# Original Paper

# Literature Visualization Analysis of Ideological and Political Education in Universities - Based on CSSCI Database from

# 2012 to 2022

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### Abstract

This study is mainly based on the academic journals included in CNKI that set the theme as the source of journals that restrict the ideological and political education in colleges and universities as the research object. The annual number of publications, the author's situation, the source of journals, the co-word and dissimilarity matrix drawn according to the frequency of keywords and the social network map are visually analyzed, highlighting the current hot topics in the research of ideological and political education in colleges and universities in China, and predicting the future research trend. Finally, the development of ideological and political education in colleges and universities is considered and reasonable suggestions are put forward to provide a basis for further research on ideological and political education in colleges and universities.

# Keywords

ideological and political education, social network analysis, visual analysis

#### 1. Introduction

Since the 21st century, China and abroad have ushered in the stage of rapid economic and social development and transformation. Internet technologies such as artificial intelligence, cloud computing and big data are widely used. The combination of research and big data in the field of ideological and political education has also become the focus of scholars' extensive attention. SATI3.2 and other visualization software are used to draw the keyword co-occurrence matrix and social network map of ideological and political education in colleges and universities. Based on keyword matrix analysis and social network analysis, this study summarizes the big data literature of ideological and political education, and combines knowledge map with literature research, in order to present the research

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hotspots and trend changes in the field of ideological and political education research in colleges and universities, and provide reference for in-depth research on ideological and political education in colleges and universities.

# 2. Research Design

#### 2.1 Research Methods

This paper mainly uses the literature measurement method, mainly for quantitative analysis, which can more intuitively reflect the implicit laws between the literature. This study uses STAI3.2 and Ucinet6.0 as data analysis tools to explore the research evolution process and research hotspot analysis of the big data field of ideological and political education in colleges and universities.

#### 2.2 Data Sources

The standardization and innovation of research methods are closely related to the quality of scientific research. This paper mainly uses the keyword co-word matrix technology of software such as STAI3.2 and Ucinet6.0 to count and analyze the literature data information of the research on the big data of ideological and political education in colleges and universities, which is limited to the source of journals. In the way of visual analysis, it shows the phenomena and laws that are not easy to be visually displayed in the literature data information, and predicts the hot topics of the research on the big data of ideological and political education in colleges and universities, and considers and looks forward to the future trend. As of October 2022, on the database platform of China National Knowledge Infrastructure (CNKI), with the theme of "big data of ideological and political education in colleges and universities", the source category of journals is limited to CSSCI journals, and the main theme is set as "big ideological and political education in colleges and universities". A total of 801 articles were retrieved (retrieved in October 2022), and 707 core journals related to this study were obtained by eliminating articles with low relevance, which were used as the basic texts of this paper.

# 2.3 Research Process

The specific research process is shown in Figure 1:

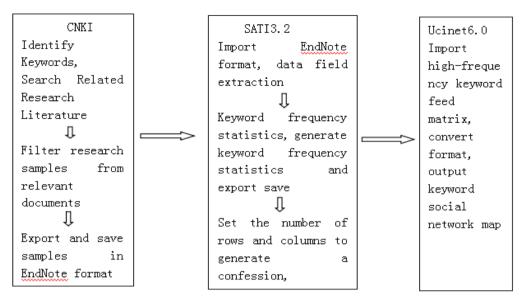


Figure 1. Specific Research Process

#### 3. Data Statistics and Analysis

# 3.1 Statistics of Annual Publication

year	quantity	year	quantity	year	quantity
2012	56	2016	46	2020	105
2013	60	2017	92	2021	76
2014	38	2018	108	2022	68
2015	46	2019	12		

Figure 2. Number of Papers on Ideological and Political Education in Colleges and Universities from CSSCI

The source of the literature is limited to the annual number of papers on ideological and political education in CSSCI journals, as shown in Figure 2. As can be seen from the figure since 2012 (4), the overall upward trend, to reach a peak in 2018. In December 2016, the National Conference on Ideological and Political Work in Colleges and Universities was held. The conference put forward specific requirements on the fundamental issue of what kind of people, how to train people and for whom to train people in colleges and universities. In 2017, the CPC Central Committee and the State Council issued the "Opinions on Improving and Strengthening Ideological and Political Work in Colleges and Universities under the Situation", which put forward clear and specific requirements for the work of colleges and universities under the new situation. The number of papers published in 2016 increased by 100 % over 2015. According to Figure 2, the paper generally shows a fluctuating upward trend, and the overall change is not very obvious. Since 2014, the number of ideological and political

education literature in colleges and universities has fluctuated and has a trend of attenuation. To a certain extent, it also shows that the quality of articles in the field of ideological and political education in colleges and universities is in a state of continuous improvement. In order to further understand the changing trend of the research results of ideological and political education in colleges and universities, in view of the above documents are aimed at the requirements of ideological and political education work, this study defines the literature source as CSSCI, and sets the theme as the theme of ideological and political work in colleges and universities. After further statistics on the number of papers, it is found that the number of papers published in 2017 (1815) is 111.53 % higher than that in 2016 (858).

#### 3.2 Author Analysis

Using SATI3.2 to count the author frequency, we can see the relationship between the ideological and political education researchers. The statistics of the number of papers published by the authors are as follows: Feng Gang 6, Li Yan 5, Gu Hailiang 4, Huang Rongsheng 4, Ji Haiju 4. From the statistical process, there are fewer high-yield authors and the cooperation between the teams is weak. At the same time, it is found in the statistics that research scholars have deeply studied different themes. For example, Feng Gang believes that ideological and political education in colleges and universities in the new era should firmly grasp and scientifically apply these laws, continue to adhere to the unwavering leadership of the Party, take the Party's innovation theory as the guidance, take talent cultivation as the central link, and take the characteristics of the times as the guiding basis to achieve a higher level of innovation and development. Huang Rongsheng think pay attention to humanistic care and psychological counseling, make good use of the main channel of classroom teaching, teachers and professional strength.

# 3.3 Source Distribution of Journals

The source distribution of the journal can also reflect the research level of some related papers to a certain extent. In this paper, 707 papers are counted on the source of the journal. Among them, the largest number of articles is "school party building and ideological education" 129, accounting for 18.25 % of the total number of journals. The statistics of other journals with higher number of articles are as follows: "ideological and theoretical education guide" has 58 articles, "Heilongjiang higher education research" has 50 articles, "ideological education research" has 43 articles, "Jiangsu higher education" has 42 articles, and "Chinese higher education" has 29 articles. The number of papers published in China Education Journal is 27, the number of papers published in Education Theory and Practice is 25, and the number of papers published in Higher Education Exploration is 22. As an important research topic in the field of education, the ideological and political education in colleges and universities has attracted more and more attention from scholars. Through the publication of journals, it can be seen that the research papers on the theme of ideological and political education in colleges and universities are published in some important journals, especially in the journals of ideological and political education. The distribution of journals on the theme of ideological and political education in colleges and universities is relatively concentrated. These journals should be the main propaganda and

communication positions for the research of ideological and political education in colleges and universities.

# 3.4 Keywords Frequency Statistics and Analysis

In order to more accurately reflect the current research hotspots in a certain research field and predict the future development trend, it is necessary to perform word frequency statistical analysis on the keywords of the selected literature data. In this study, SATI3.2 software was used to count keywords. Firstly, the keyword part was extracted, and then the keywords were sorted and merged. Statistical analysis of frequency. Found that only the ideological and political education, ideological and political education, colleges and universities, college students, the new era, ideological and political education, ideological and political education 7 high frequency keywords, can not accurately reflect the current ideological and political education in the field of big data research. Therefore, select the high frequency keywords frequency greater than or equal to 9, confirmed by high frequency keywords 22, according to the word frequency sort, the results are shown in Table 1. It shows that the selected high-frequency keywords can reflect the current research hotspots in the field of great party building spirit research.

Table 1. Statistical Table of High-frequency Keywords of Ideological and Political Education in Colleges and Universities (22)

N.	High-frequency	Frequency of	NI.	High-frequency	Frequency	of
No.	keywords	appearance	No.	keywords	appearance	
	ideological and political					
1	education in colleges and	346	12	path	14	
	universities					
2	ideological and political	289	13	big data	14	
2	education	20)	13	oig data	14	
3	college and universities	115	14	new media era	13	
4	college student	34	15	collaborative education	13	
5	new era	23	16	validity	10	
6	ideological and political	22	17	socialist core values	10	
Ü	education				10	
7	college ideological	19	18	marxism	10	
	education	cation				
				ideological and		
8	Lide tree people	16	19	political education of	9	
				college students		
9	new media	16	20	red culture	9	
10	innovation	15	21	effectiveness	9	
11	realization path	15	22	artificial intelligence	9	

In order to further explore the hot spots and future trends of ideological and political education research in colleges and universities, in addition to the frequency statistics of keywords. The implicit relationship between keywords is also the focus of research (Sun & Jiang, 2015). Therefore, this study uses SATI3.2 visualization software to generate a high-frequency keyword co-word matrix (10 \* 10) based on the above frequency statistics. The headings "Ideological and Political Education in Colleges and Universities", "Ideological and Political Education", "Colleges and Universities", "College Students", "New Era", "Ideological and Political Education", "Ideological and Political Education in Colleges and Universities", "Morality Education", "New Media", "Innovation", etc. are respectively represented by serial numbers 1 to 10, as shown in Figure 3. From the high-frequency keyword co-word matrix table, it can be clearly observed that in addition to the limited theme "ideological and political education in colleges and universities", keywords such as ideological and political education, colleges and universities, new era, ideological and political education, ideological and political education in colleges and universities, moral education, new media and innovation appear in the same article more frequently, which also shows that the content of ideological and political education in colleges and universities has formed a structured system.

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	1	2	3	4	5	6	7	8	9	10
ideological and political education in colleges and universities	346	0	0	8	15	13	11	7	4	6
ideological and political education	0	289	103	22	Ф	0	0	ω	ω	6
college and universities	0	103	115	4	5	4	0	1	2	2
college student	8	22	4	34	1	1	0	0	0	1
new era	15	6	5	1	23	0	0	1	0	1
ideological and political education	13	0	4	1	0	22	0	0	0	0
college ideological education	11	0	0	0	0	0	19	0	1	0
Lide tree people	7	8	1	0	1	0	0	16	0	1
new media	4	8	2	0	0	0	1	0	16	0
innovation	6	6	2	1	1	0	0	1	0	15

Figure 3. High-frequency Keywords Co-word Matrix Table

The dissimilarity matrix table can explain the implicit relationship of each keyword, that is, the high-frequency keyword dissimilarity matrix is constructed using SAT13.2 software, as shown in Figure 4. The greater the value of the intersection of rows and columns in the matrix, the smaller the correlation between the two. That is, the farther the distance between keywords (Chen, Hu, & Wang, 2015). It can be seen from the dissimilarity matrix that there are more cross-sections with values greater than 0.9 at the intersection of rows and columns, indicating that in the field of ideological and political education research in colleges and universities, some high-frequency keywords are related, but the cross-research between most keywords is not deep enough.

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	1	2	3	4	5	6	7	8	9	10
ideologic al and political education in colleges and universit ies	0	1	1	0.99 46	0.97	0.97 78	0. 98 16	0.99	0.99 71	0.99
ideologic al and political education	1	0	0.68	0.95 07	0.99 46	1	1	0.98 62	0.98 62	0.99
college and universit ies	1	0.68	0	0.99 59	0.99	0.99 37	1	0.99 95	0.99 78	0.99 77
college student	0.99 46	0.95 07	0.99 59	0	0.99 87	0.99 87	1	1	1	0.99
new era	0.97 17	0.99 46	0.99	0.99 87	0	1	1	0.99 73	1	0.99 71
ideologic al and political education	0.97 78	1	0.99 37	0.99 87	1	0	1	1	1	1
college ideologic al education	0.98 16	1	1	1	1	1	0	1	0.99 67	1
Lide tree people	0.99	0.98 62	0.99 95	1	0.99 73	1	1	0	1	0.99 58
new media	0.99 71	0.98 62	0.99 78	1	1	1	0. 99 67	1	0	1
innovatio n	0.99 31	0.99 17	0.99 77	0.99 8	0.99 71	1	1	0.99 58	1	0

Figure 4. High Frequency Keywords Dissimilarity Matrix Table

# 3.5 Spectral Analysis of Social Network

It can be seen from the keyword co-word matrix and dissimilarity matrix that the research on ideological and political education in colleges and universities is rich in keywords and covers a wide range. Then the co-word matrix table is imported into Ucinet6.0 to obtain data, and then NetDrew is used to draw high-frequency keywords through SATI3.2 software. After visualization, the social network map of high-frequency keywords is obtained, as shown in Figure 5.

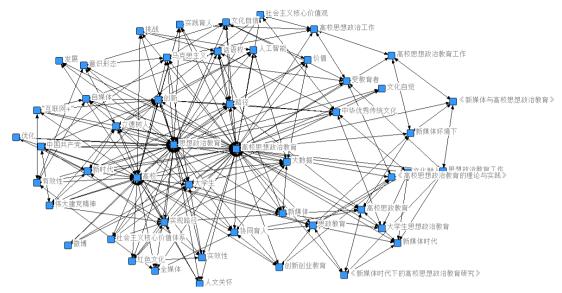


Figure 5. High Frequency Keywords Social Network Map

In the high-frequency keyword social network map, the degree of connection between keyword nodes and other keywords can indicate the importance of the research subject in the research process. The keywords appearing in the edge part can be seen that the connection between nodes is relatively weak. After removing the search keyword "ideological and political education in colleges and universities", words such as colleges and universities, college students, paths, morality education, innovation, new era and ideological and political work in colleges and universities are at the center of the map and are closely related to other keywords, indicating that these keywords are the core keywords in the field of ideological and political education research in colleges and universities, and are currently hot topics in the field of ideological and political education big data research in colleges and universities. From the perspective of the whole social network map, keywords such as ideological and political work, innovation and entrepreneurship education, all media, optimization, humanistic care and practical education in colleges and universities are at the edge of the map, and the lines that can be connected with the surrounding keywords are also very rare. It shows that the scholars in the study of ideological and political education for these keywords research is not thorough enough. At the same time, it also shows that keywords such as ideological and political work, innovation and entrepreneurship education, all media, optimization, humanistic care and practical education, which are visually analyzed based on keyword co-word matrix, are very likely to become the edge nodes of the social network map. The new trend of research in the field of ideological and political education in colleges and universities in the future.

# 4. Thoughts and Suggestions on the Development of Ideological and Political Education in Universities

### 4.1 Thinking

Using SATI3.2 and Ucinet6.0, this paper analyzes the total number of publications, journal sources, keyword statistics, co-word matrix, dissimilarity matrix and social network map of ideological and political education in colleges and universities with limited sources, which can comprehensively reflect the research hotspots of ideological and political education in colleges and universities in China and the weak points that need to be broken in the future. Therefore, the following conclusions are drawn:

- 1. The content and structure of the research on ideological and political education in colleges and universities are relatively complete. It can be seen from the above research that the research on ideological and political education in colleges and universities in China takes "colleges and universities", "ideological and political education", "college students" and "ideological and political education of college students" as the basic premise of carrying out work, takes "ideological and political theory teaching in colleges and universities" as the fundamental way to complete teaching tasks, and takes "college students" and "college counselors" as the main subjects of research. Taking "path research" and improving the "effectiveness" of ideological and political courses in colleges and universities as the fundamental requirements, we can also see the new trend that social practice teaching can seek to solve problems from the social network map. At the same time, it also shows that the content and structure of ideological and political education research in colleges and universities are in a process of continuous improvement.
- 2. Colleges and universities shoulder the important task of studying and publicizing Marxism and cultivating builders and successors of the cause of socialism with Chinese characteristics, and bear the important responsibility of strengthening the ideological and theoretical education and value guidance of college students and ensuring the long-term mechanism of all-round education of all personnel. It can be found from the social network map that words such as "Marxist theoretical education" and "socialist core values" are more densely connected with other keywords, indicating that they also constitute the focus of ideological and political education research in colleges and universities and are located in the relative center of the map. It also explains the orientation and standardization of ideological and political education courses in colleges and universities to a certain extent. Through keyword statistics and journal sources, it also reflects that the construction of our research platform for ideological and political education in colleges and universities is not perfect. It is necessary to promote the continuous innovation and reform of the carrier and content of ideological and political education in colleges and universities.
- 3. The imbalance in the research field of ideological and political education in colleges and universities. From the annual publication statistics, it can be seen that from 2005 to the present, the overall publication volume has great volatility and poor stability, and the number of core journals is generally less. From the analysis of the author's situation, the research authors are also in a relatively scattered

distribution. There is no long-term cooperative relationship between them, showing the characteristics of dispersion. To a certain extent, it also shows that there is no cluster effect between the main bodies of ideological and political education in colleges and universities. From the source distribution of journals mainly concentrated in the ideological and political education of high-level journals, did not reflect the interdisciplinary research.

# 4.2 Suggestions

- 1. Practical exploration of reform and innovation of ideological and political theory course. Ideological and political theory course is a key course with the fundamental purpose of cultivating socialist core values and the fundamental task of implementing moral education. In the practice of teaching reform, it is realized that the teaching reform of ideological and political courses is to teach students the basic theoretical knowledge of Marxism, and at the same time, pay attention to cultivating students' ability to actively explore, analyze and solve problems. It is to strengthen social practice, cultivate practical ability, improve students' political thought and moral level, and strive to achieve a high degree of unity of knowledge, ability and consciousness. Therefore, we closely around the knowledge, faith, behavior, use, adhere to the principle of unity of knowledge and behavior, guide students to all-round development.
- 2. Strengthen the construction of ideological and political theory teachers, improve the management mechanism. We should pay attention to the construction of a research team for the high-quality development of ideological and political education in colleges and universities. While improving the personal ability of the research subjects, we should strengthen the ability of communication and cooperation among the research subjects, continuously expand the team of outstanding talents for ideological and political education research in colleges and universities, and gradually form a research network for the research team of ideological and political education in colleges and universities to form a network connection. In this way, researchers can not only cooperate with each other to make the research direction more focused, but also make use of the different professional backgrounds of the research subjects and the different disciplines involved to strengthen the interdisciplinary research and promote the interaction between disciplines.
- 3. Carrier innovation of ideological and political education in colleges and universities. At present, the construction and perfection of the research platform of ideological and political education in colleges and universities in China is not high. It is necessary to display the research results of ideological and political education in colleges and universities through multiple platforms and channels, adopt macro policies, encourage some academic journals or websites and some research institutions to participate in and integrate into the academic community of ideological and political education research in colleges and universities, and promote major scientific research projects to increase research projects, so as to promote the carrier innovation of ideological and political work. Promote the ideological and political work with the depth of information technology integration, in order to explore the exchange of college students platform and communication media research. Reduce the negative impact of new media on

college students, find how to use new media to carry out ideological and political education, and discuss the innovation and application of network ideological and political education technology.

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