

Status of Ph.D. and Master's Dissertations in Library Management and Archives Management in CNKI

-- Based on Bibliometrics Research

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Abstract

With the continuous improvement and development of higher education in China, the number of master and doctoral students in China ranks first in the world. Under the background of knowledge economy, the academic papers of master and doctor have relatively high academic research value and utilization value. On the one hand, the research on master and doctor papers can strengthen the training of master and doctor personnel. On the other hand, it also has important reference and guiding significance for their professional development. Through the research on the academic papers of Library Management and Archives Management, it is helpful to extract valuable data from them, provide necessary reference for further professional training of talents, and at the same time, it is of great significance to carry out the research on dissertations of other disciplines. Through CNKI, this paper collects the data of professional master's and doctoral theses of Library Management and Archives Management in all years, and on this basis, analyzes the master's and doctoral theses of Library Management and Archives Management through bibliometric method.

Keywords

CNKI; Library Management and Archives Management; Academic Papers; Bibliometrics.

1. DATA SOURCE

CNKI has collected master's and doctoral dissertations from 1984 to the present. In the past 40 years, more than 3 million master's and doctoral dissertations have been collected, including excellent dissertations from more than 400 doctoral training units and more than 700 master's training units in China, which is representative to a certain extent.[2].

The main research object of this paper is the master's and doctoral dissertations of Library Management and Archives Management in China, whose data comes from CNKI, and the deadline of sample data is March 12, 2022.[3]. Through the relevant search in CNKI, the selected object is "doctoral and master's thesis", and the subject names are set as three, including "library science", "knowledge management" and "archival science", and the valid data are 819 for library science, 666 for knowledge management and 1247 for archival science[4]. From the above data, we can see that the number of master and doctoral theses in archival science is about twice the number of master and doctoral theses in knowledge management, and also more than 400 master and doctoral dissertations in library science, which not only reflects the current output of master's and doctoral dissertations in Library Management and Archives Management in China, but also reflects the current number of graduates majoring in Library Management and Archives Management in China.

Through the data export function of CNKI, Library Management and Archives Management files are imported into Excel, and the data are sorted and analyzed by using Excel and special

literature data processing software, and then the problems are found, and the corresponding solutions are put forward[5][6][7].

2. RESEARCH TOOLS

This article mainly through two kinds of software to carry on the research, including Cnki Ref and Pajek, and with the aid of Excel, carries on the correlation data processing and the transformation.

(1) Cnki Ref is a bibliometric analysis software developed by Mr. Zhou Chunlei. This software has powerful functions. It can not only carry out conventional bibliometrics, but also analyze and study the content of the literature. It can also be combined with Spss, Pajek and other software to further carry out knowledge mapping research, clustering analysis and social network analysis. Compared with other software for processing foreign documents, It is more suitable for Chinese documents, such as the knowlegement processing of the titles collected by CNKI.[8].

(2) Pajek is a network analysis tool, which runs in Windows environment and can carry out large-scale network analysis and visual operation. The main function of Pajek in this paper is to visualize the keywords and citation knowledge, which improves the visualization of the text data.[13].

3. AN EMPIRICAL STUDY

3.1. Analysis of Dissertations on Library Management and Archives Management Files

(1) As shown in Table 1, CNKI lists 7 colleges and universities of library science in this paper. The largest number of papers was collected in Heilongjiang University, with 182 papers. Northeast Normal University has the largest number of years, with 14 years. Shanxi University has the largest number of tutors, with 21 tutors.[30].

Table 1. Professional Dissertations of Some Library Science Universities

Dissertations of Library Science from Some Universities			
School	Number of papers	Number of years	Number of tutors
Northeast Normal University	81	14	17
Heilongjiang University	182	9	8
Nankai University	3	4	1
Shanxi University	75	11	21
Qufu Normal University	32	5	6
Sun Yat-sen University	2	1	1
East China Normal University	2	1	2

(2) As shown in Table 2, there are 7 universities included in the knowledge management major of CNKI. The university with the largest number of papers is Hebei University, with the number of 87 papers. The university with the largest number of years is Shanxi University, with the number of 11 years. Nanjing Agricultural University has the highest number of supervisors, with 11 supervisors.

Table 2. Professional Dissertations of Some Universities of knowledge management

Dissertations of knowledge Science from Some Universities			
Name	Number of papers	Number of years	Number of tutors
Hebei University	87	7	6
Nanjing Agricultural University	55	8	11
Nankai University	5	6	2
Shanxi University	75	11	7
Qufu Normal University	32	5	6
Sun Yat-sen University	4	3	2
Zhejiang University	18	9	8

(3) As shown in Table 3, there are 7 universities included in the archival science major of CNKI. Heilongjiang University ranks first in the number of papers included, with 187 papers included. Renmin University of China has the largest annual number of papers included, with 11 years. Heilongjiang University has the largest number of tutors included, with 16 tutors included.

Table 3. Professional Dissertations of Some Colleges and Universities of Archival Science

Professional Dissertation of Archival Science in Some Colleges and Universities			
School	Number of papers	Number of years	Number of tutors
Renmin University of China	10	11	7
Heilongjiang University	187	9	16
Nankai University	8	3	2
Shanxi University	78	5	5
Peking University	8	2	6
Sun Yat-sen University	3	2	2
Fuzhou University	6	3	4

3.2. Analysis of Hot Spots in the Study of Library Management and Archives Management

(1) From Table 4, we can see that university libraries have been appearing from 2005 to 2020, and knowledge resource services have appeared from 2010, which is also in line with the trend of the times.[15][16][18].

Table 4. High-frequency Vocabulary of Library Science Major Every 5 Years from 2005 to 2020

High Frequency Vocabulary of Library Science Majors Every 5 Years from 2005 to 2020	
2005: University Library 5, Network Security 2, knowledge Resources 2	2015: University Library 5, Library 4, Public Library 2, Digital Library 2, Mobile Service 2, Impact Factor 2, Index System Construction 2, knowledge Service 5
2010: University Library 22, Public Library 10, knowledge Resource Service 10, Digital Library 7, Public Service 8	2020: University Library 28, Public Library 20, Library 16, Mobile knowledge Service 8, Digital Library 7, Index system construction 5

(2) From Table 5, it can be seen that electronic knowledge has been appearing from 2005 to 2020, and knowledge management has the highest frequency in 2020, up to 28 times, which is also closely related to the current knowledge economy background.

Table 5. High-frequency Vocabulary of knowlegement Science Major Every 5 Years from 2005 to 2020

knowlegement Science Major 2005-2020 High Frequency Vocabulary Every 5 Years	
2005: Electronic knowledge 6, Communication 5, Exploration 4, Countermeasures 3, Economic Transmission 3, Company 3, Human Resource Management 3, Data Mining 3, knowledge Mobile Service 3, knowledge Work 3, Network knowledge 3, Application 3	2015: Evaluation factor 3, knowledge 3, map 3, AHP 2, case 2, electronic knowledge 2, Service 2 Intelligence 2 Social Grid 2 Microblog 2 knowledge Exchange 2 knowledge Ecological Chain 2 Academic Community 5
2010: Knowledge System 9, Electronic knowledge 8, Essence 6, After-sales Service 5, Data Exploration 5, Network 5	2020: Intelligence 20, Competitive Intelligence 14, Electronic knowlegement 11, University Library 10, Ontology 9, Data Management Platform 9, knowledge Resource Sharing 9, WeChat 10, Knowledge Management 28

(3) From Table 6, it can be seen that there is no word that always appears in archival science, while knowledge security appears five times in 2020, which is closely related to the current knowlegement security.

Table 6. High-frequency Vocabulary of Archival Science Major Every 5 Years from 2005 to 2020

High Frequency Vocabulary of Archival Science Every 5 Years from 2005 to 2020	
2005: Electronic Document 3, Online Government Affairs 2	2015: Archives construction 2, service 2, knowledge service 2
2010: Archives Management 3, Utilization 3, Archives knowledge Management 2, Online Government 2, Development and Utilization 2, Persistence 2	2020: Archives Management 17, Solutions 10, Electronic Documents 8, Archives Utilization 6, Archives Website Construction 6, Archives knowledge 6, Problems Faced 6, knowledge Security 5

4. PROBLEMS FOUND:

Through the above research, it is found that there are six problems, including data collection, false keywords, non-standard citation of references, opacity of master's and doctoral dissertations from famous universities in China, research direction and writing skills.[29]

(1) Data collection. Through the statistics of master's and doctoral dissertations, it is not difficult to see that there are some problems in the current data collection of HowNet, such as incomplete years of data collection, small number of data collection and slow updating speed. Taking the master's and doctoral dissertations of archival science as an example, since 2004, there have been some problems, such as the short period of time and the lack of comprehensive data collected by various institutions.

(2) The problem of "false keywords". The term "pseudo-keyword" first appeared in 2015, which was put forward by Zhang Cheng and Zhang Aimei of Nanjing University of Technology in journals. It refers to words such as "inquiry", "analysis" and "reason" as keywords. Such keywords are too simple and broad to get accurate search results. It belongs to the category of "pseudo-keyword".In this paper, pseudo-keywords are temporarily used to refer to such

keywords. Through the research and analysis of master's and doctor's degree theses on library management and archives management, it is found that if "library science", "knowledge science" and "archival science" are selected as keywords to search on CNKI, the results are not accurate enough to obtain comprehensive and accurate data. This shows that the selection of keywords does not conform to the relevant principles. Among them, the "false keywords" such as "research", "analysis", "problems", "countermeasures" and "enlightenment" are more serious.

(3) The citation of references is not standardized. When collecting and analyzing the citation data, it is found that there are many non-standard and inaccurate problems in the citation format of references, such as the wrong citation of author's name, the unmarked citation type and the misrepresentation of citation. This is not just a simple format error for a master's degree thesis. It is also a matter of attitude and ability.

(4) The opacity of master's and doctoral dissertations of famous universities in China. Through the search of CNKI, there are 107 doctoral dissertations, 83 doctoral dissertations and 48 doctoral dissertations in library science, library management and archives management, and 712 master dissertations, 583 master dissertations and 1199 master dissertations. Tsinghua University, Nanjing University, Peking University, Sun Yat-sen University and East China Normal University have fewer master's and doctoral dissertations, Nankai University, Tongji University and Peking University have fewer knowledge science master's and doctoral dissertations, and Fuzhou University, Renmin University of China and Peking University have fewer archival science master's or doctoral dissertations. The above included a small number of 985, 211, double first-class schools, and the number of graduates of the library management and archives management they graduated every year is not small, even taking into account the need for confidentiality of some master's and doctoral dissertations, but also can not be few a few master's and doctoral dissertations every year, which shows that the opening situation of master's dissertations in famous schools in China is not optimistic. To a certain extent, this affects the degree of utilization of dissertations by researchers in this field, which hinders the research in this professional field to a certain extent. Moreover, at present, the degree of openness of dissertations in the National Library of China is also unsatisfactory, and they are searched in the subject database of doctoral dissertations. With the keywords of "knowledge science", "archival science" and "library science", 84, 39 and 76 doctoral dissertations were retrieved respectively, and these dissertations did not provide download function, only online reading or document delivery, and when visiting the website, it was easy to fail to link to the website.

(5) Research direction. When analyzing the tutors of Lis dissertations, the tutors' research directions are almost the same as the research hotspots of doctoral and master's dissertations, which shows that most of the topics of master and doctoral students are determined by their tutors, without showing their own unique topics and research directions, lacking the ability to think independently, and in the long run. This is not conducive to academic development.

(6) Poor writing skills. It is not difficult to find that some students have poor writing skills, illogical sentences, more sentence defects, confused logical thinking, poor language expression ability and often unintelligible, which reflects that some students are purely mixed with the idea of graduation certificate and lack of real academic research. The persistence of this phenomenon is not only irresponsible for those students who are really serious and hard-working, but also irresponsible for academic development.

5. COUNTERMEASURES AND SUGGESTIONS:

(1) In view of the problem of incomplete database collection, it is necessary for all parties to make joint efforts to strengthen the development in many ways. Specifically, we should start from the following aspects, first of all, the degree of openness of all kinds of data in Colleges and

universities, especially the degree of openness of master's and doctoral dissertations; Secondly, the degree of openness of the database, the database should also improve its own technical means of collection and update speed. While opening and sharing data, we should pay attention to the protection of intellectual property rights and the prevention of leakage of confidential data. Finally, universities can build exclusive databases, which can greatly improve the degree of development of dissertations, facilitate the use of other researchers, accelerate the sharing of knowledge, and promote academic development and progress.[28].

(2) For the problem of "false keywords", schools should cultivate students' rigorous academic style, narrow and refine the scope of keywords, and accurately and comprehensively summarize the research perspective of papers.

(3) For the problem of errors in the citation format of references, colleges and universities should strengthen the education of academic norms for master and doctoral students, improve the relevant requirements, and strictly control the quality. The standardization of academic format is regarded as an inevitable requirement for the evaluation of academic papers, so that students can realize the importance of academic norms.

(4) For the problem of open access to papers of famous universities in China, we should solve this problem from the following aspects. First, universities should realize the importance of paper data opening to academic development. The opening of academic papers is conducive to the reuse of dissertations and the academic development and progress in this field. Secondly, database providers should not only pursue economic and commercial interests, but also realize their social responsibilities and the importance of a good academic atmosphere generated by data sharing. Finally, the relevant departments of the state, society and schools should work together to promote the opening and sharing of dissertations from famous universities.

(5) In the analysis of the dissertation guidance tutors of the graphic files, the research directions of the tutors are almost the same as those of the research hotspots of the doctoral and master's thesis, which shows that most of the topics selected by the master and doctoral students are the direction determined by their tutors, and they do not show their own uniqueness. Some topics and research directions lack the ability to think independently. In the long run, this is not conducive to academic development.

(6) For some students with poor academic writing skills, we should strengthen and improve their writing skills from the following two aspects. One is to pay attention to the cultivation and accumulation of this ability, write more papers, study more high-quality papers, and improve their logical thinking ability and writing ability. On the other hand, schools and tutors should strictly control the quality, set high standards and strict requirements for the papers of master and doctoral students, and intensify the examination. For students who do not have a deep understanding and dawdle, they should dare to postpone or even retire, so as to fundamentally improve their writing ability and level.

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