



RESEARCH ANALYSIS OF ONLINE SPORTS CONSUMPTION BEHAVIOR AMONG GUANGZHOU UNIVERSITY STUDENTS BASED ON NETWORK SPORTS CONSUMPTION BEHAVIOR MODEL

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ABSTRACT

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This study focuses on the online sports consumption behavior of Guangzhou university students, employing literature review, questionnaire surveys, interviews, and mathematical statistics for comprehensive analysis. The research finds that online channels have become the primary choice for university students seeking sports consumption information, particularly for spectator consumption. Consumer evaluations significantly influence purchasing decisions, while service quality is crucial for participatory sports consumption. The study recommends that sports businesses strengthen their online channels, emphasize consumer evaluation management, and enhance service quality to improve consumer satisfaction and loyalty. This research provides new perspectives for understanding university students' online sports consumption psychology and behavior, offering guidance for developing sports industry marketing strategies.

KEYWORDS: *Online Sports Consumption, University Students in Guangzhou, Consumption Behavior, Network Sports Consumption Behavior Model*

1. INTRODUCTION

1.1 Research Background

In the digital era, online sports consumption has become a new trend among university students. As the economic and cultural center of southern China, Guangzhou, with its numerous universities and large student population, presents significant research value regarding online sports consumption behavior. With the rapid development of internet technology, sports consumption patterns have gradually shifted from traditional offline purchases to online platforms. As digital natives, university students' consumption habits and behavioral patterns have profound implications for the development of the sports industry.

This research investigates the characteristics and underlying psychological mechanisms of online sports

consumption behavior among Guangzhou university students based on the network sports consumption behavior model. By analyzing university students' behavioral patterns in online sports consumption, this study can provide a basis for market segmentation in the sports industry and guide the design and marketing strategies of sports products. Additionally, the research results will offer new perspectives for understanding youth consumer psychology and behavior, helping the sports industry better meet young consumers' needs and promote innovative development.

1.2 Research Methods

1.2.1 Literature Review Method

First, relevant monographs on sports marketing and sports economics were consulted in the library to provide theoretical support for this research. Second, by

searching the CNKI journal database, Chinese excellent master's thesis database, and Chinese doctoral dissertation database for materials related to sports consumption, online consumption, and online sports consumption, important concepts and current research status were identified. These materials were summarized and analyzed to understand the current state and trends in this field, laying a solid foundation for this paper.

1.2.2 Questionnaire Survey Method

Before developing the survey questionnaire, extensive reading of books on social research and scientific research methods was conducted for thorough theoretical preparation. Based on the main content and purpose of this research, a "Survey Questionnaire on the Current Status of Online Sports Consumption Behavior Among Guangzhou University Students" was designed. The author first conducted a small-scale pre-test with 10 university students to assess completion time, clarity of instructions and questions, analyze semantic meanings of items, identify unclear or ambiguous items, and modify inappropriate questions. After the pre-test, experts in economics, sociology, statistics, and research methods were consulted regarding the questionnaire's validity. Additionally, the test-retest method was used to check the questionnaire's reliability. After completing validity and reliability checks, considering that Guangzhou University City concentrates second-tier and above institutions with consistent student environments, and ten institutions cover diverse disciplines with varying student majors and perspectives, random sampling was used to distribute questionnaires across institutions in Guangzhou University City to fully reflect the diversity and differences among survey respondents.

The randomly sampled ten universities were: South China Normal University, Xinghai Conservatory of Music, Sun Yat-sen University, Guangdong University of Foreign Studies, Guangzhou University of Chinese Medicine, Guangdong Pharmaceutical University, South China University of Technology, Guangdong University of Technology, Guangzhou Academy of Fine Arts, and Guangzhou University. A total of 1,000 questionnaires were distributed, with 990 recovered (99.0% recovery rate), among which 819 were valid (81.9% effective rate). According to statistics, 412 of the 819 university students had online sports consumption habits.

1.2.3 Interview Method

Through interviews with individual university students engaged in online sports consumption and business operators, further understanding was gained about individual thoughts or opinions regarding online sports

consumption, hoping to obtain meaningful information for this research.

1.2.4 Mathematical Statistics Method

The experimental data obtained in this study were analyzed using SPSS software and Excel software. The collected questionnaires were organized, data entered, and statistical methods such as descriptive statistics and correlation analysis were used to analyze the data on online sports consumption among Guangzhou university students, leading to corresponding conclusions.

2. CONSTRUCTION OF NETWORK SPORTS CONSUMPTION BEHAVIOR MODEL

Consumer science holds that: "Consumption patterns are the procedures, norms, and qualitative determinations of subject consumption behavior, whose formation and development are constrained by economic, social, political, and cultural factors. It not only comprehensively reflects the basic content of people's consumption life but also reflects the essential connections, development trends, and inherent laws in the consumption field. It is both a summary and sublimation of people's rich consumption practices and a concentrated embodiment of people's wishes and will in consumption life. Its content includes regulations, rules, and value concepts and moral standards related to consumption (Yin, 1992)".

American scholar Matthew D. Shank in *Sports Marketing: A Strategic Perspective* considers participant consumption behavior as the actions consumers take in seeking, participating in, and evaluating sports activities they believe will satisfy their needs (Shank, 2003). The definition of participant consumption behavior also includes components of participant decision-making processes. Decision-making is the foundation of our participant consumption pattern, which is a five-step process consumers use when deciding what sports items or activities to participate in: problem identification, information search, evaluation of alternatives, participation, and post-participation evaluation.

Song Hengguo in his theoretical conception of constructing a rational sports consumption model for university students believed that university students first engage in sports consumption behavior through various social relationships, then under the regulation of external and internal dimensions, cyclically complete each stage of sports consumption behavior and gradually advance it. Under the guidance of such a model, various information continuously provides feedback to university students, who after processing the information, begin their next sports consumption behavior through various social relationships. In the

continuous process of feedback-processing information, university students gradually develop good sports consumption behavior habits and healthy lifestyles, thus providing multiple capability supports for their own maturity and improvement, creating conditions for achieving their sustainable development (Song & Wang, 2006).

Liu Yezheng, Jiang Yuanchun, and Zhang Jiekui in *Online Consumer Behavior: Theory, Methods and Applications* proposed the theory of online consumer purchase decision process (Liu, Jiang, & Zhang, 2011). The first step in the online consumer purchase decision process is information needs. When online consumers have consumption needs, they will then search for information, which can be done through online channels or traditional channels. After collecting sufficient information, consumers will evaluate and select consumption items. Similarly, consumers can evaluate and select objects through online channels or traditional channels, ultimately realizing purchase behavior, and after completing the purchase, consumers will also evaluate this consumption result to some extent.

Based on previous research on consumption behavior patterns, sports consumption behavior patterns, and online consumption behavior patterns, we can clearly understand that different consumers' consumption behaviors are extremely complex and variable, influenced by consumers' own factors, environmental factors, and enterprise business marketing factors. Meanwhile, these factors are also affected by many complex and minor factors, which makes the entire consumer behavior pattern (the sum of sports consumption behavior patterns, online consumption behavior patterns, etc.) research structure dynamic and variable, with intricate relationships between them. Although researching the entire consumer behavior pattern would be comprehensive, the amount of research information would certainly be enormous. To study the behavior patterns of online sports consumers in a targeted manner and reasonably explain university students' online sports consumption behavior phenomena, the author made the following summary of the above scholars' research:

First, the formation and development of consumption behavior are undoubtedly constrained by economic, social, political, and cultural factors. Moreover, while

reflecting the basic content of people's consumption life, it also reflects the essential connections, development trends, and inherent laws in the consumption field. Different categories of consumption forms, such as sports consumption and online consumption, are all extended from the most essential consumption behavior, and there must be certain connections and internal laws between them.

Second, regarding the current situation, consumers' consumption behavior is a continuous process. As long as they generate needs, temporarily setting aside objective factors that cannot be realized, they will complete this need. General consumption behavior patterns, sports consumption behavior patterns, and online consumption behavior patterns cannot be separated from the most essential consumption steps: needs, information search, evaluation of alternatives, participation (consumption), and post-participation (consumption) evaluation.

Finally, whether in general consumption processes, sports consumption processes, or online consumption processes, consumers will evaluate the overall consumption experience after completing consumption. These evaluation information, after being processed by consumers, assist in their next consumption process, thus continuously improving their consumption process in such cycles. However, online sports consumers can choose traditional channels or online channels (the two channels are bidirectional) during information search and participation consumption processes. Once they choose the online channel, online sports consumption behavior will continue until consumption is completed and feedback returns to the initial sports consumption need.

Since the survey subjects in this study do not have significant differences in the overall environment, political, cultural, economic, and technological factors are temporarily not considered when constructing university students' online sports consumption behavior patterns, but this does not mean they are not affected by these factors. After understanding the above conclusions, this study combined consumption, sports consumption, online consumption, and other patterns to construct the online sports consumption behavior pattern. The specific diagram is shown below:

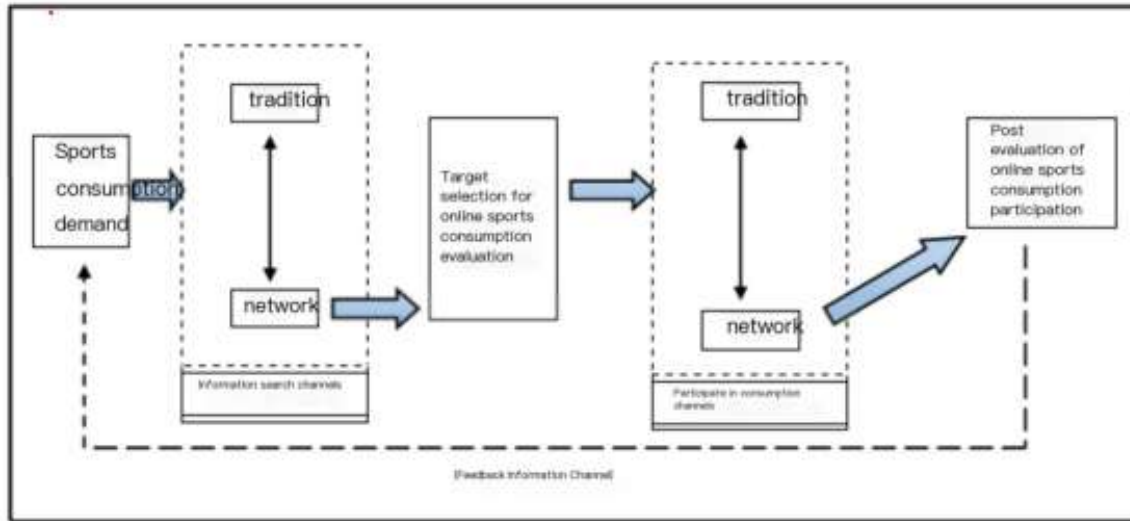


Figure 1-1 Online Sports Consumption Behavior Pattern

3.1 Analysis of Information Search Process in Online Sports Consumption Among Guangzhou University Students

According to the online sports consumption behavior pattern process, there are two channels available for consumers to choose from during information search and participation consumption processes. The selection intention and reasons for channels have crucial effects on online sports consumption, therefore this study currently only analyzes the information search process and participation consumption process. According to the online sports consumption behavior pattern process, this paper designed questions about information search in three types of consumption: physical, spectator, and participatory online sports consumption.

3.1.1 Analysis of Physical Sports Consumption Information Search Process Among Guangzhou University Students

After generating physical sports consumption needs, the highest proportion of Guangzhou university students

choose to search information online, followed by physical stores. According to the table below: 47.7% (391) students indicated they would first choose to search online for sports products they want to purchase, 40.3% (330) students indicated they would choose to search information in physical stores, 11.1% (91) students indicated they would choose to search information through family or friends, and less than 1% of students would choose to search information about sports products they want to purchase through newspapers and magazines. Additionally, it's worth noting that 58.0% of male students (11.1% more than female students) indicated they would first search for sports product information online, while 47.2% of female students (14.5% more than male students) indicated they would first search for sports product information in physical stores.

Table 1-1: Distribution of Primary Information Search Channels When Guangzhou University Students Purchase Sports Products N=819

	Online	Physical Store	Family or Friends	Newspapers and Magazines	Total
Male	58.0%(244)	33.7%(142)	8.1%(34)	0.2%(1)	100%(421)
Female	36.9%(147)	47.2%(188)	14.3%(57)	1.5%(6)	100%(398)
Total	47.7%(391)	40.3%(330)	11.1%(91)	0.9%(7)	100%(819)

Based on this phenomenon, this study conducted related interviews. According to the interview results, some male students felt it was too troublesome to search for sports products information in physical stores, while some female students expressed they preferred shopping in stores to search for sports products. Undeniably, due to scientific and technological progress, this has provided people with great convenience to a certain

extent, with nearly half of university students preferring to first search for sports product information online, which is a powerful illustration. University students are a group with higher knowledge levels, pursuing fashion and convenience, and there will be more and more university students tending to first choose the internet to search for sports product information they want, and fewer and fewer university students will choose

traditional media like newspapers and magazines to search for sports product information they want. Therefore, businesses should pay more attention to this point when promoting products.

3.1.2 Analysis of Spectator Sports Consumption Information Search Process Among Guangzhou University Students

Regarding spectator sports consumption, after generating needs, the online channel has become the primary choice for most Guangzhou university students to search for sports information, with traditional television media and print media falling far behind network media. According to the above table: 70.3%

(576) students indicated they would first choose to check sports information they want to watch online, 22.8% (187) students indicated they would first choose to search for sports information they want to watch through television, 6.0% (49) students indicated they would first search for sports information they want to watch through family or friends, and less than 1% of students would choose to search for sports information they want to watch through newspapers and magazines. There was no significant difference between male and female students in the information search channels for watching sports information, with over 70% choosing the internet as their first choice, television media only accounting for about 23%, and newspapers and magazines less than 1%.

Table 1-2: Distribution of Primary Information Search Channels When Guangzhou University Students Watch Sports Information N=819

	Online	Television	Family or Friends	Newspapers and Magazines	Total
Male	72.0%(303)	22.1%(93)	5.0%(21)	1.0%(4)	100%(421)
Female	68.5%(273)	23.6%(94)	7.0%(28)	0.8%(3)	100%(398)
Total	70.3%(576)	22.8%(187)	6.0%(49)	0.9%(7)	100%(819)

Referring to previous research results on university students' sports information consumption, this study conducted related interviews with some university students about watching sports information online. According to the interview results, the main reasons for this current situation are: 1. Most Guangzhou university students are residential students, due to their environment, they rarely have access to search for sports information they want to watch through media like television. 2. Network media has the obvious advantage of storing huge amounts of information; whether it's live sports broadcasts, sports knowledge, past game videos, or even knowledge, videos, games, etc., that haven't been reported by television, newspapers, and magazines, almost all can be searched online.

3.1.3 Analysis of Participatory Sports Consumption Information Search Process Among Guangzhou University Students

Regarding participatory sports consumption, after generating consumption needs, both male and female university students choose the online channel as their primary choice for searching sports service booking information. However, the proportion of people

choosing to consult at sports venues and through family or friends is also relatively high. According to the above table: 38.8% (318) students indicated they would first search online for sports services they want to participate in, 34.4% (281) students indicated they would first consult at sports venues about sports services they want to participate in, 26.3% (216) students indicated they would first consult through family or friends about sports services they want to participate in, and less than 1% of students indicated they would first choose to search in newspapers and magazines for sports services they want to participate in. This shows that while nearly 40% of university students think of searching information online first when booking venues, sports training, etc., one-third of university students will first consult information at sports venues, and a considerable portion of university students will first search for desired venue booking or training information through family or friends, indicating that the search channels for participatory online sports consumption are not yet as favored by university students as the search channels for physical and spectator online sports consumption.

Table 1-3: Distribution of Primary Information Search Channels When Guangzhou University Students Book Sports Services N=819

	Online	Consult at Sports Venues	Family or Friends	Newspapers and Magazines	Total
Male	40.4%(170)	36.8%(155)	22.6%(95)	0.2%(1)	100%(421)
Female	37.2%(148)	31.7%(126)	30.4%(121)	0.8%(3)	100%(398)
Total	38.8%(318)	34.4%(281)	26.4%(216)	0.5%(4)	100%(819)

Referring to some scholars' research results on university students' sports participatory consumption, this study conducted related interviews with some university students regarding this situation. The interview results showed that the main reasons for this situation are: 1. University students' main consumption in sports participatory consumption is venue rental, with some individual students participating in sports training services. At the same time, the vast majority of university students indicated that since they are basically residential students, the school's sports facilities are generally complete and close to student dormitories, so when they generate such needs, they can directly obtain information or satisfy needs through school venues, therefore there is no need to search for such information online.

Table 1-4: Primary Reasons for Guangzhou University Students to Stop Continuing Online Purchase of Sports Products N=412

	Negative Reviews from Other Buyers	Unpleasant Experiences of Classmates/Friends	Family Opinion	Service Attitude	Others	Total
Male	51.8%(130)	27.9%(70)	2.4%(6)	17.1%(43)	0.8%(2)	100%(251)
Female	55.3%(89)	31.7%(51)	2.5%(4)	9.3%(15)	1.2%(2)	100%(161)
Total	53.2%(219)	29.4%(121)	2.4%(10)	14.1%(58)	1.0%(4)	100%(412)

In the participation consumption process of physical online sports consumption, the highest proportion of Guangzhou university students chose "negative reviews from other buyers" as their primary reason for stopping continued online purchase of sports products, followed by "unpleasant shopping experiences of classmates or friends". According to the above table: 53.2% (219) students considered negative reviews from other buyers about the product would be their primary reason for stopping continued purchase of that sports product, 29.4% (121) students considered unpleasant experiences of classmates or friends when previously purchasing that product would be their primary reason for stopping continued purchase, 14.1% (58) students considered the seller's service attitude would be their primary reason for stopping continued purchase, and 2.4% (10) students considered family opinions would be their primary reason for stopping continued purchase. According to the above data analysis, over half of university students would stop continuing purchases due to negative reviews from other buyers, nearly 30% would be influenced by classmates or friends, and only about 2% would be influenced by family opinions. It can be imagined that when university students make physical sports purchases online, most are primarily purchasing independently, with very few students purchasing with family accompaniment. Furthermore, it can be found that university students are more likely to terminate purchase behavior due to negative reviews of the product from others (unknown buyers or people around them).

3.2 Analysis of Participation Consumption Process in Online Sports Consumption Among Guangzhou University Students

3.2.1 Analysis of Physical Sports Consumption Participation Process Among Guangzhou University Students

To understand the participation consumption process situation of 412 university students engaged in online sports consumption, this study designed related questions for three types of consumption: physical, spectator, and participatory online sports consumption, as shown in the table below:

Therefore, businesses and enterprises should strive to satisfy consumers' purchase needs when selling sports products online; otherwise, they will not only lose current customers but also potential customer groups. Additionally, it's worth noting that businesses and enterprises should also pay attention to their service attitude, which is also an important factor that might terminate purchases among the university student group to a certain extent.

3.2.2 Analysis of Spectator Sports Consumption Participation Process Among Guangzhou University Students

In the participation process of spectator online sports consumption, the highest proportion chose "website completeness" as their primary factor for stopping continued online viewing of sports information. According to the above table: 55.6% (229) students would consider the website's completeness as their primary reason for stopping continued viewing of sports information, 26.2% (108) students indicated they would consider unpleasant viewing experiences of classmates or friends on that website as their primary reason for stopping continued viewing of sports information, and only 13.8% (57) students would stop continued viewing of sports information due to negative reviews from other viewers about the website, family opinions, or other reasons.

Table 1-5: Primary Reasons for Guangzhou University Students to Stop Continuing Online Viewing of Sports Information N=412

	Negative Reviews from Other Viewers	Unpleasant Viewing Experiences of Classmates/Friends	Family Opinion	Website Completeness	Others	Total
Male	13.5%(34)	28.3%(71)	2.0%(5)	55.0%(138)	1.2%(3)	100%(251)
Female	14.3%(23)	23.0%(37)	4.3%(7)	56.5%(91)	1.9%(3)	100%(161)
Total	13.8%(57)	26.2%(108)	2.9%(12)	55.6%(229)	1.5%(6)	100%(412)

As Professor Song Hengguo said: Mature image video live streaming systems, completely smooth network environment, and broad online communication space provide technical guarantee and support for network media interactive information exchange. The Internet will inevitably become the main carrier of contemporary sports media, becoming the main media carrier that promotes sports activities, expands sports influence, and profoundly affects various aspects of people's lives (Song, 2005, pp. 25-26). The completeness of network media websites plays a key role in spectator online sports consumption. Whether sports information websites can provide consumers with stable, smooth, and rich sports information naturally becomes the primary factor for most Guangzhou university students in deciding whether to continue consuming on that website.

3.2.3 Analysis of Participatory Sports Consumption Participation Process Among Guangzhou University Students

In the participation process of participatory online sports consumption, "unpleasant booking experiences of classmates and friends, negative reviews from other buyers, and training institution service attitude" are the top three reasons with the highest proportion of choices among Guangzhou university students. According to the above table: 35.0% (144) students considered unpleasant

experiences of classmates or friends in purchasing venue, sports training services, etc., would be their primary reason for stopping continued booking, 32.5% (134) Guangzhou university students considered negative reviews from other buyers about the venue, sports training, etc., would be their primary reason for stopping continued online booking of sports services, and another 29.1% (120) students considered the service attitude of venues and training institutions would be their primary reason for stopping continued booking. Analysis of the reasons for this situation mainly includes: 1. When university students engage in this type of consumption, they more often do so with classmates or friends, therefore, the university student group more often considers the previous consumption experiences of classmates or friends. 2. Participatory online sports consumption mainly involves booking services online and then experiencing consumption offline. Although this has similarities with physical online sports consumption, the cancellation services for these services are not as complete as physical online sports consumption (for example: 7-day unconditional return policy, etc.). 3. Participatory online sports consumption is mainly an industry with service as its selling point, and service attitude often plays a decisive role in the survival and development of businesses and enterprises.

Table 1-6: Primary Reasons for Guangzhou University Students to Stop Continuing Online Booking of Sports Services N=412

	Negative Reviews from Other Buyers	Unpleasant Booking Experiences of Classmates/Friends	Family Opinion	Venue/Training Institution Service Attitude	Others	Total
Male	33.1%(83)	37.1%(93)	2.8%(7)	26.3%(66)	0.8%(2)	251(100%)
Female	31.7%(51)	31.7%(51)	2.5%(4)	33.5%(54)	0.6%(1)	161(100%)
Total	32.5%(134)	35.0%(144)	2.7%(11)	29.1%(120)	0.7%(3)	412(100%)

According to this study's prediction results of influencing factors in the participation consumption process of participatory online sports consumption among Guangzhou university students, sports businesses and enterprises planning to develop in this market should try to ensure that this customer group's online sports consumption needs are met while providing numerous venues, sports training, sports activities, and other services, while also paying attention

to ensuring the quality of these services and service attitude, so as to effectively prevent consumers from stopping continued online booking of sports services and switching to traditional sports consumption channels or other consumption activities.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Online channels have become the main information search pathway for sports consumption among Guangzhou university students. In physical, spectator, and participatory online sports consumption, online channels have become their primary choice for information search. Particularly in spectator sports consumption, the proportion of online channel selection is far higher than television and print media.

Consumer reviews significantly influence the purchasing decisions of Guangzhou university students in online sports consumption. In physical sports consumption, negative reviews from other buyers are the primary reason for university students to stop continued online purchase of sports products. This indicates that other consumer reviews have a significant impact on university students' purchasing decisions.

Service quality is crucial for participatory sports consumption among Guangzhou university students. In participatory sports consumption, unpleasant booking experiences of classmates or friends, negative reviews from other buyers, and training institution service attitude are the main reasons affecting Guangzhou university students' decision to stop continued booking of sports services.

4.2 Recommendations

Strengthen the construction and optimization of online channels: Given the importance of online channels in university students' sports consumption information search, it is recommended that sports businesses and enterprises strengthen the construction and optimization of online channels, providing more convenient and efficient online services to attract and retain consumers.

Emphasize consumer review management: Since consumer reviews significantly influence purchasing decisions, it is recommended that businesses actively manage online review systems, encourage satisfied consumers to leave positive reviews, while promptly responding to and handling negative reviews to reduce their negative impact on potential university student consumers.

Improve service quality and consumption experience: For participatory sports consumption, it is recommended that sports service providers focus on improving service quality, including improving service attitude, providing more personalized services, and optimizing cancellation policies, etc., to enhance consumer satisfaction and

loyalty, thereby promoting the sustainable growth of university students' online sports consumption.

REFERENCES

1. Liu, Y., Jiang, Y., & Zhang, J. (2011). *Network consumer behavior: Theory, methods, and applications*. Beijing, China: Science Press.
2. Shank, M. D. (2003). *Distribution of concept*. In *Sports marketing: A strategic perspective* (pp. 476-477). N.p.: Publisher.
3. Song, H., & Wang, L. (2006). *A study on the sports consumption behavior of college students in Guangzhou*. *China Sport Science and Technology*, 42(2), 5.
4. Song, H. (2005). *Research on university students' sports consumption behavior* (Doctoral dissertation, South China Normal University).
5. Yin, S. (1992). *Analysis of consumption patterns*. *Chinese Social Sciences*, 3, 13.