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### Research Article

### The Development of Leisure Sports in Big Cities in China from the Perspective of Ecological Civilization

### Guifang Cao<sup>1</sup> and Thanh Dat Ngo<sup>2</sup>

<sup>1</sup>Xinjiang Institute of Engineering, Urumqi, Xinjiang 830023, China <sup>2</sup>Faculty of Social Sciences and Humanities, Ton Duc Thang University, Ho Chi Minh City, Vietnam

Correspondence should be addressed to Thanh Dat Ngo; ngothanhdat@tu.edu.vn

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Leisure sports is a combination of leisure and sports. Urban leisure sports are the instinctive needs of urban residents to cope with the "urban disease." It caters to the current urban value demands of optimizing residents' lives and conforms to the development of "Better City, Better Life" trend. This article comprehensively uses literature research, comparative research, system analysis, questionnaire surveys, and case studies to explore the relevant theories of urban leisure sports. Taking Xi'an as an example, we carry out a practical survey of urban leisure sports, including the expression of needs and behaviors of urban residents' restrictions, feedback on the supply of urban leisure sports, and analysis of its existing problems. Investigation results show that ecological civilization and the development of urban leisure sports are an interactive process. Ecological civilization is the external thrust of the vigorous development of urban leisure sports, and leisure sports is a means of ecological civilization construction. "For good health" is the primary factor that stimulates people's leisure sports behaviors. Among the restrictions that affect urban residents' participation in leisure sports, lack of partners is the main interpersonal restriction. The current development of urban leisure sports is faced with problems such as the squeeze of urban life and ecological space, poor air quality, lack of leisure sports facilities, insufficient opening of leisure sports resources, and insufficient guarantees for leisure sports funds. It is recommended to optimize the urban "production, living, and ecological" spatial layout and continuously extend the urban leisure and sports space through the organic renewal of urban space, spatial reuse, and rational development of vertical space. On the basis of understanding the laws of urban development, the exploration of the laws of the development of urban leisure sports must coordinate with the development of urban ecology, economy, and culture.

#### 1. Introduction

The history of human development can be interpreted a splendid history of human civilization. After passing through primitive civilization, agricultural civilization, and industrial civilization, human civilization is moving towards a new era of civilization-ecological civilization. Industrial civilization is an advanced stage of human civilization, which has brought great wealth of material civilization and spiritual civilization [1]. However, due to humans' excessive demand for nature, it has caused nature's unintelligence recovery. Industrial civilization has also brought about a global ecological crisis, resulting in a high tension between man and nature. From the end of the 20th century to the beginning of the 21st century, the global financial crisis broke out. While the contradictions between countries and people in social relations became acute, the continuous outbreak and prominence of the global and regional ecological crisis made the contradictions between people and natural ecology appear very acutely, mainly manifested in global environmental pollution, ecosystem destruction, resource shortage, and other comprehensive and complex problems. Environmental pollution and ecological damage have brought fundamental threat to the survival and development of mankind. The prosperity of ecology leads to the prosperity of civilization, and the decline of ecology leads to the decline of civilization. In the long history of human civilization, one of the reasons that the ancient Egyptian civilization, the Babylonian

civilization, the ancient Mediterranean civilization, and the Indian Ganges civilization went from prosperity to decline or even extinction is related to ecology and environmental changes. In ecological civilization, talents may truly find the value and meaning of life [2]. The arrival of ecological civilization is a new form of human civilization and progress. The rise of ecological civilization is the inevitable result of the development and reform of modern social productive forces. Since the end of the 20th century, the rapid development of natural science, the wide-ranging application of information technology, and the endless exploration of the universe system have greatly expanded and deepened human cognition of nature and the whole universe system. New technological revolution, new scientific and technological revolution and global industrial transformation, low-carbon green energy regeneration and recycling technology and industry represented by clean energy, new energy, new materials, bioenergy, and life science, biotechnology and their industries represented by cell biology, genetic engineering, microbiology, enzyme engineering, and life origin have all been gestated and started to move towards practicality, bringing about a new industrial revolution. With the advent of the leisure era, leisure sports are becoming more and more popular as a fashionable and healthy leisure method and sports behavior. The emergence of leisure sports is a sign of the progress of the times [3, 4]. As a more advanced form in the development of human civilization, ecological civilization is the promotion of a green lifestyle. Urban leisure sports is a pure green project, and its development requires extremely high environmental requirements. Leisure sports have changed the relationship between people themselves, between people and nature, and between people and society, which is the driving force for the in-depth construction of urban ecological civilization [5].

As a life element, leisure sports with unique charm have become an important part of a good life, and a social practice of the relationship between people and people, people and society, and people and nature. Generally speaking, leisure sports refer to physical exercise activities aimed at improving people's physical and mental health, enriching and creating life interests, and improving themselves in their leisure time. It is characterized by freedom, culture, nonutilitarianism, and initiative. It is of great significance and role in improving health, strengthening physique, preventing disease and rehabilitation, improving cultural literacy and spiritual civilization, enriching life content, and strengthening interpersonal relations, and promoting human socialization and personality formation. Germany is the first country in the world to establish a complete social welfare system, which guarantees that Germans have enough leisure time and the right to enjoy social public resources [6]. Traditional German holidays and the right to paid leave granted by law give Germans 178 leisure days a year. In terms of environmental protection, Germany has promulgated more than 8000 federal and state environmental protection laws and regulations to provide effective protection for the environment of leisure sports activities. The "White Paper on Sports and Entertainment" issued by the British government in 1975 clearly stated that leisure sports are part of national welfare and highlighted the role of sports and leisure in improving people's health and maintaining social stability [7]. There are many types of recreational sports popular in Australia. In addition to ball games, fitness, racing, sea, and air sports, there are also local-specific recreational sports, such as Australian football, rugby, cricket, jungle adventure, and gas sports. After the 21st century, with the continuous warming up of leisure sports research and the continuous expansion of its scope, cities, as the center and hub of national political, economic, cultural, social, and ecological construction, are an important field of leisure sports research [8].

Leisure sports activities have gradually become the habit of daily life of urban residents. The city provides time and space conditions for leisure sports activities. Urban living space is the basic condition for urban residents to develop leisure and fitness activities. However, at present, China's urban leisure and sports space still has problems such aslack of reasonable planning, serious shortage of venues, and serious shrinkage of community sports living space. The way to realize the development of leisure sports can include three aspects: First, call on the government and social managers to organize, develop and manage social leisure time resources, advocate civilized leisure sports and entertainment life, and unify with healthy ideas and high-grade cultural quality; second, increase the development and investment of sports leisure and entertainment projects and facilities; and third, meet the needs of different groups and social strata for leisure sports. The development of leisure sports industry can not only meet the growing needs of consumers for spiritual and cultural life but also play a positive role in the adjustment of industrial structure and the development of service industry.

This article takes Xi'an, a big city in western China, as an example. Xi'an is located in the Guanzhong Basin in the middle of the Weihe River Basin, between  $107.40^{\circ} \sim 109.49^{\circ}$ E longitude and  $33.42^{\circ} \sim 34.45^{\circ}$ N latitude (Figure 1). At the end of 2019, Xi'an has a permanent population of 10,203,500. The urban population is 7,612,800, accounting for 74.61% of the permanent population (resident population urbanization rate) and the rural population is 2,590,700, accounting for 25.39% [9]. Taking urban leisure sports in Xi'an as the research object, through investigation and analysis of residents' leisure sports demand characteristics, behavioral constraints, and feedback on the supply of urban leisure sports, we explore the development logic and internal development rules behind urban leisure sports to promote the development of urban leisure sports.

#### 2. Methods and Materials

2.1. Research Objects. The earliest conceptual framework of urban spatial structure was put forward by foreign scholar Fei Li in the 1960s. He believed that urban spatial structure includes three elements: cultural value, material environment, and functional activities. The urban spatial structure is manifested in two aspects: form and process. The form of urban spatial structure refers to the spatial distribution of material elements and activity elements, and the process



FIGURE 1: Location map of Xi'an city area.

refers to the mutual influence between elements, manifested as various traffic flows [10]. Correspondingly, the urban space is divided into "adapted space" (such as buildings) and "dynamic channel space" (such as transportation networks). Based on this theory, the spatial structure of urban leisure sports is constructed. The reasonable layout and planning of urban leisure sports space is the extension of urban leisure sports space.

This article takes urban leisure sports as the research object and investigates the development logic and internal development laws behind urban leisure sports by investigating the characteristics of leisure sports demand, behavioral constraints, and feedback to the urban leisure sports supply in Xi'an to promote the development of urban leisure sports.

#### 2.2. Research Methods

2.2.1. System Analysis Method. Urban leisure sports is a complex system that integrates city, culture, sports, and leisure. It is necessary to have a holistic view and open mind when researching and solving urban leisure sports problems [11]. Compared with some internationally renowned sports cities and leisure sports cities, such as Sheffield in the UK, Kiel in Germany, and Melbourne in Australia, we have to reexamine the development of leisure sports in China and think about the construction of leisure sports cities in China from the perspective of industrial development and humanistic care. If we want to avoid the wave of homogenization and establish our own urban development characteristics, we need cities to make full use of local natural and human resources, develop leisure sports characteristic industries according to local conditions, and form an exclusive business card. When conducting leisure sports research, we must consider the various components of urban leisure sports and the relationship between them and carry out overall and systematic analysis and research in order to form a feasible basic theory and effective development concept of urban leisure sports.

2.2.2. Interview Method. Through in-depth interviews and observations, we can understand the situation of urban development, local traditional culture, leisure sports events and festivals, public service supply, resources, and environment and explore the internal mechanism and power support of urban leisure sports development [12].

2.2.3. Questionnaire Survey Method. The questionnaire survey method is a way to indirectly obtain materials and information by sending a concise inquiry form to the investigator and asking for instructions to fill in opinions and suggestions on the relevant issues.

First, the compilation and revision of the questionnaire, based on the basic individual situation of demographic variables, and the theoretical content of demand motivation and behavior restriction are used to understand the current situation of urban residents' participation in leisure sports and behavior restrictions, urban leisure sports supply, and environmental satisfaction evaluation [13].

Then, we conduct the questionnaire reliability and validity test based on the expert validity evaluation method by selecting relevant experts in the fields of tourism, leisure, sports, and leisure sports, mainly professors and doctoral tutors. The validity of the questionnaire content is tested, and the test results show that 20% of the testers think it is very effective and the remaining 80% think it is effective (Table 1). The retest method was used to test the reliability of the questionnaire, 55 residents were selected, and the consistency of the two measurement results for each question was calculated at an interval of 2 weeks. The reliability coefficient *R* of the questionnaire is 0.796, and the value of the reliability coefficient tends to be good, reaching the level that a comprehensive questionnaire can be used (Figure 2).

TABLE 1: Expert evaluation results of questionnaire validity.

	Very effective	Effective	Average	Ineffective	Very ineffective
Number of people	2	8	0	0	0
Proportion (%)	20	80	0	0	0



FIGURE 2: Questionnaire sample retest agreement and reliability coefficient value.

The questionnaire survey was subsequently implemented. A total of 3600 questionnaires were distributed, and 3425 questionnaires were recovered. After excluding invalid questionnaires, 3242 valid questionnaires were obtained. The effective response rate was 90.06%.

Finally, we use SPSS 21.0 statistical software to perform statistical processing on the returned questionnaires and perform descriptive statistical analysis of urban residents' leisure sports demand expression and behavioral restrictions, urban leisure sports supply, and environmental satisfaction [14]. This research will objectively and truthfully reflect the inner relationship between leisure sports behavior demand and urban leisure sports supply and environmental satisfaction.

2.2.4. Case Study Method. The case method is a commonly used research method in sociology. It refers to a method of in-depth and detailed investigation and research on a specific social unit. Case studies often use purposeful sampling, such as representative case sampling, critical case sampling, extreme case sampling, and comprehensive sampling. This research is based on a sample of representative cases. We select three field survey sites in Xi'an and conduct in-depth investigation and research from January 2018 to June 2019.

#### 3. Results and Analysis

#### 3.1. Expression of Urban Residents' Leisure Sports Demand

3.1.1. Performance of Urban Residents' Leisure Sports Demand. The so-called "urban disease" refers to a series of social problems caused by the excessive concentration of population in big cities, which are manifested in the blind expansion of urban planning and construction to the surrounding areas, and the occupation of a large number of cultivated lands, making the contradiction between people

and land more acute. "Urban diseases" are manifested in population expansion, traffic congestion, environmental degradation, housing tension, employment difficulties, etc., which will aggravate the burden of cities, restrict the development of urbanization, and cause physical and mental diseases of citizens. In particular, the travel time of the city is long. Due to traffic congestion and management problems, the city will lose a lot of wealth, virtually wasting energy, and resources, which is not conducive to "the smooth development of the city." As "urban diseases" and "urban civilization diseases" become more prominent, the deterioration of the living environment and the gradual degradation of human functions have threatened the physical and mental health of urban residents. Physical and mental health has become the most concern of urban residents. A survey of residents in Xi'an found that "for the sake of health" is the primary factor that motivates people's leisure sports behavior, accounting for 81.5%. "For happiness," "to regulate emotions," and "to release stress" are also the main reasons for participating in leisure sports, accounting for 43.5%, 33.4%, and 33.0%, respectively. According to Maslow's hierarchy of needs theory, higher levels of needs will appear after people's basic needs are met, which is also reflected in this survey [15, 16].

The survey finds that among the many leisure methods, static leisure methods such as watching TV and surfing the Internet are still in the mainstream. With the awakening of people's health awareness, leisure sports have been favored, accounting for 51.5%. Cultural leisure such as reading, watching movies are also popular among urban residents, accounting for 31.6% and 27.0%, respectively. Under the guidance of the leisure era, the audience of tourism and leisure has gradually expanded and become one of the main leisure methods (Table 2).

The survey finds that among the 14 types of leisure sports activities, the most popular are simple, popular, free or low-cost activities, such as walking, running, and ball games, accounting for 60.6%, 40.7%, and 32.6%, respectively. The new and fashionable activities such as cycling and mountaineering/hiking tours are also very popular, accounting for 23.5% and 20%, respectively. Square dance, which blooms all over China for many years, is also reflected in this survey, accounting for 16.8%. Although swimming is popular, due to venue restrictions, the participation rate is not high, accounting for 13.3% (Figure 3).

3.1.2. Temporal and Spatial Characteristics of Urban Residents Participating in Leisure Sports. Investigating the time dimension of Xi'an residents participating in leisure sports is carried out from the two aspects of participation frequency and time. The time dimension is an important indicator of whether leisure sports will become a lifestyle

Method	Physical exercise	Watching TV	Surfing the internet	Reading	Movies	Chatting	Hanging out	Laying cards/mahjong	Travel
Quantity	1671	1771	1759	1025	876	311	588	501	932
Proportion (%)	51.5	54.6	54.3	31.6	27.0	9.6	18.1	15.5	28.7

TABLE 2: Urban residents' leisure preference in their leisure time.



FIGURE 3: Leisure and sports preference of urban residents in their leisure time.

(Table 3). The frequency of urban residents participating in leisure sports is mostly 1-2 times a week, reaching 58.2%, above 3 times a week accounting for 30.4%, and the uncertain ratio is 11.4%. It can be seen that the overall activity of leisure sports that urban residents participate is acceptable, but the frequency of participation of most of the population is not high, just staying at 1-2 times, which is far from the goal of leisure sports to become a lifestyle of residents. In terms of the length of time that urban residents participate in leisure sports, the average daily participation time is less than 0.5 hours, reaching 30.8%. The participation time of the rest is basically between 0.5-1 hour and 1-3 hours, and the participation time over 3 only accounts 10.6%.

The survey shows that in terms of leisure and sports activities, urban residents are most inclined to choose places that are close, good, and free of charge. Residents who choose open spaces, fitness spots and green spaces/parks/ squares in the community are the most, reaching 47.6% and 45.7%. With the free opening of school venues and the continuous construction of fitness trails/cycling paths, the space and venues for urban residents' leisure and sports activities have been expanded. Free school venues and beautiful fitness trails have become the preferred venues for citizens, and the selection rate has reached 25.3% and 24.6%, respectively. Convenient community fitness centers are also more popular, accounting for 26%. The selection rate of fee-based sports venues/gymnasiums is only 16.3%, indicating that residents' leisure sports consumption concepts and awareness are not high. The sports industry market has yet to be developed. 11% of residents have chosen streets or construction vacancies, which shows that there are still insufficient leisure sports venues. In terms of the time it takes for urban residents to reach leisure and sports activities, 19.7% and 39.3% choose "within 5 minutes" and "6-15 minutes," respectively, which confirms that the construction of a 15-minute fitness circle in urban communities has achieved certain results, but not yet able to cover all people. 24.7% of people choose "16-30 minutes," 10% of people choose 46 minutes to reach the leisure stadium the above.

3.1.3. Behavioral Needs of Urban Residents Participating in Leisure Sports. Behavior selection is mainly to investigate the behavioral ways of urban residents participating in leisure sports to understand the behavioral needs of residents for travel and activity methods. In terms of travel mode, 55.7% of people choose to walk to leisure sports venues, reflecting the increase in people's fitness awareness and the improvement of leisure sports venues. With the implantation of environmental protection concepts and the popularization of shared bicycles, green travel has become a fashion, 16.5% of the people choose bicycle travel and around 6.5% of the people prefer self-driving travel. Electrical bikes have always been favored as a convenient means of transportation and have been verified in the survey. Buses and rail transit are the main ways to alleviate traffic congestion, but the proportion of choices in the survey is very low, only 8.4% and 1.4%, reflecting that the convenience of public transportation and rail transit needs to be improved.

In terms of the main ways of urban residents participating in leisure sports activities, the most important way of activities is with themselves, friends/colleagues, and with

uency -2/week	uency -2/wet
370	370
11.4	11.4

TABLE 3: Time dimension of urban residents participating in leisure sports.



FIGURE 4: The main ways urban residents participate in leisure sports activities.

family members. Due to the diverse content and flexible forms of leisure sports activities, there are both individual activities and group participation (Figure 4).

The behavioral consumption of leisure sports reflects the demand for consumption of leisure sports and is an important indicator to measure the development of the leisure sports market and industry. The survey showed that in the past year, 34.1% of leisure sports consumption was below 100 yuan, 27.5% were 101-500 yuan, 14.6% were 501-1000 yuan, and only 23.8% were above 1000 yuan. It can be seen that the leisure sports consumption population of urban residents is not large, and the consumption demand is still relatively weak. This is far from the goal of achieving the total scale of the fitness and leisure industry to reach 3 trillion yuan by 2025. With the increase of urban residents' demand for experiential consumption, there is huge room for the development of the leisure sports industry market.

## 3.2. Restrictions on Recreational Sports Behaviors of Urban Residents

3.2.1. Personal Restrictions on Leisure Sports for Urban *Residents.* On the basis of reference to the existing theoretical research, combined with the research object and content, the interest, body, job, and skills are selected as the factors to examine the personal limitations of urban residents. The survey found that urban residents' "strongly agree" choices for individual restrictions are all below 10%. The highest proportion of options is physical discomfort, and the lowest proportion is lack of skills. Among the "more agreeable" choices, the highest proportion is that I am not interested in participating in the heavy workload/physical and mental fatigue, the lowest ratio is that I am not interested in participating. In the "basically agree" and "relatively disagree" options, the ratio of each factor does not fluctuate greatly. In the "very disagree" option, the percentage of people who choose "I am not interested in participating" is the highest, and the percentage of people who choose "heavy work load / physical and mental fatigue" is the lowest. It can be inferred that among the personal restriction factors for urban residents to participate in leisure sports, "heavy work load/physical and mental fatigue" is the main influencing factor, followed by lack of skills and physical discomfort, while the barriers to participation in interest are the smallest (Table 4). It can be seen that most urban residents recognize and like leisure sports subjectively, which is good for the vigorous development of urban leisure sports.

3.2.2. Interpersonal Restrictions on Leisure Sports for Urban Residents. Interpersonal restriction refers to the negative factors that affect their leisure sports preferences or participation due to the lack of suitable companions, such as lack of partners, no invitation, and different leisure sports preferences of husbands and wives, thus reducing participation in leisure sports activities. Interpersonal restrictions are "preexisting" restrictions like personal restrictions. Interpersonal restrictions can be investigated from two aspects: lack of partners and lack of family support. The survey shows that among the interpersonal restrictions of urban residents' participation in leisure sports, the lack of family support (31.4%) is higher than the lack of partners (25.2%) for the "strongly disagree" choices. For the "relatively disagree" choices, lack of partners is slightly higher than lack of family support. For the choices of "basically agree," "quite agree," and "strongly agree," lack of partners is significantly higher than lack of family support. It can be seen that in terms of interpersonal restrictions, urban residents agree that lack of family support is not the main obstacle to participating in leisure sports, and lack of partners is the main restricting factor affecting participation in leisure sports. Negotiation and adjustment of interpersonal restrictions is inseparable from the improvement and growth of leisure sports organizations and puts forward clear requirements for the organization and supply of urban leisure sports.

3.2.3. Structural Restrictions on Leisure Sports for Urban Residents. Structural constraints, also called structural environmental constraints, refer to the external social

Content		I am not interested in participating	Physical discomfort	Heavy work load/physical and mental fatigue	Lack of skills
Strongly diagram	Frequency	1056	871	675	794
Strongly disagree	Percentage (%)	32.6	26.9	20.8	24.5
Relatively agree	Frequency	693	800	740	741
	Percentage (%)	21.4	24.7	22.8	22.9
Designally, agrees	Frequency	1003	963	1089	1067
Dasically agree	Percentage (%)	30.9	29.7	33.6	32.9
Owite comes	Frequency	228	302	465	417
Quite agree	Percentage (%)	7.0	9.3	14.3	12.9
Strongly agree	Frequency	262	306	273	223
	Percentage (%)	8.1	9.4	8.4	6.9
Mean		2.37	2.50	2.67	2.55
Standard deviation		1.23	1.24	1.20	1.19

TABLE 4: Urban residents' recognition of personal restrictions on participating in leisure sports.

Note: A 5-level scoring method is adopted, with 1 point for "strongly disagree," 2 points for "relatively disagree," 3 points for "basically agree," 4 points for "relatively agree," and 5 points for "strongly agree".

environmental factors that affect individual leisure sports participation [17]. The mediating restrictions between leisure preference and leisure participation are "turbulent" restrictions, including mediating restrictions (time, money, opportunity, etc.) and social environmental restrictions (transportation, facilities, crowds, inconvenient parking, air environment, etc.).

The survey shows that among the approval of the structural restrictions, for the "strongly disagree" option, the proportion of inconvenient transportation is the highest, reaching 27.1%, followed by insufficient economic strength, inconvenient parking, long leisure and fitness facilities, lack of facilities and places, lack of time, and poor air quality. For the "relatively disagree" option, the proportion of inconvenient transportation is still the highest, and vice versa, the proportion of poor air quality is the lowest. For "basically agree," only 28.6% chose the inconvenient transportation option, and the selection ratios of other factors were more similar, all above 30%. For the "quite agree" option, the most popular factor was lack of time, followed by lack of facilities and crowded places. For the "strongly agree" option, urban residents' approval of various factors is the opposite of the "strongly disagree" option, the highest proportion of choices are poor air quality and the lowest proportion is the inconvenient transportation [18].

It can be seen that among the structural constraints, urban residents believe that the biggest constraint affecting participation in leisure sports is poor air quality. Because of air pollution, people participating in outdoor activities will inhale a large number of pollutants, which will constitute a health problem [19]. Although air pollution has been significantly alleviated under heavy control, it will take time to cure it. Under the pressure of urban life, lack of time is also the main restrictive factor. Leisure sports venues are a necessary condition for the development of leisure sports activities. Although the facilities of leisure sports facilities have been improved in recent years, they are still far from meeting the needs of urban residents. It is generally agreed that crowded venues, lack of facilities and venues, inconvenient parking, and leisure and fitness venues have certain restrictive effects on its participation in leisure sports [20–22]. Under the background of the rapid development of urban economy, the insufficient economic strength restriction on the participation of urban residents in leisure sports is no longer prominent. With the continuous construction of the urban public transportation network system, it provides urban residents with more convenient means of transportation. Inconvenient transportation have no longer obvious restrictions on urban residents participating in leisure and sports activities.

#### 4. Conclusions

- (1) "For good health" is the primary factor that stimulates people's leisure sports behaviors. The most popular are simple, popular, free, or low-cost activities, such as walking, running, ball games, and riding. The role of social organizations in the development of urban leisure sports has not been brought into play, and the participation methods are mainly individuals, and there are not many group activities
- (2) Among the restrictions affecting urban residents' participation in leisure sports, lack of partners is the main interpersonal constraint. "Heavy work-load/physical and mental fatigue" is currently the main personal restriction. Poor air quality, lack of time, and insufficient supply of facilities have become a major structural restriction. The restrictions of participation interest and insufficient economic strength are no longer prominent
- (3) Urban residents generally have a disconnection between leisure sports awareness and participation behavior, that is, "awareness is strong, and behavior is weak." Insufficient public service supply, lack of

time, and environmental issues have become the main restrictions affecting residents' participation in leisure sports. It is hoped that urban leisure sports restrictions and consultation studies can attract more scholars and government personnel's attention

#### **Data Availability**

The figures and tables used to support the findings of this study are included in the article.

#### **Conflicts of Interest**

The authors declare that they have no conflicts of interest.

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