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Analysis of the Higher Education Research in the Chengdu-Chongqing Region: A Comparative Perspective Based on Three Major Economic Circles in China

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Abstract: Drawing on literature regarding higher education research retrieved from the CNKI database from 1997 to 2021, this paper used CiteSpace to analyze the current status of higher education research in the Chengdu-Chongqing economic circle. By comparing it with that in the Beijing-Tianjin-Hebei region, the Guangdong-Hong Kong-Macao Greater Bay Area, and the Yangtze River Delta, this paper concluded that the level of higher education research within a region is in line with the level of the region's economic and social development. As higher education research in the Chengdu-Chongqing economic circle draws more and more attention, its research areas and topics are becoming increasingly diversified. However, by comparison, the research in this region features a late start and lower participation of researchers and research institutions, resulting in insufficient research in both quantity and quality. Therefore, it is essential to encourage more experts and scholars to participate in higher education research in the Chengdu-Chongqing economic circle. Efforts should also be made to strengthen academic exchanges and cooperation between scholars in Chengdu and Chongqing and establish a long-term cooperation mechanism for higher education research between the two cities. Improved higher education research will definitely facilitate the construction of first-class universities, thus providing human capital and intellectual support for the construction of the Chengdu-Chongqing economic circle.

Keywords: higher education research, Chengdu-Chongqing economic circle, Beijing-Tianjin-Hebei region, Guangdong-Hong Kong-Macao Greater Bay Area, Yangtze River Delta

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The paper is a phased achievement of the "Research on Jointly Promoting the First-class University (Discipline) Building in the Chengdu-Chongqing Economic Circle" under the special project of the "Research on the Construction of the Chengdu-Chongqing Economic Circle" (Project No.: SCJJ-02), a key research field in philosophy and social sciences of Sichuan University during the 14th Five-Year Plan Period (2021–2025).

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Education is the cornerstone of national rejuvenation and social progress. President Xi Jinping stressed that a thriving education makes a thriving country, while a powerful education makes a powerful country. At the 20th National Congress of the Communist Party of China, a strategic plan was made to speed up the building of China into a country strong on education. The report proposed that education, science and technology, and human resources are the foundational and strategic pillars for building a modern socialist country in all respects. We should redefine the strategic position, responsibilities, and duties of education in the new era through overall planning and integrated arrangements. Higher education is the top priority in helping China become a leading country in education, and it has increasingly become the driving force and innovation carrier for economic and social development. In recent years, China and other major countries in the world have made strategic arrangements to promote the integrated development of higher education, scientific and technological innovation, and talent cultivation.

Studies have shown that there is an evident symbiosis between the higher education of a region and its innovation ability (Xiong & Li, 2021). Higher education and regional economic development complement each other. At present, a symbiotic system in which first-class universities and modern urban areas coexist and promote one another is being formed in China. In 2021, China proposed to accelerate the construction of the Chengdu-Chongqing economic circle and turn it into a new driver and an important growth engine of high-quality development in western China. First-class universities provide intellectual support for regional economic development, and the research status of regional higher education, to some extent, reveals the intentions of various regions to develop first-class universities by providing important references that can be utilized as they plan to improve their universities. At present, academic studies on regional higher education mainly focus on its relationship with regional economic development (Zhou, 2021; Bao & Chen, 2021) and its contribution to economic development (Yang, Hu & Tan, 2021), but few studies compared the research areas of higher education among regions. Focusing on the higher education research in the Chengdu-Chongqing region, this paper analyzed the quality and quantity, citation rate, financial support, and background of researchers and research institutions of the published papers via a bibliometric approach. Through a visual analysis of keywords, this paper drew cluster views and time-zone views of the keywords extracted, presenting the research hotspots and cutting-edge topics in relevant research fields. At the same time, this paper made a comparative study of the higher education research in the Chengdu-Chongqing region with that of the other three economic circles, namely the Beijing-Tianjin-Hebei region, the Guangdong-Hong Kong-Macao Greater Bay Area, and the Yangtze River Delta to determine the development stage and regional characteristics of higher education research in the Chengdu-Chongqing region.

Data Sources and Key Indicators

Data Sources

CiteSpace is an important tool for analyzing the research hotspots and fronts of the literature, and

a kind of widely-used software for knowledge graph rendering (Chen, 2006). For this paper, CiteSpace 5.8.R3 software was adopted to analyze literature documents retrieved from the CNKI database. All the literature documents were retrieved by regions from the journal and dissertation databases of CNKI.^① The time was set as “all” when retrieving, with one year as a time unit. Our deadline for data acquisition was December 15, 2021.

Main Methods and Key Indicators

On the basis of co-word cluster analysis, the research fields, hot topics and fronts of relevant papers are presented. The relevant definitions are as follows.

Research field: Select the field with the top keywords in the cluster.

Hot topics: Select keywords that appear more frequently according to the frequency of keywords.

Fronts: Select keywords according to the burst value, that is, the keywords with a high-frequency increase rate appear in the short term.

Characteristics of Higher Education Research in the Chengdu-Chongqing Region and Comparison with the Other Economic Regions

Quantity and Quality of Papers Published

According to the search results, there were a total of 322 papers on higher education research in the Chengdu-Chongqing region, of which 308 were screened out according to the topics mentioned above, including 68 papers published in core journals (Peking University Core and Chinese Social Sciences Citation Index [CSSCI], hereinafter referred to as “core journals”). In addition, 2,282 Chinese papers on higher education in the Beijing-Tianjin-Hebei region were found, including 317 published in core

Table 1 Quantity of Papers Published on Higher Education Research in Four Regions

Area	Quantity of papers	
	Total quantity (articles)	Core journals (articles)
Chengdu-Chongqing region	308	68
Beijing-Tianjin-Hebei region	2282	317
Yangtze River Delta	1392	333
Guangdong-Hong Kong-Macao Greater Bay Area	1036	216

^① The specific strategies used for our literature retrieval are as follows:

In the Chengdu-Chongqing region, papers were retrieved with “Subject = (‘Chengdu-Chongqing’ or ‘Sichuan-Chongqing’) and Subject = (‘higher education’ or ‘colleges and universities’ or ‘disciplines’ or ‘double first-class’ or ‘undergraduate’ or ‘talent training’) and Year = (all).” A total of 322 papers were found, of which 308 were selected as research samples including papers, news and newsletters.

In the Beijing-Tianjin-Hebei region, papers are retrieved with “Subject = (‘Beijing-Tianjin-Hebei’) and Subject = (‘higher education’ or ‘colleges and universities’ or ‘disciplines’ or ‘double first-class’ or ‘undergraduate’ or ‘talent training’), and Year = (all).”

In the Yangtze River Delta region, papers are retrieved with “Subject = (‘Yangtze River Delta’) and Subject = (‘higher education’ or ‘colleges and universities’ or ‘disciplines’ or ‘double first-class’ or ‘undergraduate’ or ‘talent training’) and Year = (all).”

In the Guangdong-Hong Kong-Macao Greater Bay Area, papers are retrieved with “Subject = (‘the Guangdong-Hong Kong-Macao Greater Bay Area’) and Subject = (‘higher education’ or ‘colleges and universities’ or ‘disciplines’ or ‘double first-class’ or ‘undergraduate’ or ‘talent training’), and Year = (all).”

journals; 1,392 papers in the Yangtze River Delta were found, including 333 published in core journals; 1,032 papers in the Guangdong-Hong Kong-Macao Greater Bay Area were found, including 216 papers published in core journals. The specific data is shown in Table 1.

The total quantity of papers published represented the number of existing research results, which could reflect the social attention to higher education in each region. On the whole, the number of related papers in the Beijing-Tianjin-Hebei region was the largest, registering 2,282, followed by 1,392 in the Yangtze River Delta region, and 1,036 in the Guangdong-Hong Kong-Macao Greater Bay Area. In terms of the number of papers published in core journals, the Yangtze River Delta region had a maximum of 333 articles, followed by 317 articles in the Beijing-Tianjin-Hebei region and 216 articles in the Guangdong-Hong Kong-Macao region. The number of published papers and those published in core journals in the Chengdu-Chongqing Greater Bay Area was significantly lower than that in the other three regions. From these figures, this paper could find that the research results on higher education in the Chengdu-Chongqing region were fewer, suggesting insufficient attention has been paid to this field, which still needs to be further expanded by institutions and scholars.

Characteristics of Literature Published

The time when related literature is published can reflect the development stage of the research in this field and predict its future development trends.

Temporal Distribution of Papers

Since 1997, the research on higher education in the Chengdu-Chongqing region has been on the rise on the whole, with the earliest literature appearing in 1997. Before 2005, papers in this field were small in number, with few papers being found. After 2006, the number of relevant research papers published showed a steady growth trend, but presented low valleys in 2013 and 2016. Especially the growth rate was obvious after 2017 and reached a phased peak in 2021 (69 articles), as shown in Figure 1. This development trend was consistent with that of the Chengdu-Chongqing region. With the increasing popularity of the research on the Chengdu-Chongqing city cluster, higher education research, as the core path of talent training for the region, has attracted more and more attention.

Higher education, as the core path of regional talent training, needs to adapt to regional economic, educational, and cultural development, among others. Figure 2 was plotted according to the number of publications in higher education fields in the four regions from 2003 to 2021. Research on higher education in the Beijing-Tianjin-Hebei region had seen an obvious peak from 2014, when the concept of the

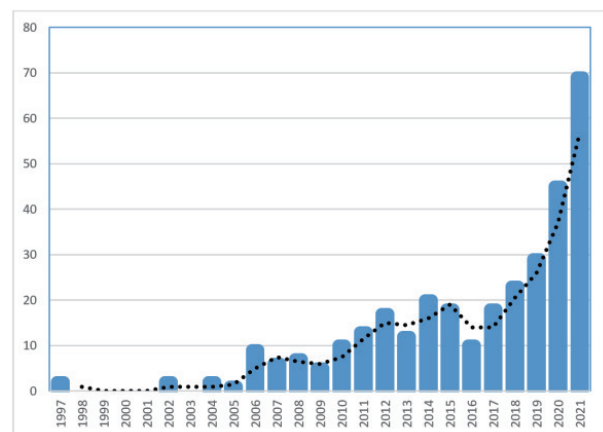


Figure 1 Trend of the Number of Publications on Higher Education Research in the Chengdu-Chongqing Region from 1997 to 2021

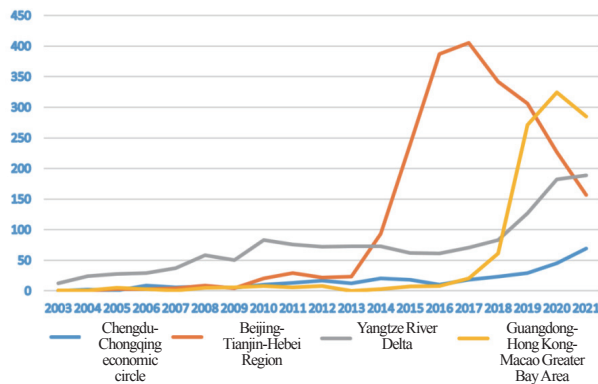


Figure 2 Research on Higher Education in the Four Regions from 2003 to 2021

Beijing-Tianjin-Hebei region was first proposed, to the present day, with a peak of 405 articles in 2017 and a decline to 150 or so at present. After 2018, research on higher education in the Guangdong-Hong Kong-Macao Greater Bay Area began to rise significantly, but it has not yet hit a peak (data in 2021 are incomplete). The research on higher education in the Yangtze River Delta region has consistently been greater than those in the other regions for a long time, with rapid growth after 2019. However, the research on higher education in the Chengdu-

Chongqing region started relatively late and has shown an upward trend in recent years.

Citation of Papers

The citation rate of an academic paper can, to some extent, reflect its academic value and degree of attention. Similarly, the total and average citation numbers of academic papers on a certain field in a region can, to some extent, reflect the research level of the region in that field. By comparing the citations of papers on higher education research in the four regions, this paper found that:

In terms of the total citation number, the Beijing-Tianjin-Hebei region topped the list, with 9,721 times in total, followed by the Yangtze River Delta with 9,394 times. However, the Guangdong-Hong Kong-Macao Greater Bay Area and the Chengdu-Chongqing region relatively lagged behind, especially the Chengdu-Chongqing region, where the total number of citations was less than 1,000 times.

In terms of the citation number per article, the Yangtze River Delta region was significantly higher than that of the other three regions, reaching 6.75 times per article. The number of the Beijing-Tianjin-Hebei region and the Guangdong-Hong Kong-Macao Greater Bay Area was very close, hitting 4.26 times and 3.91 times, respectively. The number of the Chengdu-Chongqing region obviously lagged behind the other three regions, only 2.92 times per article.

In terms of the impact of papers, the number of papers on higher education research with a citation of 20 times or more records 42 papers in the Beijing-Tianjin-Hebei region, 76 in the Yangtze River Delta region, 17 in the Guangdong-Hong Kong-Macao Greater Bay Area, and only nine in the Chengdu-Chongqing region (including four dissertations and five journal papers).

The analysis of the citation showed that the overall level of higher education research in the

Table 2 Quantity of Papers Published on Higher Education Research in Four Regions

Area	Citation of papers	
	Total number of citations	Number of citations per article
Chengdu-Chongqing economic circle	899	2.92
Beijing-Tianjin-Hebei region	9721	4.26
Yangtze River Delta	9394	6.75
Guangdong-Hong Kong-Macao Greater Bay Area	4051	3.91

Funding	Number of papers published in the region			
	Chengdu-Chongqing economic circle	Beijing-Tianjin-Hebei region	Yangtze River Delta	Guangdong-Hong Kong-Macao Greater Bay Area
National Natural Science Foundation of China	3	25	49	8
Humanities and Social Sciences Foundation of the Ministry of Education of China	3	10	15	28
National Educational Science Planning Project	3	22	16	28
China Postdoctoral Science Foundation	1	2	3	2
Others	43	181	127	284
Total	60	269	257	368

Researchers

Among the 308 research papers related to the Chengdu-Chongqing region, six scholars have published three or more articles, with the highest number of related papers published being only four. There are 11 authors who have published 2 papers, while most of the authors have only published one article. Among the 68 core journal papers, four papers were contributed by Wang Wei and two by Luo Zhe, which mainly examined the vocational education development in the Chengdu-Chongqing region. Wang Chengrui also published two papers on higher education in the region, which mainly studied the resource allocation of higher education in the region alongside the co-building and sharing of these resources.

However, in the Beijing-Tianjin-Hebei region, there were three authors with eight papers published, one author with seven papers published, three authors with six papers published, and five authors with four papers published. In the Yangtze River Delta, there were two authors with six papers published, three authors with five papers published, and five authors with four papers published. In the Guangdong-Hong Kong-Macao Greater Bay Area, there was one author with 10 papers published, one author with nine papers published, one author with seven papers published, two authors with six papers published, and four authors with five papers published. On the whole, the Chengdu-Chongqing region relatively lagged behind in higher education research, with fewer scholars engaged in the research.

Research Institutions

This paper found that the research on higher education in the Chengdu-Chongqing region was mainly carried out by colleges and universities in southwest China. The distribution of higher education research institutions in this region is shown in Figure 4. In general, institutions that carried out higher education research in the Chengdu-Chongqing region had fewer publications, and only four universities had more than 10 publications. The four universities were as follows: Southwest University topped the list with 19 papers published, followed by Chongqing University with 15 papers, and China West Normal University and Sichuan University with 10 papers each. Other colleges and universities, such as Southwest University of Finance and Economics, Chongqing University of Arts and Sciences, Sichuan Normal University, Chongqing Technology and Business University, and Chongqing College

of Finance and Economics also had papers published, but the number was relatively small.

The top three institutions in terms of the number of publications on higher education in the Beijing-Tianjin-Hebei region were Hebei University of Technology (74), Hebei University (72), and Hebei University of Finance (62). The top three institutions in the Yangtze River Delta were East China Normal

University (43), Soochow University (27), and Zhejiang University (22), while those in the Guangdong-Hong Kong-Macao Greater Bay Area were South China Normal University (52), Guangzhou College of Technology and Business (42), and South China University of Technology (35). In contrast, the research on higher education in the Chengdu-Chongqing region was relatively scattered, with a low concentration of research institutions.

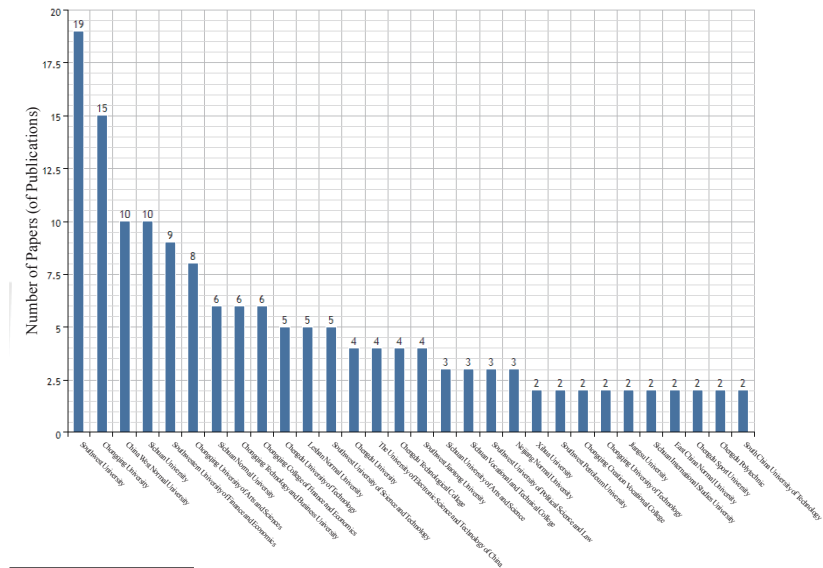


Figure 4 Number of Publications by Higher Education Research Institutions in the Chengdu-Chongqing Region

Main Research Areas

Through the co-occurrence analysis, cluster analysis, emergent analysis, and research front trends analysis of keywords, the research hotspots and overall status quo of relevant research fields can be directly reflected.

Cluster Analysis of Keywords

For our study, this paper used CiteSpace to analyze the keywords in papers concerning higher education research in the Chengdu-Chongqing region to form a cluster-based knowledge graph, as shown in Figure 5. The graph contained 313 nodes and 383 lines, with a density of 0.0078. It showed the four cluster labels with the highest frequency and the largest area, namely the economic circle, higher vocational education institutions, vocational education, as well as colleges and universities, which constituted the key research fields. This paper could find that the overlapping area of these clusters was very large, indicating that these clusters were closely related to each other and that the literature research was relatively concentrated, of which studies on the “economic circle” and “universities and colleges” had a high correlation. In comparison, the cluster-based knowledge graph

in the Beijing-Tianjin-Hebei region contained 504 nodes and 1,136 lines, with a density of 0.0089. The graph for the Yangtze River Delta region contained 518 nodes and 692 lines, with a density of 0.0089, and that of the Guangdong-Hong Kong-Macao Greater Bay Area contained 307 nodes and 555 lines, with a density of 0.0018. From these figures, we could find that the research on higher education in the

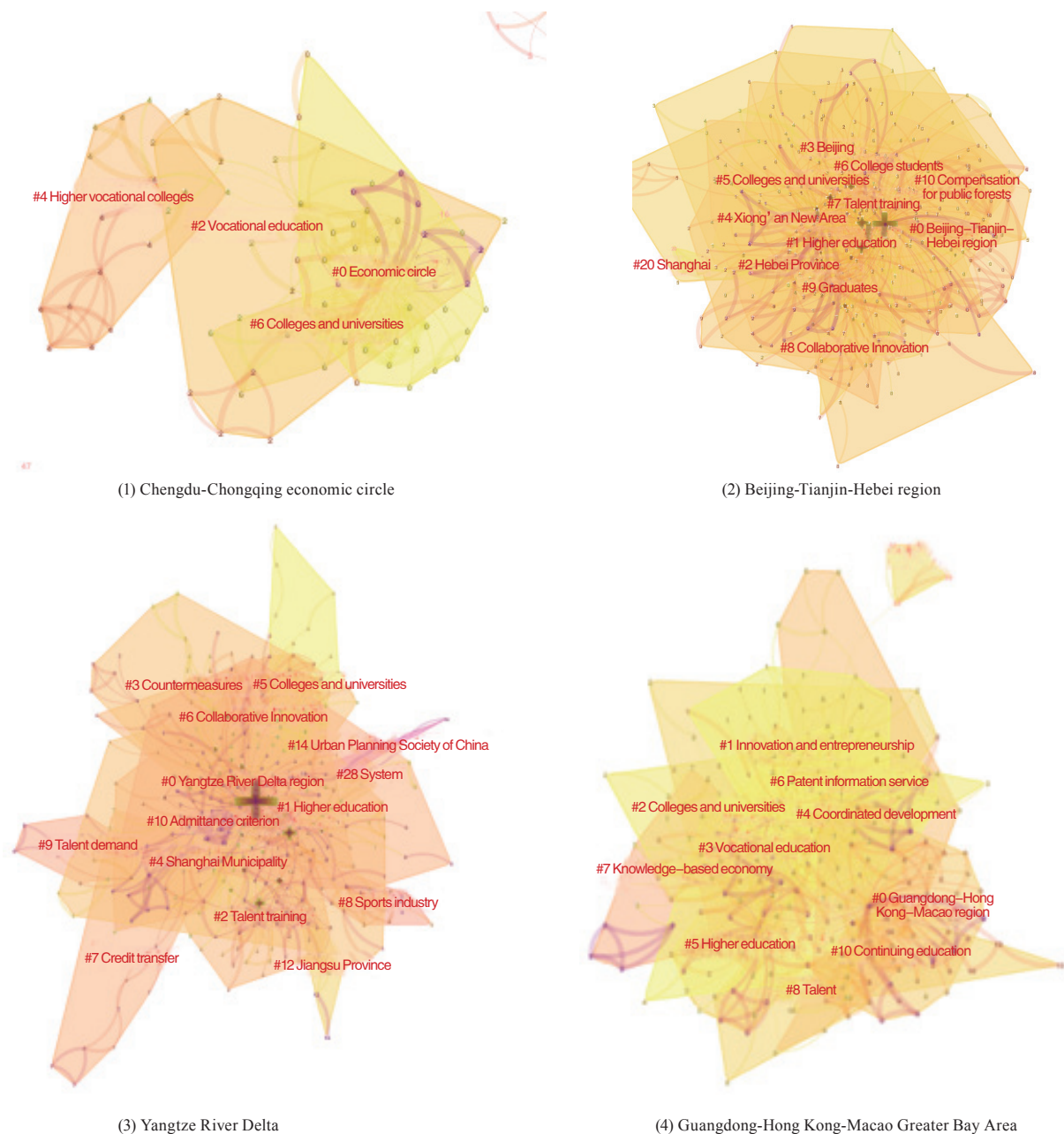


Figure 5 Cluster-based Knowledge Graph of Keywords in Papers Concerning Higher Education Research in the Four Regions

Chengdu-Chongqing region was far from sufficient both in quality and quantity.

CiteSpace was also used to analyze keywords in the literature related to higher education in the Chengdu-Chongqing region, Beijing-Tianjin-Hebei region, the Yangtze River Delta, and Guangdong-Hong Kong-Macao Greater Bay Area, respectively, to create the co-occurrence knowledge graphs of the keywords in the four regions, with one year as a time interval. The main research areas of the four regions extracted by knowledge graph clusters are shown in Table 4. In contrast, the main research areas of higher education in the Chengdu-Chongqing region are significantly fewer than those in the other regions.

Table 4 Main Research Areas of the Higher Education Research in the Four Regions

Area	Main Research Areas
Chengdu-Chongqing economic circle	#0 economic circle, #2 vocational education, #4 higher vocational colleges, #6 colleges and universities
Beijing-Tianjin-Hebei region	#0 Beijing-Tianjin-Hebei region, #2 Hebei Province, #3 Beijing Municipality, #4 Xiong'an New Area, #5 Colleges and universities, #6 College students, #7 Talent training, #8 Collaborative innovation, #9 Graduates, #10 Shanghai Municipality
Yangtze River Delta	#0 Yangtze River Delta region, #2 Talent training, #3 Countermeasures, #4 Shanghai Municipality, #5 Universities and institutions, #6 Collaborative innovation, #7 Credit transfer, #8 Sports industry, #9 Talent demand, #10 Admittance criterion, #12 Jiangsu Province
Guangdong-Hong Kong-Macao Greater Bay Area	#0 Guangdong-Hong Kong-Macao region, #1 Innovation and entrepreneurship, #2 Colleges and universities, #3 Vocational education, #6 Patent information service, #7 Knowledge-based economy, #8 Talent, #9 Continuing education

Analysis of Research Hotspots

The frequency of keywords reflected the academic circle's attention to certain knowledge nodes. The higher the frequency of keywords, the more research in this regard, and the more popularity of the related literature. Through word frequency analysis using CiteSpace, this paper identified the high-frequency keywords of higher education research in the four regions, as shown in Table 5. In the Chengdu-Chongqing region, the research hotspots on higher education mainly focused on talent training, industry-education integration, employment of college students, economic circle, city cluster, coordinated development, systematic innovation, and regional economic development. By comparing these with the research hotspots in the Beijing-Tianjin-Hebei region, the Yangtze River Delta and the Guangdong-Hong Kong-Macao Greater Bay Area, this paper found that the hotspots in different regions were highly similar without significant differences.

Table 5 Top 15 High-frequency Keywords of Higher Education Research in the Four Regions

No.	Chengdu-Chongqing economic circle	Beijing-Tianjin-Hebei region	Yangtze River Delta	Guangdong-Hong Kong-Macao Greater Bay Area
1	Chengdu-Chongqing region	Beijing-Tianjin-Hebei region	Yangtze River Delta region	Higher Education
2	Industry-university cooperation	Coordinated development	Higher Education	Guangdong-Hong Kong-Macao region
3	Economic circle	Talent training	Talent training	Colleges and universities

No.	Chengdu-Chongqing economic circle	Beijing-Tianjin-Hebei region	Yangtze River Delta	Guangdong-Hong Kong-Macao Greater Bay Area
4	Chengdu-Chongqing region	Higher Education	Higher vocational colleges	Talent training
5	Higher Education	Hebei province	Colleges and universities	Guangdong province
6	Talent training	Colleges and universities	Regional economy	Guangdong-Hong Kong-Macao Greater Bay Area
7	Countermeasures	Countermeasures	Shanghai Municipality	Vocational education
8	College students	Xiong'an New Area	Colleges and universities	Higher vocational colleges
9	Colleges and universities	Higher vocational colleges	Countermeasures	Innovation and entrepreneurship
10	Collaborative innovation	Vocational education	Coordinated development	Strategy
11	Coordinated development	Collaborative innovation	City cluster	Library
12	City cluster	Regional economy	Innovation system	Regional development
13	Industry-education integration	University-enterprise cooperation	Integration	Service system
14	Neijiang city	Employment	Collaborative innovation	Industry-education integration
15	Regional economy	College students	Beijing-Tianjin-Hebei region	Coordinated development

Analysis of Research Fronts

CiteSpace was also used to detect burst terms with high frequency and fast growth and observed the time distribution and change trends of burst terms to identify the research fronts in this field. Generally, the larger the value of emergent changes, the greater the intensity, indicating that there were more studies on the specific keyword during this period. The fronts of higher education research in four regions were obtained via CiteSpace, as shown in Table 5.

Table 5 Fronts of the Higher Education Research in the Four Regions

Area	Fronts	Start time of burst changes	End time of burst changes
Chengdu-Chongqing region	Industry-university cooperation	2003	2009
	Colleges and universities	2007	2011
	Research	2008	2012
	Chengdu-Chongqing region	2009	2012
	Newly-built normal universities	2010	2011
	Higher vocational colleges	2013	2014
	Regional economy	2013	2017
	Collaborative innovation	2019	2021
Beijing-Tianjin-Hebei region	Xiong'an New Area	2018	2019
	Regional development	2003	2013
	Policy evaluation	2003	2013
	Text mining	2003	2013
	Knowledge-based economy	2003	2009
	Human capital	2010	2016

Area	Fronts	Start time of burst changes	End time of burst changes
Beijing-Tianjin-Hebei region	Regional cooperation	2013	2014
	Regional economy	2013	2014
	Winter Olympics	2019	2021
	Development path	2018	2021
	Industrial transfer	2014	2016
	Talent flow	2014	2016
Yangtze River Delta	Colleges and universities	2019	2021
	Beijing-Tianjin-Hebei region	2013	2018
	Regional economy	2013	2016
	Interactive development	2009	2011
	Higher vocational colleges	2008	2014
	Industry-education integration	2018	2021
	Innovation network	2017	2019
	Coordinated development	2014	2018
	Human capital	2008	2013
	Higher vocational education	2008	2010
Higher Education	2003	2007	
Guangdong-Hong Kong-Macao Greater Bay Area	Knowledge-based economy	1997	2016
	Polarization effect	1997	2016
	Hybrid governance	1997	2017
	Compound administration	1997	2017
	Xiong'an New Area	1997	2014
	Library	1997	2016
	Service system	1997	2016
	Regional development	1997	2016
	Higher vocational colleges	2019	2021
	Vocational education	2018	2019
	Scientific and technological innovation	2018	2021
	Innovation and entrepreneurship	2018	2019

Eight topics on the higher education research in the Chongdu-Chongqing region, including industry-university cooperation, colleges and universities, the Sichuan-Chongqing region, newly-built normal universities, higher vocational colleges, regional economy, and collaborative innovation experienced emergent changes during a certain period. In particular, the research on “collaborative innovation” has grown rapidly since 2019, indicating that more and more scholars have begun to pay attention to the higher education research in the Chengdu-Chongqing region, especially issues such as the collaborative innovation of universities in Chengdu and Chongqing with the implementation of the national and regional coordinated development strategy and the construction of the Chengdu-Chongqing economic circle.

Burst terms also appeared in the higher education research in other regions in recent years, for instance, collaborative innovation, Xiong'an New Area and Winter Olympics in the Beijing-Tianjin-Hebei region; development path, universities and institutes, industry-education integration, and innovation network in the Yangtze River Delta; vocational education, higher vocational colleges, and innovation and entrepreneurship in the Guangdong-Hong Kong-Macao Greater Bay Area. Different focuses on higher education research in each region indicate that higher education research in our country has certain regional characteristics.

Conclusions

The level of higher education research in a region is in line with the level of its economic and social development. The research on higher education in the Chengdu-Chongqing region is still in the initial stage and needs to be further improved, while that in the other regions was started earlier and thus performs better both in research breadth and depth.

As higher education research in the Chengdu-Chongqing region has attracted more and more attention, its research areas and topics are becoming increasingly diversified. However, there is still a large gap between the Chengdu-Chongqing region and the other three regions in terms of higher education research. To conclude, the research in the Chengdu-Chongqing region features a late start and lower participation of researchers and research institutions, resulting in insufficient research in both quantity and quality.

In terms of the citation of papers, the Chengdu-Chongqing region is still faced with weak conditions, such as a low citation rate per article and fewer high-quality and influential research achievements. In addition, the region lacks core researchers and research institutions engaging in higher education research. In terms of funding support, there are few high-end and high-level research results made, and the region lacks stable and sustained financial support for research in this regard. In terms of research topics, the topics are becoming more and more diversified, and the content is increasingly refined, with the economic circle, higher vocational education, colleges and universities as its key research areas. In recent years, the collaborative innovation of colleges and universities in the Chengdu-Chongqing Region has become a research front in this field. In comparison, there is no significant difference in the research hotspots among different regions, but the Chengdu-Chongqing region has not expanded as many research fronts as the other regions and boasts a slow update speed. In terms of keywords, there are many papers on vocational education research, while keywords in the field of higher education, such as “Double First-class Initiative,” “first-class disciplines,” and “first-class universities,” have not been included in research hotspots and fronts in this regard.

As the region with the densest population, the strongest industrial foundation, the most powerful innovation capability, the broadest market space, and the highest degree of openness in western China, the Chengdu-Chongqing Economic Circle occupies a unique and important strategic position in the overall development of the country and boasts great development potential. With the release of

dividends brought by the construction of the Chengdu-Chongqing Economic Circle, higher education research in the Chengdu-Chongqing region will usher in a period of rapid development, and researchers in this field should contribute their energy to the further development of this field. At the same time, we also call on all sectors of society to intensify their attention and investment in higher education research in the Chengdu-Chongqing region. We encourage scholars to conduct more interdisciplinary and cross-field research in this regard, to promote academic cooperation between institutions and strengthen academic exchanges between scholars. Continuing efforts will also be made to facilitate integrated discussions among multiple regions, thus continuously improving the breadth and depth of higher education research in the Chengdu-Chongqing region. On this basis, we will try to establish a long-term cooperation mechanism for higher education research between Chengdu and Chongqing to provide a solid support for the development of the Chengdu-Chongqing Economic Circle and make important contributions to building China into a leading country in education.

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