

RESEARCH ON CONSUMER MARKET SEGMENTATION OF SPORTS CHARACTERISTIC TOWNS IN CHINA BY STP THEORY

Jing Li¹ Khongsuebsor Watthanapong²

¹ Ph.d Student Exercise and Sport Science, Faculty of Education, Mahasarakham University, Thailand

² Lecture Health and Sport Science, Faculty of Education, Mahasarakham University, Thailand

Email: 1653254156@qq.com, wattha.k@msu.ac.th

Abstract : The objective of this research was to investigate the needs of consumers in small towns with sports characteristics, to analyze the factors that affect consumers' participation in sports towns, to subdivide sports characteristic town consumer market.

The mixed research methodology was used by conducting quantitative and qualitative research. Questionnaires and interviews were used as study tools. The validity test was evaluated using the project-objective agreement index (IOC), with a final IOC mean of 0.936. The questionnaire's confidence factor of the questionnaire were .951, which used a total of 401 samples. Data analysis used with a computer program (SPSS) on the frequency distribution, Descriptive statistical analysis, factor analysis.

The results are as follows:

According to the questionnaire method, the proportion of male consumers in sports towns is slightly higher than that of female consumers, most of whom are between 26 and 45 years old, whose education level is mainly at the undergraduate level, and the number of civil servants and public institutions is the largest. From the perspective of monthly income, most of the respondents are concentrated between 5,001 yuan and 8,000 yuan, and each time they spend on sports consumption in sports towns with sports characteristics. Most respondents chose 200-500 yuan. From the point of view of the sports involved, fitness walking, cycling, mountaineering, watching sports events, etc., are more popular with consumers.

According to the interview method, factors that affect the demand and behavior of consumers in sports towns include interest, time, monthly income, education level, age, popularity, social class, living standard, publicity, participation motivation, sports content, experience, loyalty, town facilities and services, sports prices and so on.

According to Segmentation, Targeting and Positioning theory (STP theory), this stage investigates the consumers in sports towns from four dimensions: Geographical Segmentation

(GS), Demographic Segmentation (DS), Psychological Segmentation (PS) and Behavioral Segmentation(BS).

Keywords: Sports Characteristic Town; Market; Market Segmentation ; STP

Introduction

Since the reform and opening up, small towns have played an important role in the process of urbanization in China as spatial carriers for the in-situ urbanization of rural surplus labor (Wu Y.Zh.&Wang L, 2012). Especially as China has entered the stage of new urbanization development, the construction of small towns has received national attention as an important strategic measure for regional economic transformation and upgrading and supply-side structural reform. As one of the ways of small town construction and development, sports town is an important measure to promote the construction of modern cities and towns, realize the integrated development of urban and rural areas, and promote the structural reform of the supply side. It is an important measure to develop the national fitness cause under the background of implementing the national fitness and healthy China strategy, an important measure to develop the sports industry under the background of supply-side structural reform, and an important measure to promote sports poverty alleviation under the background of poverty alleviation. In May 2017, the State General Administration of Sport issued the Notice on Promoting the Construction of Sports and Leisure characteristic Towns, marking the official start of the construction of sports characteristic towns in China and providing theoretical guidance and practical basis for the construction of sports characteristic towns (State General Administration of Sport, 2017). Immediately, the General Office of the General Administration of Sports announced the list of the first batch of sports and leisure characteristic town pilot projects, and a total of 96 projects were identified as the first batch of sports characteristic town pilot projects. In this study, China is divided into southern region, northern region, northwestern region and Qinghai-Tibet region according to geographical location. Taking Rizhao Olympic Water Sports Town in northern region, Fuyang Yinghu Smart Sports Town in southern region, Zhongnan Shanzhai Sports and leisure Town in northwestern region, Longyangxia Sports Town in Qinghai-Tibet region , 4 sports towns with sports characteristics as examples, Research on their markets. Because these four sports towns are the first batch of sports towns in China with relatively good development, but there are still unclear consumer segmentation of sports towns, inaccurate market positioning. (Tian X.L. & Zhao X.H. 2018, Guo L.J. 2019, Si L. & Chen M. 2022, Ji Y.P. 2023).

At present, there are many theories about market research According to the research objective, this study mainly uses Segmentation Targeting Positioning theory(STP theory)to subdivide the sports characteristic town market, understand the needs of consumers, and finally select the appropriate target market for accurate positioning. The main role of STP theory is to determine their own target market on the basis of a certain market segmentation, and finally position the product or service in the target market. STP theory is the most suitable for the study of this paper. STP theory contains three elements: Segmentation(S), Targeting(T), Positioning(P).

Segmentation(S) refers to the process by which a market for a product or service is divided into a series of market segments according to the differences in customer needs. Targeting(T) refers to a series of target planning based on the market target setting after market segmentation. Positioning(P) refers to positioning its products or services in a certain position in the target market in the process of marketing, that is, determining the competitive position of its products or services in the target market, also known as "competitive positioning" (Kotler, P. 1989). The application of these three elements can just complete the purpose of this paper, so this study chooses STP theory.

From the current research, STP theory has not been applied to the sports characteristic town market related research. In this study, consumers are divided by market segmentation, and the most valuable and promising target markets are selected based on their realistic background and resource conditions. On this basis, demand and preference of target markets are analyzed, and marketing strategies formulated by different market players are observed to finally complete market positioning.

From the current research, STP theory has not been applied to the sports characteristic town market related research. To investigate the needs of consumers in small towns with sports characteristics., analyze the factors that affect consumers' participation in sports towns and subdivide sports characteristic town consumer market. It is imperative to make use of STP theory to subdivide the market of sports characteristic town consumers, understand the needs of consumers, and make its positioning more accurate. This study clarifies the current situation of consumers in sports towns and the key factors affecting market development, and provides practical reference for the healthy, sustainable and high-quality development of sports towns.

Methods

Participants

The research population of this study includes government administrators, sports characteristic town managers and consumers of the first 96 national sports characteristic towns in China.

During the interview, a purposeful random sampling method was used to identify a government department manager for interview. For the purpose of sampling, Mr. Zhao from the State General Administration of Sport was selected to participate. The snowball technique is then used during the interview to identify other potential participants. A total of 4 government workers and 4 management personnel of sports towns were selected.

Based on the characteristics of geographical location, physical geography and human geography, China is divided into four geographical regions, namely the north region, the South region, the northwest region and the Qinghai-Tibet region. At this stage, 1 town in each region was selected for investigation. According to the development of characteristic towns and

preliminary data survey, four characteristic towns were selected : Rizhao Olympic water sports Town in the north, Fuyang Yinhu Smart Sports Town in the south, Zhongnan Shanzhai Sports and leisure town in Yingpan of Shangluo City in the northwest, Longyangxia Sports Town in Gonghe County of Qinghai Province in the Qinghai-Tibet region. Because these four sports characteristic towns are relatively well developed among the first batch of sports characteristic towns in China, Convenience sampling was used to sample 440 consumers.

Before answering the questionnaire, the respondents should be screened first. Choice 1 means that they have been to sports characteristic towns, choice 2 means that they have not been to sports characteristic towns. The questionnaire marked as "2" was deleted using excel, 80% of the questionnaires with the same score were deleted. After excluding invaquestionnaires, there were 98 valid questionnaires in South China, 99 in North China, 109 in Northwest China and 95 in Qinghai-Tibet. A total of 39 questionnaires were deleted, leaving 401 valid questionnaires, with an effective recovery rate of 91.14%.

Study design

This study adopts a mixed research method, using a combination of qualitative and quantitative methods. The main purpose of this study is to segment the sports characteristic town consumers. This is based on Philip Kotler's STP theory (Segmentation, Targeting and Positioning) (Philip Kotler, 2009) investigating sports character towns.

This study is divided into three phases. One is to conduct a semi-structured interview about sports towns with government departments and sports towns with sports characteristics. The second is to use the questionnaire survey method to investigate the consumer demand of sports characteristic towns, The third is to use the questionnaire carry out market segmentation.

Prior to the official data collection, permission was obtained from the Ethics Committee of Maharakham University on November 30, 2023.

Research procedure

The research tools used were interview Outlines and questionnaires.

The interview outline is derived from STP theory and designed according to the research purpose of this study. The interview outline consists of two parts, one is basic information, the other is interview questions. Semi-structured interviews are mainly conducted for government managers and sports town managers.

The effectiveness of the interview syllabus was assessed by a panel of five experts using the project-Objective Consistency Index (IOC). After two rounds of evaluation, the IOC value of each project is greater than or equal to 0.8(≥ 0.8), indicating that the project content validity is reasonable. There are two kinds of interviews, one is face-to-face interview. One is to use

telephone, wechat video online interview. The interviews will be 60 to 90 minutes long, and each interview will be an audio recording, auditory cues, and a live transcript made by the researcher.

Before the questionnaire was released, the content validity of the questionnaire was evaluated by IOC, and a pilot test was conducted. 47 non-sample questionnaires were tested by internal consistency of the scale, and the α value of Cronbach was analyzed by SPSS. The reliability coefficient of the questionnaire was 0.936. It indicates that the questionnaire has the same objectives and can be distributed.

The online self-management survey collects sample data using a self-selected convenient sampling method. In this study, Questionnaire Star software was used for data collection. Considering the accuracy of the target population, before answering the questionnaire, you should first answer: "Have you ever been to a sports town?" If the answer is: "No." It is regarded as invalid questionnaire.

Statistical Analysis

According to the characteristics of qualitative research, data analysis should run through the whole process of data collection (Patton, 1990). The interview mainly adopts text analysis method. After each interview, the content of the interview was transcribed and conceptualized. According to the theoretical basis of this study, the data is coded and analyzed. Through sorting out the interview content, the data was decomposed into manageable fragments, and the data was encoded by naming different fragments, presenting four dimensions and eight questions.

In order to analyze the questionnaire data collected in this study, IBM SPSS Statistics 21.0 will be used for data analysis, such as reliability test of questionnaire data, frequency analysis of questionnaire data, descriptive statistical analysis, factor analysis of factors, etc.

Results

Sports characteristic town consumer demographic characteristics

A total of 401 valid questionnaires are reserved for this questionnaire. Due to the limitation of preconditions, only the screening question "Have you ever been to a town with sports features?" The answer is "yes". It's withheld. For consumers who were not in sports towns, 80% of the answers with the same options were excluded.

Table 1 Sports Town Consumer Region

Sports Town Consumer Region	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Efficient Southern Region	98	24.4	24.4	24.4

Northern Region	99	24.7	24.7	49.1
Northwest Region	109	27.2	27.2	76.3
Qinghai-tibet region	95	23.7	23.7	100.0
Total	401	100.0	100.0	

Regionally, there were 98 valid questionnaires in the south, accounting for 24.4%; There were 99 valid questionnaires in the northern region, accounting for 24.7%; There were 109 valid questionnaires in Northwest China, accounting for 27.2%; There were 95 valid questionnaires in Qinghai-Tibet region, accounting for 23.7% (Table 1). In terms of the number proportion, the number of valid questionnaires in the four regions is relatively balanced, which meets the requirements of the study.

Table 2 Sports Town Consumer Gender

Sports Town Consumer Gender	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Male	212	52.9	52.9	52.9
Efficient Female	189	47.1	47.1	100.0
Total	401	100.0	100.0	

From the perspective of gender, there were 212 men, accounting for 52.9%, and 189 women, accounting for 47.1%, with the proportion of men slightly higher than that of women (Table 2).

Table 3 Sports Town Consumer Age

Sports Town Consumer Age	Frequency	Percentage	Valid Percentage	Cumulative Percentage
18-25 years old	101	25.2	25.2	25.2
26-45 years old	240	59.9	59.9	85.0
Efficient 46-60 years old	58	14.5	14.5	99.5
>60 years old	2	.5	.5	100.0
Total	401	100.0	100.0	

From the perspective of age, there were no respondents under 18 years old, and 101 respondents aged 18-25 years old, accounting for 25.2%; There were 240 respondents aged 26-45, accounting for 59.8%; There were 58 respondents aged 46 to 60, accounting for 14.5%; There were 2 respondents over 60 years old (Table 3). This shows that most of the interviewees who participate in sports towns are middle-aged and young people. They have a good interest in sports, and are willing to accept new things and join sports towns with sports characteristics.

Table 4 Sports Town Consumer Education

Sports Town Consumer Education	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Junior high School or below	19	4.7	4.7	4.7
Senior high School or technical secondary school	35	8.7	8.7	13.5
Efficient Diploma	37	9.2	9.2	22.7
Bachelor	231	57.6	57.6	80.3
Master or higher	79	19.7	19.7	100.0
Total	401	100.0	100.0	

From the perspective of education level, it is mainly concentrated in the undergraduate level, with 231 undergraduates, accounting for 57.6%, followed by Master or higher, Diploma, Senior high School or technical secondary school. At the bottom of the list was Junior high School or below (Table 4). It shows that the education level of consumers in sports towns belongs to the middle and high level.

Table 5 Sports Town Consumer Occupation

Sports Town Consumer Occupation	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Efficient Civil Servants or Personnel of Public Institutions	180	44.9	44.9	44.9
Personnel of Enterprises	85	21.2	21.2	66.1

Self-employed	59	14.7	14.7	80.8
Student	46	11.5	11.5	92.3
Retiree	1	.2	.2	92.5
Farmer	17	4.2	4.2	96.8
Others	13	3.2	3.2	100.0
Total	401	100.0	100.0	

In terms of occupation, the number of civil servants and public institutions is the largest, 180 people, accounting for 44.9%, followed by enterprise units and freelance workers, 85 and 59 people, accounting for 21.2% and 14.7%, students, farmers, retirees, etc. (Table 5), the proportion is slightly lower, which is caused by the different values of each occupation for sports.

Table 6 Sports Town Consumer Monthly Income

Sports Town Consumer Monthly Income	Frequency	Percentage	Valid Percentage
2500 Yuan and below	47	11.7	11.7
2501 yuan to 5000 yuan	123	30.7	42.4
5001 yuan to 8000 yuan	132	32.9	75.3
8001 yuan to 10000 yuan	59	14.7	90.0
10001 yuan and above	40	10.0	100.0
Total	401	100.0	100.0

From the perspective of monthly income, this is related to the occupation of the respondents, most respondents concentrated in 5001 to 8000 yuan, accounting for 32.9%, and some respondents' monthly income between 2501 and 5000 yuan, accounting for 30.7%(Table 6). This means that the salary of most civil servants and public institutions is around 5,000. The second is 8001-10000 yuan, more than 10,000 yuan and less than 2,500 yuan, and the less than 2,500 yuan is mainly concentrated in students, whose economic source is their parents and part-time jobs, but they also like sports, so they have become consumers of sports towns.

Table 7 Sports Town Consumer Cost Amount

Sports Town Consumer Cost Amount	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Less than 200 yuan	143	35.7	35.7	35.7
200 yuan to 500 yuan	161	40.1	40.1	75.8
501 yuan to 800 yuan	56	14.0	14.0	89.8
801 yuan to 1000 yuan	23	5.7	5.7	95.5
1001 yuan or more	18	4.5	4.5	100.0
Total	401	100.0	100.0	

In terms of the cost of sports consumption in sports towns with sports characteristics, 161 respondents chose 200-500 yuan, accounting for 40.1%, 97 people chose 501 yuan or more, accounting for 24.2%, and 35.7% chose less than 200 yuan, which proves that most consumers in sports towns are willing to pay reasonable fees on sports (Table 7).

Table 8 Frequency statistics of participation in sports

item	multiple responses		Case percentage
	N	percentage	
Marathon	100	8.1%	24.9%
Dragon Boat	38	3.1%	9.5%
Sailing	16	1.3%	4.0%
Rowing	14	1.1%	3.5%
Paragliding	16	1.3%	4.0%
Sports ^a Canoeing	16	1.3%	4.0%
Motorsport	44	3.6%	11.0%
Cross Country	45	3.6%	11.2%
Snow Sports	66	5.3%	16.5%
Golf	21	1.7%	5.2%
Fitness Walking	135	10.9%	33.7%

Cycling	126	10.2%	31.4%
Camping	89	7.2%	22.2%
Basic Ball Games	68	5.5%	17.0%
Fishing	63	5.1%	15.7%
Mountaineering	115	9.3%	28.7%
Watching Sporting Events	114	9.2%	28.4%
Participating In Sporting Festivals	86	7.0%	21.4%
Others	62	5.0%	15.5%
Total	1234	100.0%	307.7%

For the participation in sports, multiple responses of SPSS were used to calculate their frequency. According to the data analysis, the total frequency was 1234 times, among which the fitness walking and cycling were 135 times and 126 times, accounting for 33.7% and 31.4% respectively. The other items are mountaineering, watching sports events, marathon, camping and participating in sports festivals, which account for more than 20%. The items with less participation are sailing, rowing, paragliding, canoeing and golf, with about 20 people participating in these items, accounting for a smaller proportion (Table 8). The reason is that these projects have certain technical requirements, the popularity is not very wide, so the number of participants is small.

Interview results

According to the interview results of the four interviewees, we can conclude: Factors include interest, time, monthly income, education level, age, gender, personality, lifestyle, travel mode, transportation, travel time, climate, popularity, social class, living standard, publicity, participation motivation, sports content, experience, loyalty, town facilities and services, sports prices and so on.

According to the interview results of the four interviewees, we can conclude: Market segmentation has four dimensions, including geographical segmentation, demographic characteristics, psychostatistical characteristics and behavioral factors. It mainly includes geographical location, natural environment, city size, climate, income level, family demographic structure, participation motivation, preference, timing, interests, brand loyalty, etc., which is divided according to the differences in consumer demand in the overall market, so as to achieve the goal of satisfying different consumers.

Sports characteristic town consumer market segmentation

According to the market segmentation theory, the questionnaire in this study is divided into four dimensions: Geographical Segmentation(GS), Demographic Segmentation (DS) , Psychological Segmentation (PS)and Behavioral Segmentation(BS). Based on the screening and prediction of the expert IOC, 60 questions were finalized. The geographic segmentation consists of four questions, named GS9-12. The demographic breakdown consists of five questions, named DS13-17. The psychological subdivision consists of 15 questions named PS18-32. The behavioral breakdown includes 36 questions, They are named BS33-60.

Table 9 Questionnaire reliability statistics

Dimensions	Cronbach's Alpha	Cronbach's Alpha based on standardized terms	Number of terms
GS	.730	.733	4
DS	.838	.843	5
PS	.885	.890	15
BS	.930	.947	36
Total	.951	.960	60

The internal consistency of the scale was used for reliability test, and the α value of Cronbach was analyzed by SPSS, and the reliability of the questionnaire was tested. Cronbach's α value cannot be lower than 0.7, 0.8 is considered a good coefficient, Cronbach's α value reaches 0.9, indicating high confidence. Cronbach's Alpha value was 0.730 for 4 questions of geographical subdivision, 0.838 for 5 questions of population subdivision, and 0.885 for 15 questions of psychological subdivision. The Cronbach's Alpha value for the 36 questions in the behavioral subdivision is 0.930, and the total Cronbach's Alpha value for the four dimensions is 0.951. It indicates that the reliability of the questionnaire is high (Table 9).

In this study, KMO test and Bartlett sphericity test were used to test its four dimensions. The KMO test, or Kaiser-Meyer-Olkin test, is an index used to compare simple and partial correlations between variables. This test statistic takes values between 0 and 1 and is used to evaluate the correlation between variables and the applicability of factor analysis. When the KMO value is close to 1, it indicates that it is suitable for factor analysis, while when the KMO value is close to 0, it indicates that the correlation between variables is weak, and it is not suitable for factor analysis. The Bartlett sphericity test is to see whether the data comes from the population obeying the multivariate normal distribution. If the P value is <0.05 , it just indicates that the data comes from the population with normal distribution, which is suitable for further analysis. If $KMO >0.7$ and the significance of Bartlett sphericity test <0.05 , it is suitable for factor analysis.

Table 10 Statistical Table of Mean and SD of Geographical Segmentation

Index	Mean	SD	N
GS9	4.0773	1.02054	401
GS10	4.3641	.86724	401
GS11	4.3042	.91772	401
GS12	4.0000	1.04403	401

In geographical segmentation, the mean and standard deviation of GS9 considering town size are 4.0773 ± 1.02054 , the mean and standard deviation of GS10 climate are 4.3641 ± 0.86724 , and the mean and standard deviation of GS11 traffic are 4.3042 ± 0.91772 . The mean and standard deviation of the GS12 terrain are 4.0 ± 1.04403 (Table 16). The four values were analyzed by factor analysis, and the KMO value of the circumference and Bartlett sphericity test value were calculated. Finally, the KMO value was equal to 0.665, and KMO value < 0.7 , indicating that the correlation between variables was weak, and it was not suitable for factor analysis.

Table 11 Statistical Table of Mean and SD of Demographic Segmentation

Index	Mean	SD	N
DS13	3.1920	1.33061	401
DS14	3.9651	1.05061	401
DS15	3.7481	1.17639	401
DS16	3.6584	1.21881	401
DS17	2.6958	1.40257	401

In Demographic segmentation, among the five factors, the mean value of DS17 religious factor is 2.6958, which is less than 3, indicating that most respondents believe that this factor has little impact on their participation in sports characteristic town movement. The mean value of DS13 gender factor is 3.192, which is greater than 3 but less than 3.6, indicating that the influence factor is average (Table 11).

In the factor of demographic segmentation, using the factor analysis of the five values (gender, income, occupation, education, religion) was analyzed, and calculating the circumference of KMO, ultimately, KMO value equal to 0.817, and explain the correlation between variables is strong, The data come from normal distribution population and are suitable for factor analysis.

Table 12 Statistical Table of Mean and SD of Psychological Segmentation

Index	Mean	SD	N
-------	------	----	---

PS18	3.7706	1.15855	401
PS19	3.4838	1.18548	401
PS20	3.9800	.98722	401
PS21	4.1771	.79754	401
PS22	4.0948	.80062	401
PS23	4.1771	.75569	401
PS24	3.9277	.98603	401
PS25	4.1097	.89885	401
PS26	4.1796	.82927	401
PS27	4.4763	.60833	401
PS28	3.8678	.93273	401
PS29	3.8504	.93944	401
PS30	3.5486	1.09236	401
PS31	3.9701	.93760	401
PS32	3.5037	1.11383	401

There are 15 questions in psychological segmentation, and the mean value of each question is more than 3, indicating that most respondents agree with the question. The standard deviation values are all between 1 and 2, indicating that the data distribution is relatively concentrated (Table 12).

Among the factors of psychological Segmentation, the 15 values were analyzed by factor analysis, and the KMO value of the circumference were calculated. Finally, the KMO value was 0.871, indicating that the correlation between variables is strong, and the data is from the normal distribution population. Suitable for factor analysis.

Table 13 Statistical Table of Mean and SD of Behavioral Segmentation

Index	Mean	SD	N
BS33	3.4190	1.24460	401
BS34	4.3042	.73294	401

BS35	4.1322	.83065	401
BS36	4.3491	2.60822	401
BS37	4.1446	.87694	401
BS38	4.3990	.66363	401
BS39	4.4339	.63737	401
BS40	4.2569	.75918	401
BS41	4.0923	.88542	401
BS42	4.2145	.81172	401
BS43	4.1372	.84773	401
BS44	4.1222	.82008	401
BS45	4.0748	.89129	401
BS46	2.7431	1.13858	401
BS47	3.6908	1.18285	401
BS48	3.8329	1.00225	401
BS49	3.9476	1.02944	401
BS50	1.9302	.71422	401
BS51	3.2768	1.28868	401
BS52	4.0274	.88416	401
BS53	3.6708	1.09607	401
BS54	4.0798	.80537	401
BS55	4.1322	.75828	401
BS56	4.0399	.79900	401
BS57	4.0349	.82388	401
BS58	3.9551	.88768	401
BS59	3.8678	.93541	401

BS60	3.8803	.90589	401
BS61	4.0349	.85661	401
BS62	3.9401	.90632	401
BS63	4.0599	.80710	401
BS64	3.7905	.99800	401
BS65	4.2170	.77156	401
BS66	4.3741	.67433	401
BS67	4.3017	.72196	401
BS68	4.2020	.78524	401

There are 36 questions in the behavior subdivision. From the statistical table of mean value and standard deviation, except for BS46 and BS50, the mean value of each question exceeds 3 (Table 13), indicating that most respondents agree with the question. The BS46 question is: "I am a first-time user of Sports Town." Most respondents disagree with this view, which proves that most consumers have participated in sports town many times. The BS50 question is: "I will not go to sports town again", and the majority of respondents do not agree with this view, which proves that most consumers are willing to go to sports town again. Except for BS36, the standard deviation values of other problems are between 1 and 2, indicating that the data distribution is relatively concentrated (Table 13). The question of BS36 is: "I will choose to come to sports town in winter and summer vacation", and the standard deviation value is 2.60822, which is more than 2. Indicating that the interviewees have a slightly higher degree of dispersion on this question, which may be related to the occupation of consumers, except for the occupation of teachers, other occupations have no summer vacation, so their travel is limited. The KMO value of the circumference are calculated. Finally, the KMO value is equal to 0.941,, indicating that the correlation between variables is strong, and the data comes from the normal distribution population, which is suitable for factor analysis.

Discussions

This study is divided into three phases, with a total of three research objectives.

Part 1: The conclusion reached in the first part is: The proportion of male consumers in small towns is slightly higher than that of women, and most of them are distributed between the ages of 26-45. From the perspective of education level, they are mainly concentrated at the undergraduate level and above. From the perspective of occupation, civil servants and public institutions have the most people. In terms of monthly income, most respondents focus on 5,001 yuan to 8,000 yuan. This is the same as the research of most scholars such as Ji Yuping , Jing Lan,

Wang Chengyang (Ji Y.P.,2023; Jing L.,2019; Wang Ch. Y.,2020) . However, based on the finding of similar studies, there are also some differences. For example, in terms of each time spent on sports consumption in sports towns with sports characteristics and sports items participated, Consumers in different regions choose different items and spend different amounts. According to Ji Yuping's research on Rizhao Olympic water Sports town, consumers mainly participate in water sports, which is consistent with the results of this paper(Ji Y.P.2023). Jing Lan pointed out in her research on Zhongnan Shanzhai sports and leisure characteristic town that the main project for consumers to participate in is the canyon sports park, and the sports consumption is mainly about 200 yuan, which is consistent with the survey results of this paper. (Jing L.,2019; Wang Ch. Y.,2020;Lu Zh. Q., 2021.)

Part 2: Through interviews, factors affecting consumer demand and consumer behavior in sports towns include interest, time, monthly income, education level, age, gender, personality, lifestyle, travel mode, transportation, climate, popularity, social class, living standard, participation motivation, sports content, sports price, town facilities services ,etc. This is consistent with the research results of scholars such as Tang Shi and Ma Yawen. (Wilkie, William L.,& Joel B. Cohen, 1977; Cravens, D.W. ,&Piercy, N.F. 2009; Tang Sh., 2018; Ma Y.W., 2019). But through the interview, we also got new factors such as publicity, experience, loyalty, which is consistent with the STP theory studied in this paper (Kotler, P. 1989).

Part 3: According to STP theory, this study subdivides consumers in sports towns according to four dimensions: geographical segmentation, population segmentation, psychological segmentation and behavioral segmentation, which is consistent with the views of most researchers. They believe that the variables of segmented consumer market mainly include geographical variables, population variables, psychological variables and behavioral variables. Market segmentation based on these variables produces four basic forms of market segmentation: geographical segmentation, demographic segmentation, psychological segmentation and behavioral segmentation. (Cahill, D. J.,1997; Ma Zh., Jiang J.Y.,& Wang J.,2007; Qu Y.B.,2010; Kotler, P.,2015; Andaleeb, S. S.,2016).

Conclusions

According to the research objective, this stage draws three conclusions through questionnaires and interviews.

Part I: Through the survey of 401 consumer questionnaires, it is concluded that the proportion of male consumers in sports towns is slightly higher than that of female consumers, and most of them are between 26 and 45 years old. From the perspective of education level, they are mainly concentrated at the undergraduate level. From the perspective of occupation, civil servants and public institutions have the most people, followed by enterprises and freelance workers. From the perspective of monthly income, most respondents focus on 5,001 yuan to 8,000 yuan, and most respondents choose 200-500 yuan for each expenditure of sports consumption in small towns with

sports characteristics. From the perspective of participating sports, fitness walking, cycling, mountaineering, watching sports events, marathon, camping and participating in sports festivals are more popular among consumers.

Part 2: Interviewed 4 managers of government departments and 4 managers of sports towns to find out the factors affecting consumer demand and consumer behavior. Interview conclusions: Factors that affect consumers' participation in sports feature town sports include interest, time, monthly income, education level, age, gender, personality, lifestyle, travel mode, transportation, travel time, climate, popularity, social class, living standard, publicity, participation motivation, sports content, experience, loyalty, town facilities and services, sports prices, etc. However, according to the consumer questionnaire survey, the degree of influencing factors is different. From the survey results, the research hypothesis 2 in Chapter 1 is demonstrated: Factors that affect consumers' participation in sports town include income, education level, interest, time, etc.

Part 3: According to STP theory, this stage investigates the consumers in sports towns from four dimensions: geographical segmentation, population segmentation, psychological segmentation and behavioral segmentation, with a total of 60 questions. The results showed that the Cronbach's Alpha value of the four dimensions was 0.951, indicating high reliability of the questionnaire. In geographical segmentation, the average values of the four values of town size, climate, traffic and terrain are all more than 4, indicating that consumers have relatively consistent views on these four aspects. Among the factors of population segmentation, there are 5 factors, including gender, income, occupation, education and religion, and the religious factor has little influence, while the gender factor has no influence. The most influential factors are income, occupation and education level. Among the values of the correlation matrix, DS15 occupation and DS16 education have the highest correlation, with a value of 0.707. The correlation between variables is strong, and the data comes from the normal distribution population. In psychological segmentation, the mean value is more than 3, indicating that most respondents agree with the question. The standard deviation values are all between 1 and 2, indicating that the data distribution is relatively concentrated. According to the results, the correlation between the variables is strong, and the data comes from the normal distribution population, which is suitable for factor analysis, and the rotation sum of squares is loaded to extract 3 factors. The results of behavior subdivision show that the correlation between variables is strong, and the data comes from the normal distribution population, which is suitable for factor analysis. 7 factors are extracted using the rotation sum of squares loading, and the cumulative value of rotation sum of squares loading is 68.6%.

First of all, this study provides empirical support for the application of STP theory in sports characteristic town market. Secondly, make clear the growing sports and leisure needs of consumers in sports towns, and promote the development of national fitness. Finally, the paper analyzes the factors of sports participation of consumers in sports towns, and provides practical reference for the healthy, sustainable and high-quality development of sports towns. Although this

study segmented the market of sports-featured town consumers from the perspective of STP theory, it also had some limitations. As for the distribution of questionnaires, it is impossible to intercept participants directly in small towns. In this study, questionnaires were distributed and collected online by using questionnaires. Although online distribution saves cost and time, it also increases the difficulty of controlling the quality of questionnaires, making it more challenging to find target groups. After the sports characteristic town consumer market segmentation, further put forward the market strategy.

References

- Andaleeb, S. S. (2016). Market segmentation, targeting, and positioning. In *Strategic marketing management in Asia: case studies and lessons across industries* (179-207). Emerald Group Publishing Limited.
- Cahill, D. J. (1997). Target marketing and segmentation: valid and useful tools for marketing. *Management Decision*, 35(1), 10-13.
- Cravens, D.W. and Piercy, N.F. (2009), *Strategic Marketing*, 9th ed., McGraw Hill Irwin, Boston.
- Guo Lijun. (2019). Research on the construction of sustainable development evaluation index system of sports and leisure characteristic towns. *Journal of Jilin University of Physical Education* (03),54-59. doi:10.13720/j.cnki.22-1286.2019.03.011.
- Ji Yuping. (2023). Research on the Improvement of Tourism Attraction of Rizhao Olympic Water Sports Town. Master degree thesis, Shanxi university. <https://link.cnki.net/doi/10.27284/d.cnki.gsxiu.2023.001171> doi: 10.27284 /, dc nki. Gsxiu. 2023.001171.
- Jing Lan. (2019). Research on Leisure sports activities in Sports and leisure Characteristic towns of Shangluo City. Master degree thesis, Xi 'an Physical Education University. https://kns.cnki.net/kcms2/article/abstract?v=TmrGBFWiZl0JEPd1j508jBRszH5Q2lqXcmSsNNJCIahOfBVJnufPC4vKK8Iqu2ulz9dbheF4hGhH52SS1BYupIzZB1xd6HNeG3PCorbSzE8q3_cSYOeHvGWF0YtfvUsJkrpc6ceHgXxgBqL0Toox7w==&uniplatform=NZKPT&language=CHS
- Kotler, P. (1989). From mass marketing to mass customization. *Planning review* , 17(5), 10-47.
- Kotler, P. (2015). *Marketing Management Analysis, Planning, Implementation, and Contro*. New Jersey: Prentice Hall International.
- Lu ZhiQin. (2021). The characteristics of sports leisure town industrial convergence development research (Ph.D. Thesis, wuhan sports college). <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFDLAST2021&filename=1021039884.nh>

- Ma Zhu, Jiang Jianye & Wang Jie.(2007). Classification and selection of market segmentation criteria. *Market Research* (10),48-49.
- Patton, M. Q. (1990). *Qualitative research & evaluation methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Philip Kotler, Kevin Lane Keller, He Jiaxun, Yu Hongyan, Niu Yongge, Xu LAN... & gold jade. (2016). "marketing management" (15). *The brand research* (05), 2. Doi: 10.19373 / j.carol carroll nki. 14-1384 / f 2016.05.011.
- Qu Yunbo (2010), *Market Segmentation*, Beijing: Enterprise Management.
- Si Liang & Chen Miao.(2022). Connotation, dilemma and guarantee path of standardized and healthy development of sports towns in China. *Journal of Shenyang Institute of Physical Education* (05),124-130.
- State Council.(2014, October 20). Several Opinions on Accelerating the development of sports industry and promoting sports consumption. Retrieved March 2, 2022. From: https://www.gov.cn/xinwen/2014-10/20/content_2767791.htm.
- Tang Shi. (2017). *Research on Marketing Strategy of Liuzhou City's Commercial Taekwondo Club Based on STP Theory* (Master's Thesis, Guangxi Normal University).<https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201702&filename=1017214250.nh>.
- Tian Xueli & Zhao Xiuhan.(2018). Research on development level evaluation index system of small towns with sports characteristics. *Journal of chengdu sports institute* (03), 45 to 52. Doi: 10.15942 / j.j csu 2018.03.008.
- Wang Chengyang. (2020). *Research on Evaluation of construction effectiveness of characteristic Towns in Guangxi based on AHP-Fuzzy Comprehensive Evaluation Method*. Master degree thesis, Guangxi University. <https://link.cnki.net/doi/10.27034/d.cnki.ggxju.2020.002032> doi: 10.27034 /, dc nki. Ggxju. 2020.002032.
- Wilkie, William L. & Joel B.Cohen(1977) .*ABehavioral Science Look at Market Segmentation Research*[A].*Moving A Head With Attitude Research* [C].Yoram Wind,ed. Chicago : American Marketing Association.
- Wu Yizhou & Wang Lin.(2012). Spatial performance of urbanization in China: analysis framework, realistic dilemma and optimization path. *Planner* (09),65-70.