Research on the Sports Consumption Status and Development Countermeasures of Urban Residents in Zigong City under the Background of "National fitness"

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Abstract

In the years of "National fitness Plan" in China, with the continuous improvement of relevant policies and regulations, "national fitness Plan" has been gradually promoted as a national strategy, the participation of Chinese residents in sports activities has gradually increased, and the basic pattern of national fitness has been basically formed. Sports consumption is accompanied by the development of the national fitness career and gradually rise and prosperity, in our country, as early as the late 1980s and early 90s have experts and scholars on the "national fitness" and "sports consumption" the relationship between the thorough study, think the national fitness can drive sports consumption, release the consumption potential, is the driving force of the development of the sports industry, and sports consumption and can reflect on the development of the national fitness career. In the Opinions on Promoting National Fitness and Sports Consumption and Promoting the High-quality Development of the Sports Industry, China pointed out how to upgrade sports consumption in the following 10 aspects: First, deepen the reform of "delegating power, delegating power and providing services" to release the development potential. Second, we will improve industrial policies and optimize the environment for development. Third, we will promote sports consumption and strengthen the impetus for development. Fourth, the construction of site facilities, increase the supply of factors. Fifth, we will strengthen platform support and expand market entities. Sixth, we will improve the industrial structure and enrich the supply of products. Seventh, we will optimize the industrial distribution and promote coordinated development. Eighth, we will implement the "Sports Plus" campaign to promote integrated development. Ninth, we will strengthen demonstration and guidance and build development carriers. Tenth, to consolidate the industrial foundation and improve the service level. However, there are no clear indicators and process for the specific content of sports consumption upgrading. Therefore, this study through the literature method, questionnaire survey, data statistics method, logical analysis method, through the study of Zigong urban sports consumption status, further explore the present situation of the development of Zigong sports consumption market and existing problems, and put forward the corresponding countermeasures, to better promote the prosperity of Zigong sports consumption market, and promote the benign development of Zigong sports consumption to provide certain reference.

Keywords

National fitness; Zigong City; sports consumption; current situation and development countermeasures.

1. Introduction

National fitness is a major strategy to adapt to the national development, which is directly related to people's life happiness and physical quality, which is also the basic of the effective construction of a harmonious society. Especially under the background of the rapid economic development, the national fitness can not only guarantee the physical quality level of the whole people, but also is the key to promote the rapid development of the sports industry. While promoting consumption, it can also promote the sustainable development of the market economy. In this regard, the maintenance of national fitness and sports consumption can achieve mutual promotion, not only can achieve the sustainable development of social economy, but also can guarantee the overall level of health of the people. So this paper, through the investigation of Zigong urban sports consumption, analysis of the problems existing in Zigong sports consumption, and in view of the existing problems, put forward the corresponding countermeasures, in order to further optimize the life consumption structure of urban residents in Zigong city, promote the benign development of Zigong sports consumption to provide certain reference.

2. Sports consumption status of urban residents in Zigong City

With the continuous development of social economy, the income level of urban residents in Zigong city is also steadily improving. Through consulting the statistical yearbook of Zigong City in 2023, it shows that the per capita disposable income of urban residents in Zigong City in 2022 was 43,740 yuan, an increase of 4.2% over the previous year; the per capita consumption expenditure in 2021 was 23,878 yuan, while the per capita consumption expenditure in 2022 was 24,650 yuan, an increase of 772 yuan compared with 2021. This fully shows that the disposable income of urban residents is growing steadily, the living standard of residents is improving steadily, and the consumption proportion is also increasing. With the increase of urban residents' income, the consumption structure is also constantly changing. The demands of urban residents in food, clothing and use are becoming diversified and comfortable, with higher requirements for the quality of goods and services. With the improvement of urban residents 'living standards, urban residents' requirements for physical fitness are also constantly improving.

2.1. Structure of sports consumption of urban residents in Zigong City

Sports consumption structure refers to the sum of different types of sports consumption data and the composition or proportion of different labor services in the process of residents 'sports consumption. It is an important indicator to reflect the change of residents' sports consumption quality^[1]. The structure of sports consumption is related to the development degree of social economy, which shows that the structure of sports consumption must change after the development of social economy reaches a certain stage.

According to the relevant literature data, it can be seen that the sports consumption structure is mainly composed of three types, namely, physical sports consumption, ornamental sports consumption and participatory sports consumption. Among them, physical sports consumption refers to the physical expenditure of urban residents to buy sports clothing, sports equipment, newspapers, magazines, sports lottery tickets, sports equipment, etc. Participating sports consumption refers to the expenses incurred by residents to participate in various kinds of sports activities (including participating in competitive sports, carrying out sports fitness, participating in sports competitions and training, etc.) and other sports and fitness training. Finally, ornamental sports consumption refers to the behavior of people purchasing sports services in order to watch various sports competitions, performances, TV, movies, videos and other activities with their theme^[2].

Table 1 Sports Consumption Structure of Urban Residents in Zigong City (N=200)

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	Physical type of sports consumption		Ornamental sports consumption		Participating sports consumption	
amount of money	frequency	percentage	frequency	percentage	frequency	percentage
Under 200	71	35.5%	127	63.5%	121	60.5%
From 200- 500 yuan	61	30.5%	49	24.5%	45	22.5%
500-1,000 yuan	51	25.5%	15	7.5%	21	10.5%
More than RMB 1,000 yuan	17	8.5%	9	4.5%	13	6.5%
amount to	200	100%	200	100%	200	100%

As can be seen from Table 1,63.5% of ornamental sports consumption is less than 200 yuan, 60.5% of participating sports consumption is less than 200 yuan. In addition, 8.5% of physical sports consumption of 1000 yuan is more than 1000 yuan, and 6.5% of participating sports consumption of more than 1000 yuan. Ornamental sports consumption in more than 1,000 yuan accounted for 4.5%. To sum up, it can be seen from the sports consumption of urban residents in Zigong city that the overall sports consumption level of urban residents in Zigong is not high, among which the physical sports consumption is the main one. The ornamental sports consumption and participatory sports consumption are mainly distributed below 200 yuan, indicating that the sports consumption structure of residents in cities and towns in this region is unbalanced, leading to the physical consumption of residents, which reduces the demand for ornamental and participatory sports consumption.

Table 2 Sports consumption structure of Urban residents in Zigong City

Sports consumption	Physical type of	Ornamental sports	Participating sports
type	sports consumption	consumption	consumption
number of people	125	50	25
Male (Percentage)	62.5%	25%	12.5%
number of people	123	56	21
Female (Percentage)	61.5%	28%	10.5%

As can be seen from Table 2, male physical consumption accounts for 62.5%, and female physical consumption accounts for 61.5%, with little difference. Compared with the physical sports consumption, the overall proportion of ornamental sports consumption and participatory sports consumption is relatively low. Because for women are more willing to put money into the gym, fitness training institutions, under the guidance of professional coaches, through their own efforts to shape the beautiful body shape, on the contrary, for men, they are more willing to spend money to see the more exciting, intense competition, because for them, this kind of feeling is quite enjoy.

2.2. Motivation of sports consumption of urban residents in Zigong City

Sports consumption motivation refers to the subjective cause of sports consumption, which is to promote the direct cause of people sports consumption, it is people in certain social economic and cultural conditions, to meet the physical and psychological needs and form a motivation, it is the direct cause of urban residents sports consumption behavior^[3]. It can be seen from Table 3 that the top several sports consumption motives of urban residents are physical fitness,

leisure and entertainment, interpersonal communication and self-improvement, which account for 20%, 17.5%, 14% and 14% respectively. It can be seen that physical fitness and leisure and entertainment are the main motivation and purpose of promoting residents' sports consumption and physical exercise. And perfect self and interpersonal proportion relative to other, consumption motivation is higher, through the investigation and analysis, the Zigong urban residents on sports consumption is more attention to physical fitness and recreation, in the great promotion, but also has a smaller part of people because of the influence of the herd psychology and sports consumption.

Table 3 Motivation of sports sports Consumption (n=200)

	build one's body	leisure and recreation	interpersonal interaction	hobbies and interests	self- improvement	temper one's willpower	Fashion bodybuilding	group psychology	else
N	40	35	28	27	28	14	13	11	4
(%)	20%	17.5%	14%	13.5%	14%	7%	6.5%	5.5%	2%

2.3. Sports consumption level of urban residents in Zigong City

From the perspective of sports consumption, the level of sports consumption reflects the overall level of social and economic development in a region, and also reflects the understanding of urban residents in a region. As shown in Table 1, according to the data obtained from the survey, the results obtained through the statistics show that 39.5% of Zigong urban residents are below 500; 15.5% are between 500 and 1000 yuan; and only 9.0% are over 2000 yuan. More than half of the residents' annual sports consumption expenditure is less than 1,000 yuan. It can be seen from this that, due to the influence of their own economic income, the sports consumption level of urban residents in Zigong City is generally not high. Most of the urban residents spend less than 1000 yuan in sports in a year, while only a small number of people spend more than 2000 yuan in sports a year. It can be seen that the sports consumption level of urban residents in Zigong city is generally not high.

Table 4 Annual sports consumption level of Urban residents in Zigong City (N=200)

amount of money	number of times	percentage
Under 500 yuan	79	39.5
500-1,000 yuan	72	36
1000-2000 yuan	31	15.5
More than RMB 2,000 yuan	18	9
amount to	200	100

2.4. Sports consumption attitude of urban residents in Zigong City

The attitude of sports consumption refers to a tendency, tendency or stability held by urban residents when they participate in sports. Its performance is in three aspects: one is the physical consumption of sports, the second is the participatory consumption of sports, the third is the ornamental consumption of sports [4]. Urban residents 'attitude towards sports consumption is the driving force to promote sports consumption, and urban residents' understanding of sports consumption is related to their educational background, age and occupation. According to the survey, 56.5% of urban residents think it is "very worthwhile", while 26% of urban residents think it is "worth it", which shows that with the development of China's economy, social progress and the improvement of people's living standards, residents' demand for sports consumption is also increasing. At the same time, the survey also shows that 13% and 4.5% of

urban residents do not pay enough attention to sports consumption, and think that it is not matter or worth spending money. This phenomenon is related to the common consumption concept and consumption consciousness of Chinese residents.

Table 5 Survey of Sports Consumption Values of Urban Residents in Zigong City (N=752)

Sports consumption	It's very expensive	It's worth spending	cannot be designated	It's not worth spending
attitude			as	
N	113	52	26	9
%	56.5	26	13	4.5

2.5. Characteristics of Sports Consumption of Urban Residents in Zigong City

Different age groups have different consumption expenditure. From the analysis of big data, we can draw the following conclusions through the analysis of the proportion of annual sports consumption of young people and middle-aged and elderly residents between the ages of 17 and 28. Firstly, according to the distribution of age, the sports consumption concept of young people in urban areas in China is relatively open and the economic ability is relatively strong, so the annual sports consumption expenditure is mostly between 500 yuan and 2,000 yuan. Secondly, relatively speaking, the sports consumption concept of middle-aged and elderly residents in the area of sports consumption is more traditional, so the consumption is mostly concentrated in the physical aspects of sports, and the consumption form is relatively single, so the annual sports consumption of middle-aged and elderly residents between the ages of 29 and 50 is usually between 500 yuan and 1,000 yuan, or even less than 500 yuan.

Have a high demand for sports consumption. In recent years, with the rapid development of the national economy, the living conditions of urban residents in our country have also been greatly improved, which has increased the residents' sports consumption demand to a certain extent, especially under the circumstances that the concepts of national fitness and quality education are continuously popularized and deepened, more and more residents realize the importance of sports consumption, and thus form a higher sports consumption demand. But on the whole, the sports consumption level of urban residents is still relatively low.

The consumption goal is unitary. Through the investigation of the sports consumption behavior of urban residents, it is not difficult to find that the aim of sports consumption of urban residents at present is mostly to treat diseases and improve their health.

2.6. Analysis of influencing factors of sports consumption of urban residents in Zigong City

2.6.1. External factors.

There are three external factors, namely, consumer characteristics, sports consumption concept and value orientation, leisure time. Consumer's characteristic is refers to consumer's sex, the age, the educational background, the occupation, the income and so on. Consumers in age, gender, income, industry and other aspects of different, which will cause their understanding and their value pursuit and consumption values, which will have different impact on sports consumption behavior. The study found that in the non-material sports consumption, mainly male, in the age is mainly young people. From the aspects of education, occupation, income and expenditure, we find that the higher the income of consumers, the higher the proportion of consumption, the greater the proportion of sports expenditure. In this sense, the economic situation of consumers is the most important factor.

Secondly, the concept of consumption refers to people's general attitude and views on consumption level and consumption mode. Values are common notions in a society about how to distinguish right from wrong, good from bad, against the will or in accordance with the will.

Values are general and abstract concepts that feel the goals and ideals of society. It justifies a person's actions. Through the study of the characteristics of sports consumption of Zigong city residents, it is found that there is some inconsistency between the concept of sports consumption and the behavior of sports consumption. Therefore, the government and related sports departments should effectively educate and guide the residents' sports consumption. Our idea is not only to realize this, but also to reflect in consumer behavior.

2.6.2. Internal factors.

The internal factors affecting consumption behavior are analyzed from three perspectives: consumption demand, consumption motivation and consumption preference. Here, consumer demand refers to the desire and desire of consumers for all kinds of consumer materials (including services) in order to meet their own survival, enjoyment and development needs. Sports consumption is a higher level of development and enjoyment than human survival needs. Based on the investigation of the present situation of sports consumption of Zigong city residents, the conclusion is drawn that the sports consumption of Zigong City residents is mainly material sports consumption.

Secondly, the motivation of consumers refers to the need for some things due to the lack of something, which prompts people to seek items to meet their needs. In such an environment, motivation will appear, that is, the need to cause personal motivation. From the perspective of the generation of motivation, motivation has primitive characteristics. From the perspective of consumers, their internal demand drives their consumption behavior. There are some differences in sports consumption motivation and sports consumption behavior of Zigong City residents. Therefore, understanding consumers' consumption motives can not only effectively predict and influence them, but also carry out certain marketing activities.

The last is consumer preference, that is, consumers are more interested in buying or consuming products or services than other products or services, also known as "consumer preferences". It is a kind of subjective feeling about the quality of goods and services. There are obvious differences in sports consumption of Zigong city residents, and there are some differences. From the perspective of consumption age, children's preference for consumer products is mainly parental preference; Young consumer groups pursue trends and brand-name brands. Middle-aged people prefer practical goods; Older people prefer sports health products; From the perspective of gender, men prefer sports products and services that are challenging and can show masculinity, while women have a strong desire to buy all sports products or services related to beauty. In terms of occupation, education and income, consumers with lower income are more inclined to utilitarian sports goods with lower prices, while consumers with middle income are more inclined to non-physical sports consumption. With the improvement of consumers' education level, their awareness of sports consumption is becoming stronger and stronger. Therefore, consumers' consumption tendency has a direct impact on their consumption behavior.

2.6.3. Stimulus factors

There are three factors that promote consumption: consumption environment, related groups and media. First of all, the so-called consumption environment is the external factors and objective factors that consumers face in their life and development and have a certain impact on themselves. It contains both natural and social aspects. In the process of sports consumption, people have an overall understanding of sports venues, facilities and the surrounding green space environment. Therefore, the proximity and hardware facilities of the venue have a great impact on consumers' sports consumption. From this point, it can be seen that the consumption environment has a certain impact on their consumption behavior, and directly affects their enthusiasm to participate in sports.

Secondly, associated groups refer to individuals or groups that have direct or indirect influence on consumers' consumption decisions. This paper investigates the characteristics of sports consumption of Zigong City residents, and the results show that the main way of sports consumption of Zigong City residents is "together with neighbors and friends". This shows that the sports consumption of Zigong City residents is mainly collective, which further proves that Zigong City residents are easy to be affected by relevant groups when they consume sports.

Finally, advertising media is a very popular method of information dissemination, with strong penetration, is the main method of promotion for many companies, but also the most important way for merchants and customers to exchange commodity information. Therefore, media organizations have a great influence on consumers' choice of sports goods and services. Sports advertising, sports news, event reporting and other activities have a promoting role in promoting sports consumption of urban residents.

2.7. Conclusion

Zigong city residents have strong sports consumption consciousness. The results show that the urban residents of Zigong have a strong sports consumption consciousness and a strong concept of sports consumption. They often participate in various types of sports in their spare time. Most of the urban residents have participated in sports consumption activities, but the understanding of sports consumption is not profound enough to form a correct concept of sports consumption.

Through the investigation of the basic situation of sports consumption of urban residents in Zigong, it is found that in the sports consumption of urban residents in Zigong, physical consumption is the main consumption, followed by sports consumption for participation and sports consumption for viewing. But the participation and the ornamental sports expense proportion is relatively small.

The survey shows that the sports consumption level of urban residents in Zigong is mainly within 1000 yuan, which is above the average level in the whole society. The higher the degree of education, the higher the level of sports consumption, because they have a clearer understanding of sports, they are more willing to spend money on sports.

The main factors influencing the sports consumption of urban residents in Zigong city are the sports consumption concept and income level.

3. Development countermeasures for sports consumption of urban residents in Zigong City

3.1. Optimize the structure of the sports industry to meet the sports consumption needs of urban residents

In the development process of the sports industry, we should be guided by the market demand and optimize the industrial structure to meet the sports consumption demand of different urban residents. At the same time, while meeting the sports consumption demand of urban residents, it can promote the increase of sports consumption. The survey found that the urban residents in Zigong city mainly had physical consumption, and the ornamental sports consumption and participatory sports consumption were relatively low. In the sports consumption structure of residents, the sports consumption needs of residents of different ages, different educational background and different genders are also different. From the perspective of the purchasing motivation of consumers of different ages, young people are more inclined to buy the sportswear of fashion brands, and their consumption form is mainly physical consumption and participatory consumption. Middle-aged people have a certain economic foundation, and the requirements for sports products and services are also higher. The motivation of middle-aged consumers to participate in sports consumption is mainly to

strengthen their physical fitness and improve the quality of life. For young people, their sports consumption is more reflected in physical consumption, while for middle-aged people, their sports consumption is more reflected in participatory consumption. And the elderly prefer to carry out physical fitness programs without spending. Most of the elderly people exercise in parks and squares, and their consumption form is mainly physical sports consumption. In addition, from the perspective of gender, there are also differences between men and women in sports consumption. Men are more willing to spend money on ornamental sports consumption and go to experience different sports competitions on site, while women are more willing to spend money on physical sports consumption to create a more perfect figure. Therefore, according to these consumption characteristics, we should promote the optimization of the sports industry, develop different levels of sports consumer goods, and meet the sports consumption needs of different residents.

3.2. Strengthen the concept of sports consumption and guide residents to participate in consumption

With the development of economy, residents 'income is to improve, and the living standard is also improved, and residents' demand for sports consumption is also diversified. The government should also create a good sports consumption environment for residents. One is to hold various types of large, medium and small sports competitions, such as basketball, football, table tennis, badminton, etc., so that the masses gradually develop the habit of participating in physical exercise in daily life; second, combined with the development of Zigong City, build a tourism sports consumption form with Zigong City characteristics, hold more sports events with Zigong characteristics, such as Zigong Dinosaur International Half Marathon with Zigong characteristics, "Chengyu Double Circle Cup" Zigong Dinosaur Western Bridge International Open, "Sister Jiang hometown Cup" national fitness series, etc.

Third, make full use of the Internet, we chat public account, microblog and other multimedia means to convey the benefits of physical fitness to the residents in the most easy to understand way, imperceptibly make physical exercise deeply rooted in the hearts of the people, let the residents fully realize the importance of sports fitness team^[6]. At the same time, it can also drive urban residents to participate sports consumption and ornamental sports consumption.

3.3. The government shall strengthen guidance and improve the management of the sports consumption market

With the rapid development of China's social economy and the substantial improvement of urban residents' consumption ability, a variety of sports and fitness clubs, fitness and entertainment places are springing up like bamboo shoots after a spring rain, providing opportunities for the majority of consumers, but also putting forward new requirements for sports consumption services. Due to the differences in social economy, culture and living habits, the types and forms of sports consumption services vary greatly^[7]. Therefore, in the process of developing the sports industry, the government should also strengthen the supervision and management of the sports market, and constantly optimize and improve the sports consumption market. The relevant government departments should strengthen the macrocontrol of the development of the sports industry. In the process of developing the sports industry, they should formulate reasonable development plans according to the actual situation, establish and improve the relevant laws and regulations of the sports consumption market, and accelerate the standardization of the sports consumption market.

3.4. The government shall increase macro-control to raise residents' awareness of sports consumption

With the continuous improvement of the income level of urban residents in China, the living standard of urban residents has also been improved, and people's demand for sports

consumption in the consumption is diversified and personalized. As for the government, in order to meet people's demand for sports consumption, it is necessary to create an environment for people to enjoy sports consumption, and the utilization rate of existing resources should be improved according to the characteristics of local residents' sports consumption structure^[8], Balancing the sports consumption structure of residents. But through the popularization of daily physical exercise. We will continue to hold activities such as "National Fitness Day", "New Year Climbing", and "Promotion and popularization of mass winter sports", carry out sports activities in government offices, enterprises, campuses, and communities, and promote government organs, enterprises, public institutions, and social organizations to implement the workshop exercise system. We should give full play to the exemplary role of sports stars and sports experts, advocate one hour of fitness every day, innovate the form of fitness activities, carry out recreational and interesting activities, guide consumers to form sports hobbies and consumption habits, and constantly release the potential of sports consumption^[9] o

4. Conclusion

Based on the current situation of the sports consumption of urban residents in Zigong City, the current situation of the sports consumption of urban residents in Zigong City is analyzed, the existing problems are found, and corresponding suggestions are put forward for these problems. Among them, the sports physical consumption is the main, the ornamental and participatory sports consumption development power is insufficient, the sports consumption level of urban residents is not high, and the lack of certain sports consumption consciousness and sports consumption motivation. However, under the background of the national promotion of the national fitness strategy, the urban sports consumption will definitely increase year by year. Therefore, we should recognize the new situation of the sports consumption in Zigong city, and to propose the following suggestions: first, optimize the sports industry structure to meet the sports consumption demand of urban residents; second, enhance the sports consumption concept; third, the government strengthens the sports consumption market management; fourth, the government strengthens the macro-control and raise the awareness of sports consumption. Through the above analysis, the conclusion is drawn that through the role of government guidance, market leadership and social participation, the prosperity of the sports consumption market of Zigong City is taken and the benign development of the sports consumption market of Zigong City as the goal, so as to promote the prosperity of the sports consumption market of Zigong City.

Acknowledgements

Project source :Zigong Philosophy and Social Science Research Base -- National Physical Health and Sports Industry Research Center Project; self-raised project "Research on the Sports Consumption Status and Development Countermeasures of Urban Residents in Zigong City under the Background of" National Fitness "; Project No. GT-03202304;

reference documentation

- [1] Tu Zhiyuan. Study on the structure of sports consumption in China [J]. Southwest Normal University (Natural Science Edition), 2004 (5): 870-873.
- [2] Shu Xin, Wang Yan. Research on the status and countermeasures of sports consumption in small towns in Yichang [J]. Hubei Sports Science and Technology, 2018,37 (08): 672-675.
- [3] Wang Junping. Research on the status and countermeasures of sports consumption of urban residents -- Take Huaibei City as an example [J]. Journal of Huaibei Vocational and Technical College, 2019,18(06):90-92.DOI:10.16279/j.cnki.cn34-1214/z.2019.06.026.

- [4] Lin Xiuhua. Study on sports consumption attitude and influencing factors of urban and rural residents in Shenyang [C]. China International Sporting Goods Expo and Sports Industry and Sports Goods Development Forum, 2010.
- [5] Kong Wenqing, Chen Zhuoyuan. Investigation on the Sports Consumption structure of Urban Residents in China [J]. Journal of Capital Institute of Physical Education, 2001 (04): 6-9.
- [6] Wang Yu. An Introduction to the Market Economy [M]. The Party School of the CPC Central Committee, 1994.
- [7] Yu Jian. On the Cultural obstacle of expanding the sports consumption demand in China [J]. Journal of Harbin Institute of Physical Education, 2002 (01): 11-12 + 14.
- [8] Cao Yanjie. Research on the current situation of sports consumption of urban residents in Nanjing [D]. Nanjing: Nanjing Normal University, 2006:6.
- [9] Zhao Shaocong, Li Xiaotian, Yang Shaoxiong. Investigation and analysis of the sports consumption status of the residents in Beijing [J]. Journal of Fujian Normal University (Natural Science Edition), 2018,34 (01): 103-111.