

The Current Situation of Community Sports Research in China -- Knowledge Map Analysis Based on Citespace

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Abstract: By collecting relevant research literature on the theme of community sports in China, using the CiteSpace visualization analysis tool to draw its knowledge map, this paper reviews, analyzes and summarizes the relevant research conducted around community sports, reveals and discusses its research status and focus, read and seize macroscopically the dynamics and development trends of the research about domestic community sports. It is of great theoretical value and practical significance to promote and guide the practice development and progress of community sports in China.

1. Introduction

1.1 The Data Sources

On November 19, 2018, the authors searched the Chinese Social Science Citation (CSSCI) database, with “community sports” as the key word, and other search conditions were not limited. A total of 250 related documents were retrieved between 1998 and 2018.

1.2 The Research Tool

This paper used knowledge map analysis based on the software CiteSpace which is developed by Chaomei Chen, a famous Chinese American information visualization expert and a tenured professor of University of Philadelphia. The software has been improved and innovated in theory and visualization since it was available in 2004^[1].

1.3 The Research Process

The paper exported the bibliographic information of the journal papers to txt documents, started with “download” and named it with the end of “.txt”. These documents were put into an empty folder and converted to CiteSpace recognized format by CSSCI REC, a format converter developed by Shengbo Liu of Dalian University of Technology. After conversion, each bibliography includes information such as the title, the author, the institute, the abstract, key words, references, etc. The exported literature records were imported into CiteSpace 3.8.R1 (32-bit) updated by professor Chaomei Chen on January 29, 2015. Then the organizations, authors and keywords were analyzed^[2], and their respective knowledge maps were obtained. These knowledge maps show all kinds of information in the field related with the documents intuitively and vividly from different angles. CiteSpace first divides the whole-time interval, then forms a small network in each time slice, and finally merges these small networks in chronological order to form a large network.

2. Results and Analysis

2.1 High Yield Institutes and Corresponding Author Groups

The node annual rings represent the distribution of the amount of published papers with time. The color of the rings represents the corresponding posting time, such as the dark color represents

the earlier time, and the light color represents the recent time. The thickness of the rings is directly proportional to the number of articles published in the corresponding time. Therefore, the larger the diameter of the node, the larger the number of published papers. The top three institutions with the largest number of published papers are Beijing Sport University, Capital University of Physical Education and Sports and Shanghai University of Sport. The number of their published papers are 9,5,5. The top three authors with the largest number of published papers are Kaizhen Wang, Jianguo Li and Jie Song, with 7, 6 and 6 posts respectively.

2.2 Co-Citation Analysis of Authors

The node annual rings represent that the author is cited at different times. The thicker the annual rings are, the more times the author is cited at the corresponding time. Therefore, the diameter of nodes is in direct proportion to the number of times the author is cited. In addition, CiteSpace also detected two authors with high Burst values, Hai Ren and Bingyou Fan respectively, whose Burst values were 3.17 and 3.15 respectively. The Burst value indicates that the citation frequency of the author increased sharply in a certain period, which may imply that the author's research content aroused the interest of other scholars. Among them, the year when cited times of Hai Ren increased sharply was 2001-2004, and the year when cited times of Bingyou Fan increased sharply was 2004-2007, indicating that their research was frequently cited in published articles, so their research was a recent frontier and focus.

2.3 Co-Citation Analysis of Literature and Journals

From the statistical results of the high cited journals, the areas which pay highly attention on community sports are mainly the science of sports and the journals of sports colleges. They stand in their respective theoretical perspectives, and apply different research methods to study community sports, and promote the prosperity of the field.

From the perspective of cited literature, the highest cited rate literature in community sports research is *The Concept, Elements and Organizational Characteristics of Urban Community Sports in China*, which was written by Hai Ren and published on Sports and Science in 1998. From the Angle of concept analysis, this document discusses the concept of community and urban community sports in China, and points out that the core of community sports is that community residents voluntarily participate in activities to promote the physical, mental and group health, break the boundary of industry and unit, go for the convenience and take part in activities voluntarily. The second most cited research subject report is *The Investigation and Research on the Current Situation of Mass Sports in China*, which is organized, led and implemented by the General Administration of Sport of the People's Republic of China. The report of this subject gives detailed answers to the main problems of the current situation of mass sports in China. The third most cited is *Community Sports Theory*, published by Bingyou Fan in 2002, which is about the guidance of community sports construction, management, development, model and other theoretical systems, and provides a theoretical foundation and framework for the research and practice of community sports.

2.4 Key Words Map Analysis

Table 1 Key Words Frequency of Community Sports Research(Top20)

Serial number	Key words	Frequency	Serial number	Key words	Frequency
1	Community sports	191	11	Community sports service	8
2	Mass sports	25	12	Sports service	7
3	National fitness	22	13	Family sports	7
4	School sports	17	14	Sports for all	7
5	urban community sports	16	15	Social sports	6
6	Sports development	14	16	Development modes	6
7	Sports management	10	17	Sports organizations	5
8	Urban community	10	18	urban	5
9	Sports activities	9	19	Sports facilities	5
10	Harmonious society	8	20	Sports culture	5

It can be seen from Table 1 that in addition to community sports (191), mass sports (25), national fitness (22), school sports (17), urban community sports (16), sports development (14), sports management (10) and urban community (10) have the highest frequency. If the key words are arranged by time, it can be seen that before 2000, the keywords studied were mainly urban community sports, urbans, sports service and so on. The key words studied from 2001 to 2005 were mainly school sports, sports development and sports activities, community sports services and harmonious society, etc. The key words studied from 2006 to 2010 were mainly community sports clubs, rural community sports, public service system and public service, etc. The key words of the research from 2011 to 2018 are mainly community sports culture, sports policy and evaluation index, etc. Mass sports and national fitness have always been the focus of community sports research.

3. Discussion

3.1 Authors

The representatives of the Chinese community sports research are Kaizhen Wang, Jianguo Li, Jie Song, Baoguo Ren, Yang Chen, Bingyou Fan, Jianjun Tang, Hongtan Zhang, Guangfeng Yuan and Jie Li. These people are the core force in the study of community sports in China, among which the top three high-yield authors are Kaizhen Wang, Jianguo Li and Jie Song. The high-yield author map also shows that some authors of the research institutions have strong relationships that form research teams. Most authors, however, are more fragmented. They work for themselves.

3.2 Four Periods of the Community Sports Research in China

The paper on community sports in China first appeared in the early 1990s. According to the amount of the literature published in cssci journals, the development of community sports research in China can be divided into four stages: (1998-2000) initial exploration stage, (2001-2003) gradual rise stage, (2004-2010) rapid development stage, (2011-present) stable development stage. This is exactly consistent with the development of community sports in China, which has experienced spontaneous formation stage (1986-1995), government publicity stage (1995-1997), accelerated development stage (1997-2008) and rapid development stage (2008-present).

3.3 The Focus Transition

It can be seen from the key word map of community sports research that the focus of community sports research changes which coincides with the national policy document on community sports.

Before 2000, the key words were urban community sports, sports service, etc. It was also the initial stage of community sports development. *The Outline of the Overall Fitness Plan* issued by the State Council in June 1995 pointed out that “to actively develop community sports, sub-district offices should strengthen the organization of sports work, give play to the role of residents' committees and grassroots sports organizations, and do a good job in community sports work.” The Sports Law of the People's Republic of China, which was promulgated in August of the same year, has also clearly stipulates the development of community sports. In April 1997, the four ministries and commissions jointly issued *The Opinions on Strengthening Urban Community Sports Work*, which clearly stated the tasks, responsibilities, organization management of community sports work, as well as the construction of site facilities.

From 2001 to 2005, the key words were mass sports, community sports culture, etc. In July 2002, the Central Committee and the State Council of People's Republic of China issued *The Opinions on Further Strengthening and Improving Sports Work in the New Era*, emphasizing the important position of community sports in urban sports and mass sports.

From 2006 to 2010, the key words were transferred to rural community sports, public system and public service, etc. This is consistent with “*The Eleventh Five-year Plan*” for the Development of Sports Industry issued by the General Administration of Sport of China in July 2006, which pointed out that the main task of mass sports during “the eleventh five-year plan” is to strengthen the

construction of urban and rural community sports facilities and provide policy guarantee for the development of community sports.

After 2011, the key words were community sports culture, sports policies and evaluation indicators, etc., which were related to the General Administration's selection of national urban sports advanced communities.

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