

# Research on Sports Public Service Supply in the Chengdu–Chongqing Twin-City Economic Circle under the Background of Regional Economic Development

Yiming Yang\*, Yun Liu, Yu Huang

Chongqing Vocational College of Applied Technology, Chongqing 401520, China

\*Corresponding author: Yiming Yang, qwer990222@163.com

**Copyright:** © 2024 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

**Abstract:** Using literature, questionnaires, interviews, and mathematical statistics to investigate the current situation of sports public services in the Chengdu–Chongqing Twin-city Economic Circle. The results show that there are some problems in Chengdu–Chongqing sports public services, such as big difference in the development level of supply between urban and rural areas, low supply level, low efficiency, supply mechanism defect, lack of social sports instructors, an outstanding contradiction between the quality of sports public service and residents’ demand. To address the problems, government departments should accelerate the transformation of government functions, improve the relevant regulations and systems, increase the investment in sports public services, improve the quality of supply, cultivate the backbone team, integrate resources, and combine the national characteristics with regional characteristics, take into account the personalized needs of the residents, combine the sports public services with intelligence, and build the service system of “Internet + Fitness.”

**Keywords:** Regional economy; Chengdu–Chongqing Twin-city Economic Circle; Sports demand; Sports public service; Current supply situation

**Online publication:** April 29, 2024

## 1. Preface

### 1.1. Background of the study

In recent years, with the continuous advancement of the construction of China’s public service system, a public service supply model in the form of government-led and social participation has been initially formed. In May 2015, The State Council issued “Opinions on the Government’s Purchase of Public Cultural Services from Social Forces,” which pointed out that a relatively complete system of government’s purchase of public cultural services from social forces should be basically established, and a mechanism of allocation and supply of public cultural resources should be formed in accordance with the level of economic and social development and the spiritual, cultural and physical fitness needs of the people<sup>[1]</sup>; In August 2021, The State Council issued

the notice of the “National Fitness Plan 2021–2025,” which pointed out that since the “13th Five-Year Plan,” with the national fitness strategy rising to the national strategy, the public service level of national fitness has increased, but there are still problems such as unbalanced regional development and inadequate public service supply. In view of the existing problems, it is proposed that during the “14th Five-Year Plan” period, it is necessary to increase the supply of national fitness facilities, formulate a “Five-Year action plan” for the construction of fitness facilities to make up for shortcomings, at the same time, increase the opening of public sports venues (gymnasiums), transform the infrastructure of sports venues and optimize the use of sports venues, and adopt free or low-cost open performance management. On this basis, it will increase the openness to vulnerable groups (youth, the elderly, the disabled); Secondly, under the condition of normalizing the COVID-19 epidemic, we should increase the opening of sports venues at all levels to society<sup>[2]</sup>. In March 2022, the State Council issued the “Notice of Opinions on Building a Higher Level of Public Service System for National Fitness,” which states that it is necessary to build a perfect mechanism for the development of national fitness, to promote the balanced development of public service for national fitness in urban and rural areas, to create green and healthy carriers for national fitness, to build a diversified system of events and activities, to consolidate the foundation of the masses for national fitness, to improve the standardization of national fitness and to form a general atmosphere for everyone’s participation in sports<sup>[3]</sup>.

## **1.2. Purpose and significance of the study**

In the context of economic globalization and international regional economic integration, the establishment of the Chengdu–Chongqing Twin Cities Economic Circle has accelerated the development of the western region, raised the level of openness in the western region, and made the western region gradually become an important pillar of the country’s comprehensive strength. To promote the construction of the Chengdu–Chongqing Twin Cities Economic Circle and accelerate the development of sports in Sichuan and Chongqing, the government departments of the two places have proposed to strengthen the regional linkage with sports as a carrier to promote the in-depth integration of fitness for all and health for all, and to further satisfy the needs of the people of the two places for a healthy and beautiful life. In April 2020, the sports Bureau of the two places jointly signed the “Framework Agreement on Promoting the Integrated Development of Sports Public Services” in the Chengdu–Chongqing Twin-city Economic Circle Area, which opened the prelude to the sports cooperation and integrated development of the Chengdu–Chongqing Twin-city Economic Circle area, and the two places will carry out in-depth cooperation in sports events, sports facilities, sports personnel training and other aspects to jointly promote integrated development. This topic will take the Chengdu–Chongqing Twin Cities Economic Circle region sports public services as an entry point to the Chengdu–Chongqing Twin Cities Economic Circle region sports public service supply development strategy<sup>[4]</sup>. Exploring the current situation and problems of sports public service supply in the context of Chengdu–Chongqing cooperative development is of great significance and practical value for improving the sports public service system.

## **2. Results and analysis**

### **2.1. The investment of public sports funds in the main cities of Chengdu–Chongqing Twin Cities Economic Circle region**

According to the survey, the investment in public sports in Chengdu–Chongqing Twin-city Economic Circle is included in the regional financial budget, and the proportion of investment in sports is much larger in cities than in rural areas. The investment of sports funding in urban areas has a stable financial allocation from the higher level of finance and specialized government funds, of which the source of funding mainly includes

donations from the society, enterprises, and institutions as well as individuals, and in some areas, there are also cases of fundraising from the residents. In general, the investment in sports funding is mainly concentrated in the education category, and the investment in urban public sports funding does not account for a high proportion of its sports funding sources are mainly based on sports lottery. Take Ya'an City as an example: the local government takes the opportunity of green city development to continuously increase the organization of national fitness activities, explore the mass sports and fitness mechanism in line with local characteristics, and continuously increase the investment in public sports and fitness facilities. During the "13th Five-Year Plan" period, 3.99 million Chinese yuan of Sports Lottery Public Welfare Funds allocated by the higher-level finances were used to improve the infrastructure conditions of the sports and fitness venues in the administrative villages at all levels in Ya'an City, widely and deeply publicize and carry out fitness activities for the whole nation, and vigorously support schools at all levels to carry out sports activities on campus, and use the funds for the maintenance and updating of stadiums, facilities and equipment.

## 2.2. Services of sports venue facilities in main cities of Chengdu–Chongqing Twin Cities Economic Circle Region

The survey shows that residents in the Chengdu–Chongqing Twin Cities Economic Circle region have a high level of satisfaction with the public infrastructure for sports, with 4.58% of the respondents having a medium level of satisfaction with the local public infrastructure for sports; 61.67% are satisfied; 23.02% are average; and 10.73% are dissatisfied. With the further promotion of national fitness, the forms of residents' participation in sports activities have become diversified, and the forms of residents' participation in sports activities have gradually increased, while the supply status of regional sports venues and facilities directly reflects the diversity of the types of sports public services enjoyed by the residents of the region and the high level of sports facilities and services. As shown in **Table 1**, the places where residents participate in physical exercise are mainly concentrated in the following areas: free sports venues (79.11%), gymnasiums open to the public (35.6%), school-related sports venues (26.7%) and other sports venues (26.03%). According to the survey, more than 65% of the residents choose a variety of sports venues for physical exercise according to their own needs. It can be seen that with the gradual improvement and increase of sports venues and facilities, the participation of regional residents in sports activities has become diversified, but the sports venues and facilities are still unable to meet the diversified needs of the residents.

**Table 1.** Places where residents in Chengdu–Chongqing Twin-city Economic Circle participate in physical fitness activities ( $n = 2,489$ ; %)

Gymnasium	Community sports facilities	Highway or street	Workers' activity center	School	Fitness and recreation club	Free sports facilities	Other
35.60	17.60	8.80	5.34	26.70	9.56	79.11	26.03

Take Chongqing as an example: by the end of 2020, the city had 126,189 sports venues, with a total area of 58,914,400 square meters, and the per capita area of sports venues was only 1.84 square meters<sup>[5]</sup>. These sports venues are mainly concentrated in schools at all levels and institutions open to the public to a low degree, it is difficult to meet the demand for residents to participate in sports activities. It can be seen that the number of fitness venues, site areas, and sports grounds in the Chengdu–Chongqing Twin Cities Economic Circle is still very insufficient, and the supply of sports facilities in the region still has a lot of room for development.

### 2.3. Organization of sports activities and promotion of sports and health knowledge in the main cities of Chengdu–Chongqing Twin Cities Economic Circle region

The survey shows that the frequency of residents’ weekly participation in sports and physical activities mainly focuses on 1–2 times, accounting for 54.04%; 3–4 times, accounting for 15.31%; and more than 4 times, accounting for 11.89%. The interviewees believed that regular participation in sports activities not only strengthens one’s body and improves one’s sports skills, but also improves interpersonal skills. In terms of participation in sports activities organized by the community: residents have little interest in sports activities organized by the community, and their leisure time is mainly spent on accompanying their families and staying at home, so their participation in sports activities organized by the community and above departments is not high; on the other hand, the interviewees believe that most of the sports activities organized by the departments are of a certain degree of professionalism, and that their own athletic level is not enough to participate in such sports activities. On the other hand, the interviewees believe that most of the sports activities organized by these departments are professional in nature and that their own level of sports is not sufficient to participate in such sports activities <sup>[6]</sup>.

As shown in **Table 2**, residents of Chengdu–Chongqing region mainly learn about sports and health knowledge through the Internet, accounting for 58.98%; sports apps, accounting for 50.94%; TV, accounting for 50.54%; community bulletin boards, accounting for 34.83%; radio, accounting for 17.36%; and others, accounting for 39.05%. The governments of the two places actively take advantage of “National Fitness Day,” “The People Walking with the Olympic Games,” and other opportunities to carry out a wide range of national fitness competitions, exhibitions, guidance, and science popularization activities that go deep into the grassroots, close to life and convenient for participation, thereby enhancing the awareness of the masses to actively participate in fitness and meet the diversified needs of the masses for participation and fitness. For example, the “Sichuan and Chongqing Ice and Snow Cup – Winter Sports Knowledge Online Challenge for All” in 2020 was launched jointly by Sichuan and Chongqing to attract the public in both places to learn more about and participate in ice and snow sports; and the “Healthy Chengdu 2021 – Special Action for Popularizing Health Knowledge” was launched to attract the public to learn more about and participate in ice and snow sports <sup>[7]</sup>.

**Table 2.** Ways for residents in Chengdu–Chongqing Twin-city Economic Circle to understand sports and health knowledge ( $n = 2,489$ ; %)

Community bulletin board	Community publicity	Television	Radio	Internet	Sports app	Other
34.83	22.22	50.54	17.36	58.98	50.94	39.05

### 2.4. Demand for sports public services of residents in main cities of Chengdu–Chongqing Twin Cities Economic Circle Region

With the all-out promotion of national fitness, residents’ attention to health has gradually increased, and there is also a growing demand for personalized physical exercise venues, as well as a growing demand for physical fitness monitoring related to physical exercise.

As shown in **Table 3**, 59.7% of the respondents expect the sports venues (halls) to have places where exercisers can communicate with their friends; 37.69% of the residents expect to have resting areas where sports information can be provided; 33.63% of the residents have higher requirements for the completeness of transportation facilities; 19.97% of the residents have the demand for related supporting service facilities; 14.54% of the residents hope that non-sports entertainment programs can be provided; 4.26% of the residents hope that other aspects of personalized needs can be provided; only 1.26% of the respondents said that they did not care. sports recreation programs; 4.26% of the residents want to provide other aspects of personalized



needs, and only 1.8% of the respondents said it does not matter. This shows that the personalized needs of local residents for public sports services are becoming increasingly extensive <sup>[8]</sup>.

**Table 3.** Personalized sports public service demand of main urban residents in Chengdu–Chongqing Twin-city Economic Circle area ( $n = 2,489$ )

Sports public service demand	%
Complete transportation facilities	33.63
Supporting service facilities (catering, bathing, etc.)	19.97
Rest areas provide sports information	37.69
Non-sports entertainment projects	15.54
Places to socialize with exercise buddies	59.70
No preference	1.80
Other	4.26

Physical fitness measurement and monitoring is an important standard for measuring the achievements of national fitness and the development of sports, and the provision of physical fitness monitoring services is the most basic public service demand for sports. Moreover, regular physical fitness monitoring and the establishment of residents’ own physical fitness and health records as well as follow-up monitoring, intervention, and tracking services are the most important and practical needs of the residents. As shown in **Table 4**, residents’ demand for physical fitness monitoring mainly focuses on physical fitness assessment (e.g. height, weight, cardiorespiratory fitness, BMI, athletic ability, etc.), pre- and post-exercise monitoring, and the establishment of personal physical fitness and health records, which each account for 75.89%, 51.62%, and 47.89% of the total demand; and the demand for follow-up services such as regular physical fitness tracking, interventions, monitoring, etc., and publication of regular physical fitness monitoring reports, each accounting for 39.05% and 33.35% of the total demand. To sum up, residents in the region are more concerned about the content of physical fitness monitoring services, and reasonable monitoring pays more attention to the health of residents’ participation in physical exercise (health knowledge and exercise methods) <sup>[9]</sup>.

**Table 4.** Physical monitoring needs of main urban residents in Chengdu–Chongqing Twin-city Economic Circle area ( $n = 2,489$ )

Physical fitness monitoring needs	%
Physical fitness assessment (e.g. height, weight, cardiopulmonary function, BMI, exercise capacity)	75.89
Establish personal physical fitness health records	47.89
Pre- and post-exercise body monitoring	51.62
Regular follow-up services such as physical fitness tracking, intervention, monitoring, etc.	39.05
Regular publication of physical fitness monitoring reports	33.35
No preference	6.91
Other	14.18

### **3. Development strategies for sports public service provision in Chengdu–Chongqing Twin Cities Economic Circle Region**

#### **3.1. Establishing and improving the sports public service organization in Chengdu–Chongqing Twin-city Economic Circle and strengthening the management**

To promote the normal operation of sports public service supply in Chengdu–Chongqing Twin-city Economic Circle, government departments at all levels should establish and improve sports public service management organizations. It is important to increase the awareness of grassroots cadres to sports work, allocate full-time posts related to sports public service or social sports instructors, and strengthen the construction of grassroots sports public service organizations and sports backbone talent teams to achieve full-time management, thus promoting the smooth development of sports public service in Chengdu–Chongqing Twin-city Economic Circle <sup>[10]</sup>.

#### **3.2. Giving full play to regional advantages and strengthening the development of sports public services in Chengdu–Chongqing Twin-city Economic Circle**

With the development of regional economic integration, the Chengdu–Chongqing Twin Cities Economic Circle has become an important economic development center and science and innovation center in the West. With the opportunity of the development of “Western Development,” “Belt and Road,” “Chengdu–Chongqing Twin Cities Economic Circle,” and “Chongqing Metropolitan Area,” the government departments of the two places should increase the inter-regional resource sharing, complement each other’s strengths, develop and cooperate by constructing sports cooperation in Chengdu–Chongqing region, optimize the allocation of sports public service resources through the cooperation mechanism, and build the coordination mechanism of sports public service resources, thereby promoting the joint development of sports public service in the Chengdu–Chongqing region.

#### **3.3. Emancipating the mind and improving the sports consciousness of grassroots cadres in the Chengdu–Chongqing region**

The degree of openness of grassroots cadres’ sports awareness is an important support for the development of sports in the Chengdu–Chongqing Twin-city Economic Circle. In the development of sports public services, grassroots cadres, as the implementers of the policy, should deeply realize that health is an important support for China’s socialist builders, and should fully realize the importance of sports public services in the development strategies of “Fitness for All” and “Healthy China,” placing sports public services in the first place and promoting their rapid development.

#### **3.4. Strengthening the optimal allocation of sports public service supply in the Chengdu–Chongqing Twin-city Economic Circle**

As one of the public services that residents are most concerned about, the government, as the main body of sports public services, should meet the actual needs of residents in the process of constructing the sports public service system. Firstly, it should coordinate the construction of relevant sports and fitness facilities, pay attention to the optimal allocation of sports public service resources, and realize the distribution of sports public service resources with the population to solve the contradiction between the supply and demand of sports infrastructures; secondly, it should promote the high-quality sports public service resources to the countryside to realize the coordinated development of urban and rural sports public service; finally, the breadth of sports public services should be increased, and the extension of sports public services to disadvantaged groups should be expanded so that all residents can enjoy the same basic sports public services.

### **3.5. Accelerating the transformation of regional government functions and establishing a sound system of relevant laws and regulations**

As a functional department and the core of public management, the government determines the construction status of the sports public service system. The nature of sports public service is a public welfare cause. The government should actively change from the management type to the service type, construct the legal system of sports public service, and perfect laws and regulations are the basis and premise of the cooperation between the government and the relevant sports public service providers. Perfect sports public service standards can ensure the quality of sports public service supply. Using the leading position of the government to rationally plan the work of regional sports public services, establish a regional resource integration mechanism, set up multi-level administrative institutions, and promote inter-regional cooperation in sports public services, thus improving the quality of sports public services, making the optimal allocation of sports public service resources, and improving the efficiency of sports public services.

### **3.6. Strengthening the integration and development among the government, market, and social organizations**

As the main body of the market economy, the government should respect the law of the market; the market, as a variety of systems for all parties to participate in the exchange, should give full play to the regulatory role of the market; Social organization is the main body of public relations. From the substantive point of view, the three belong to the dominant cooperative relationship of the “Golden Triangle of Service.” As a government department, it should improve the construction of relevant laws and guarantee mechanisms, strengthen the macro-control of sports public service supply, reasonably plan the supply of sports public services, and guide the sports social organizations, markets, enterprises, and the public to better participate in it. Social organizations, as the communication bridge between the government and enterprises, and as the main auxiliary of the government’s function transfer, should correctly utilize their influence and reasonably coordinate the resources for the supply of sports public services to solve the local supply crisis <sup>[11-17]</sup>.

## **Funding**

2021 Chongqing Municipal Education Commission Humanities and Social Sciences Planning Project General Project (21SKGH392)

## **Disclosure statement**

The authors declare no conflict of interest.

## **References**

- [1] State Council Office, 2013, Guidance on Government Purchasing Services from Social Forces, No. 96 of 2013.
- [2] State Council Office, 2021, National Fitness Program (2021–2025), No. 11 of 2021.
- [3] State Council Office, 2022, Opinions on Building a Higher Level of Public Sports Services.
- [4] Chongqing Sports Bureau, 2020, Framework Agreement for Promoting the Integrated Development of Public Sports Services in the Chengdu-Chongqing Economic Circle.
- [5] Chongqing Sports Bureau, 2021, Chongqing Sports Announcement No. 1 of 2021 – Announcement of the 2020 Statistical Survey Data of Sports Facilities in Chongqing.

- [6] Sichuan Sports Bureau, 2021, Statistical Survey Data of Sports Facilities in Sichuan Province in 2020.
- [7] State Development Office, 2021, National Basic Public Service Standards (2021 Edition).
- [8] Lu W, 2020, The Development Process, Experience, and Prospects of Rural Public Sports Services in China. *Journal of Sports Culture*, 2020(3): 54–61 + 84.
- [9] Lu W, Lu W, Chen Z, 2016, Current Situation of Village Sports Public Services in Coordinated Urban and Rural Development. *Journal of Beijing Sport University*, 39(7): 1–9 + 29.
- [10] Chen C, Lu W, Chen N, 2012, Experience and Enlightenment of Construction of Public Sports Service Supply System in the UK. *Journal of Chengdu Sports Institute*, 38(1): 28–32.
- [11] Lu W, Liang W, Sun L, et al., 2010, Research on the Current Situation, Problems, and Countermeasures of Rural Public Sports Service Supply in Western China under the Background of New Rural Construction. *Sports Science*, 30(2): 11–19.
- [12] Zhang F, Wang J, 2020, Empirical Research on the Performance Evaluation of Public Sports Services in China Based on Structural Equation Model. *Journal of Shanghai University of Sport*, 44(11): 44–54.
- [13] Jiao C, 2020, Research on the Collaborative Supply of Public Sports Services under the Perspective of Network Governance, thesis, Shanghai University of Sport.
- [14] Niu J, Liu S, 2020, Research on the Current Situation and Countermeasures of Shanxi Province's Public Sports Service System under the Perspective of Sports Power. *Bulletin of Sports Science and Technology Literature*, 28(12): 26–28.
- [15] Luo X, Yu W, 2024, Research on the Supply and Demand of Rural Public Sports Services in Sichuan Province under the Model of Comprehensive Rural Complex. *Sichuan Sports Science*, 43(2): 101–105 + 133.
- [16] Zou J, Chen J, Gao K, 2024, Research on Cross-domain Governance of Social Organizations Participating in Urban Group Sports Public Services – Based on the Investigation of the Yangtze River Delta. *Journal of Wuhan Institute of Physical Education*, 58(3): 34–40.
- [17] Zou Q, Zang W, Peng W, et al., 2024, Mechanism of Big Data Empowering Precision Operation of Government Purchasing Public Sports Services, Problem List, and Targeted Paths. *Journal of Shandong Sport University*, 2024: 1–9.

**Publisher's note**

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.