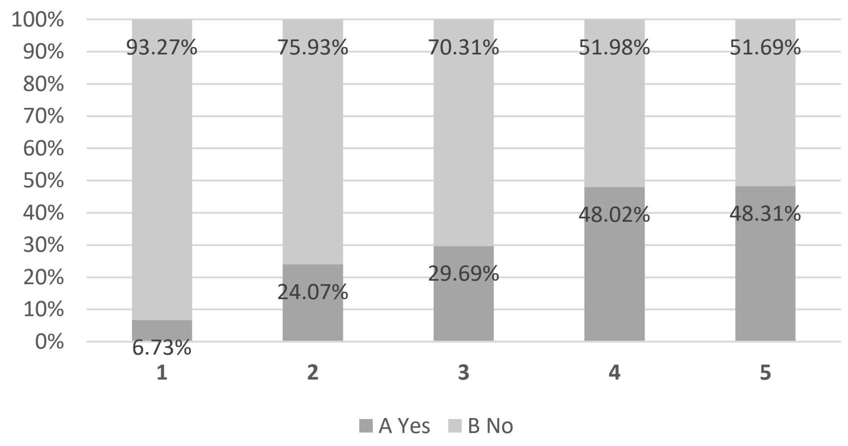
Descriptive analysis of WTPE, WTPT and WTPM showed that, the mean in score of each variables were, 17.34 RMB (2.45 USD), 16.91 RMB (2.38 USD), and 16.68 RMB (2.36 USD). The amount slightly decreased when the broadcasting platform increased. It is worth noting that, by using the same group segmentation, NSP choices to separate each category, viewers whose NSP=0 had lower willingness to pay for sport contents generally (mean=16.26). This result can be explained by the obstacles mentioned above (e.g. TV sports program is considered as a free public goods by TV viewers in China). The mean of score in table 6 was below market price. Taking Tencent sport as an example of monopoly platform, paying monthly for one NBA team's matches is 22 RMB. The score of viewer who had already subscribed online sport platforms was closer to the market value than those who did not.

Research question 2: "What is the relationship between the WTP and number of platforms broadcast same sport contents?"

As the previous analysis suggests, viewers are willing to pay higher amount of subscription fee if the sport contents is exclusively broadcasted on one platform. The number of platforms broadcast same contents increases, the WTP of viewer slightly decreases. If viewers were more willing to pay for an exclusive contents, their WTP for all types of platforms were high than those who showed lower WTP in exclusive sport contents. In addition, if a viewer agreed or strongly agreed with subscribing more than three platforms, their three WTP values were higher than others. This result was also presented in the regression analysis. However, considering the descriptive statistic of MM was the lowest among CVM questions, which means number of sample who selected 4 and 5 in MM were not sufficient enough to make another conclusion. Even through MM seemed to play a such strong importance on WTP, the MM discussion will no longer be carried out in this study.

Additionally, in the last part of the questionnaire, respondents were asked if they were willing to pay 35 RMB per month for an OTT platform's exclusive sport contents. The result in figure 13 appeals a consistence with SEP. This statistic further enhances the conclusion that SEP positively influences WTP.

Figure 9 – SEP & WTPE-35 cross analysis



Research question 3: "Is there a correlation between sport viewer's WTP and whether a platform has exclusive contents or not?"

The last part of regression analysis showed that SEP has a significant positive influence on sport viewers' WTP. And sport viewers were the only group which the SEP has same effect on WTP as MM. Also in table 6, sport viewers who have already subscribed at least one sport platform showed higher WTP for difficulty types of platforms. Sport viewers who subscribed the OTT platform to watch sport contents had experienced on such procedure, and made selection based on their consumption experience. It is can be inferred that sport viewers who have subscribed OTT sport platform, has grown a perspective on sport contents as a market goods.

5.2 Limitations

There are multiple limitations of this study. First one is the possible choices some demographics. The survey prepared did not focus on segmenting viewers' interest of sport. Although "What types of sport will you subscribe to watch" was included in the questions, the question was designed as a multi-choice question, The complex results of multiple taxonomic combinations make the conclusion not obvious.

Secondly, there was no specific income demographics determined for this study. Due to the nature of the methods used for survey distribution, 26% of the sample group is composed of under 1000 RMB income group and 30%. This has caused underrepresentation of income group no.5 (more than 10,000 RMB).

Thirdly, the instrumentation of the questionnaire limited the potential establishment of WTP likelihood, however it is fit to be repeated in the future to input more specific use and noneuse value.

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Appendix

Research Survey – Willingness to Pay on Online Sport Platform

Thank you for taking this survey! This survey is for study purpose only, and there is no correct answer for every question.

For your inInformatio:
Sport contents in this survey refers to live games, highlights and reports etc.
The currency in this survey is Chinese RMB (CYN/￥).

1. What is your gender?
- A. Male
- B. Female

2. How old are you?
- A. Under 18
- B. 18-25
- C. 26-30
- D. 31-44
- E. 45 or above

3. What is your highest education attainment?
- A. High school, vocational school and below high school
- B. Junior college
- C. College
- D. Master
- E. P.hd and above

4. What is your disposable income (in CYN) per month?
- A. Less than 1000
- B. 1000-3000

- ❍ C. 3000-6000
- ❍ D. 6000-10000
- ❍ E. More than 10000

5. What kind of device do you mostly watch sport contents on?

- ❍ A. Smart phone
- ❍ B. Computer
- ❍ C. Tablet PC
- ❍ D. TV
- ❍ E. I don't watch sport contents at all

6. How many platforms' sports membership do you have?

- ❍ A 1
- ❍ B 2
- ❍ C 3 and above
- ❍ D 0

7. Which platform's sports membership do you have?

- ❍ A. Tencent
- ❍ B. iQiyi
- ❍ C. Youku
- ❍ D. PPTV
- ❍ E. Migu Sports
- ❍ F. Others _____________

8. Which sports do you subscribe to watch?

- ❍ A. Sport in general
- ❍ B. Soccer
- ❍ C. Basketball
- ❍ D. Tennis
- ❍ E. Mixed martial arts
- ❍ F. Others _________

9. Why are you willing to subscribe platform(s) for online sports content?
- ❍ A. My favorite sport
- ❍ B. My favorite team/player
- ❍ C. Sufficient sport contents such as exciting matches and competitions
- ❍ D. Watching together with friends and families
- ❍ E. The fee is cheap
- ❍ F. Others ___________

10. Which kind of payment do you usually choose?
- ❍ A. Paying per month
- ❍ B. Paying per season
- ❍ C. Paying per year
- ❍ D. Paying per match

11. How much do you usually spend on watching online sports contents per year?
- ❍ A. Less than 50
- ❍ B. 50-150
- ❍ C. 151-300
- ❍ D. More than 300
- ❍ F. I never spend money on watching sport contents online

Online sport contents are rarely free to access. Imagine that you are going to subscribe an online sports platform for a month. Despite any reason of subscribing, paying this amount of money would not affect your life on a daily base. Considering the benefit you get from the subscription, what is the most you would like to pay?

12. I will only subscribe one platform for sport contents no matter what.

1. Strongly disagree 2. Disagree 3. Normal 4. Agree 5. Strongly agree

13. Subscribing only one platform is satisfactory for my needs of watching sports contents.
1. Strongly disagree 2. Disagree 3. Normal 4. Agree 5. Strongly agree

14. I am willing to subscribe one platform's sport membership, when it is has the exclusive broadcasting right for the sport contents I watch.
1. Strongly disagree 2. Disagree 3. Normal 4. Agree 5. Strongly agree

15. When contents of one sport are separately broadcasted on different platforms, I will only subscribe one of them.
1. Strongly disagree 2. Disagree 3. Normal 4. Agree 5. Strongly agree

16. I am willing to subscribe multiple platforms when the sport contents I watch are broadcasted on those platforms.
1. Strongly disagree 2. Disagree 3. Normal 4. Agree 5. Strongly agree

17. If the sports content I watch is broadcasted exclusively on one platform, I am willing to subscribe it for (please select the number) per month.
1. 10 2. 15 3. 20 4. 25 5. 30

18. If the sports content I watch is broadcasted on two different platforms, I am willing subscribe one of them for (please select the number) per month.
1. 10 2. 15 3. 20 4. 25 5. 30

19. If the sports content I watch is broadcasted on three or more platforms, I am willing subscribe one of them for (please select the number) per month.
1. 10 2. 15 3. 20 4. 25 5. 30

20. Suppose the sports content you watch is exclusively broadcasted by only one platform and it charges 35￥ per month to access the content. Will you be willing to pay this subscription fee?

- ❍ A. Yes
- ❍ B. No

Thank you for your participation, have a nice day!

요약 (국문초록)

이번 조사의 목적은 중국 내 온라인 스포츠 스트리밍 플랫폼에 대한 시청자의 유료화(WTP) 의향을 살펴보는 것이었다. 독과점 플랫폼과 공유 콘텐츠 플랫폼에 대한 WTP 의 분류를 탐구해 온라인 스포츠 플랫폼 개발의 이론적 근거로 삼을 수 있다. 조건부 평가 방식(CVM) 을 채택해 온라인 플랫폼 간 시청자의 통화평가는 스포츠 콘텐츠가 독점적이고 공유 스포츠 콘텐츠가 있는지 조사했다. 스포츠 시청자와 비스포츠 시청자의 WTP 가 모두 분석되었다. 그 결과에 따르면, 플랫폼의 독점적인 스포츠 콘텐츠는 더 많은 WTP 를 발생시킨다. 독점 콘텐츠를 중시하는 응답자와 온라인 스포츠 콘텐츠에 가입한 경험이 있는 응답자는 구독료를 더 내겠다는 의도가 크다. 독점 콘텐츠에 관심이 없거나 아직 온라인 스포츠 플랫폼에 가입하지 않은 응답자는 수수료 납부 의지가 가장 낮다.

주요어 : 스포츠 미디어 소비, OTT 스포츠 플랫폼, 지불 의지

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