Analysis on the Development of Library and Information Science in China

Chen Chen

School of Information Management, Heilongjiang University, Harbin 150080, China

dayincc@163.com

Abstract

Library and information science has a history of nearly 200 years, and it plays a vital role in the development of many countries. Along with the research of library and information science of China continues to deepen, the analysis of its current situation and development tendency has became a hot topic which many people focus on under the promotion of the global information wave. This paper points out the development current situation of Chinese library and information science by analyzing the data of library and information science journals (2005-2014) of CNKI.

Keywords

Library and Information Science; CNKI; Analysis of current situation.

1. Introduction

In recent ten years, facilitated by the construction of information technology and computer science, the research of LIS (Library and information science) has gained a lot of progress. Academic status of LIS has been promoted slightly. However, as Ma Feicheng said, the newer and higher standards and requirements of information science will be put forward. So only if we fully understand the current situation of the development of Library and Information Science in China, can we find the direction and target, in order to make a contribution to the further development of Library and information science?

2. Analysis on the current situation of Library and information in China

CNKI (China National Knowledge Infrastructure) is the largest and most valuable Chinese retrieval website in the world. Its content mainly has periodical magazine, the newspaper, the degree theses, the conference paper, the book, the patent and so on [1]. Because the information of CNKI is strictly collected by using the quantitative analysis, qualitative analysis and other scientific methods, whose content has also been edited and integrated, almost all of them have high quality and reference value.

I searched all the literatures of CNKI about Library and Information Science in recent 10 years (from the year of 2005 to the year of 2014), in order to understand the current situation of the development of LIS in China and provide guidance for the research of LIS in China.

2.1 Analysis on the quantity of literatures on LIS.

According to the final retrieval result (from 2005 to 2014), the total number of literatures whose topic is Library and Information Science is 1859, the average number of theses per year is 185.9. As Figure 1 shows.

As can be seen from the figure, the figure shows a steady rising trend. Between 2005 and 2006 the number is the lowest, which comes to 133 and 142.Between 2011 and 2012 the number is the highest, which comes to 222 and 242.

The amount of theses reflects the strength of scientific research ability. From above figure it can be seen that in recent 10 years the quantity of the theses about LIS has a steady increase trend. It also shows that although there is no rapid development under the promotion of the information technology wave, the ability of Library and information science is constantly improving and expanding. But

during past two years, the decrease of theses quantity shows that we should continue to strengthen the ability of research.
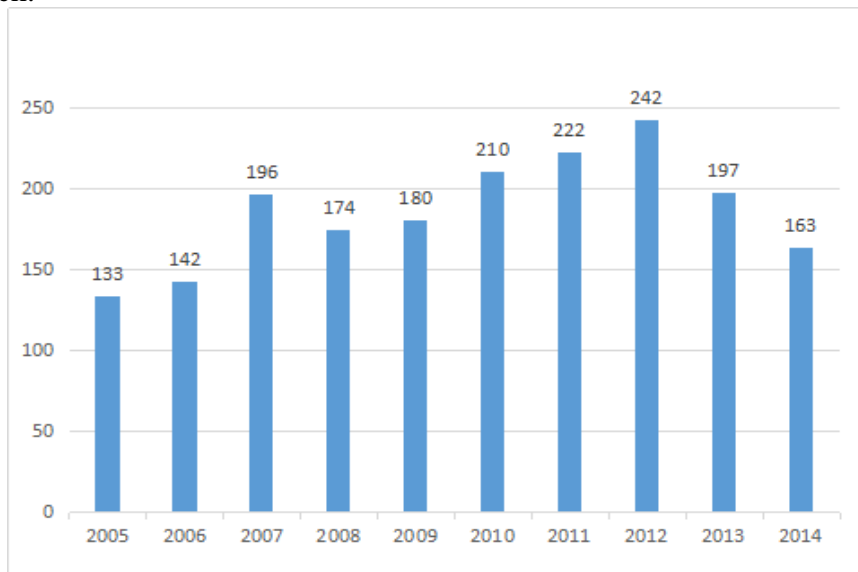

Figure 1. The quantity of theses on LIS (2005-2014)

2.2 Analysis on literatures' quantity of authors in Library and Information Science

Figure 2. The atlas of authors (2005-2014)

Table 1. The published theses numbers of top five authors (2005-2014)

Number of published theses	23	12	12	7	6
Author	Qiu Junping	Ye Jiyuan	Wang Zhijing	Su Xinning	Ye Ying

According to figure 2 and table 1, we can get a general understanding of the current research focus of Library and information science by analyzing their researching projects. This article selects some of representative authors: Qiu Junping has published 23 papers, much higher than other authors' quantity of published papers. He is a celebrity in the field of Library and Information Science. His focus fields are mainly about information measurement and scientific evaluation, knowledge management and competitive intelligence, network measurement and information management. Ye Jiyuan has published 12 papers, His focus fields are mainly about competitive intelligence and competitive strategy, economic information and enterprise strategy. Wang Zhijing also has published 12 papers, his focus fields are mainly about information management and information system, strategic information management. Su Xinning has published 7 papers, his focus fields are mainly about intelligent information processing and retrieval, information analysis and scientific evaluation, E-government [2].

Above are the orientation of all authors, combine with relevant materials and finally we can draw a conclusion that research hot spots are the theme of knowledge management, the theme of informatization, the theme of information service, the theme of information resources management and construction and so on.[3]

2.3 Analysis on literatures' quantity of universities in Library and Information Science
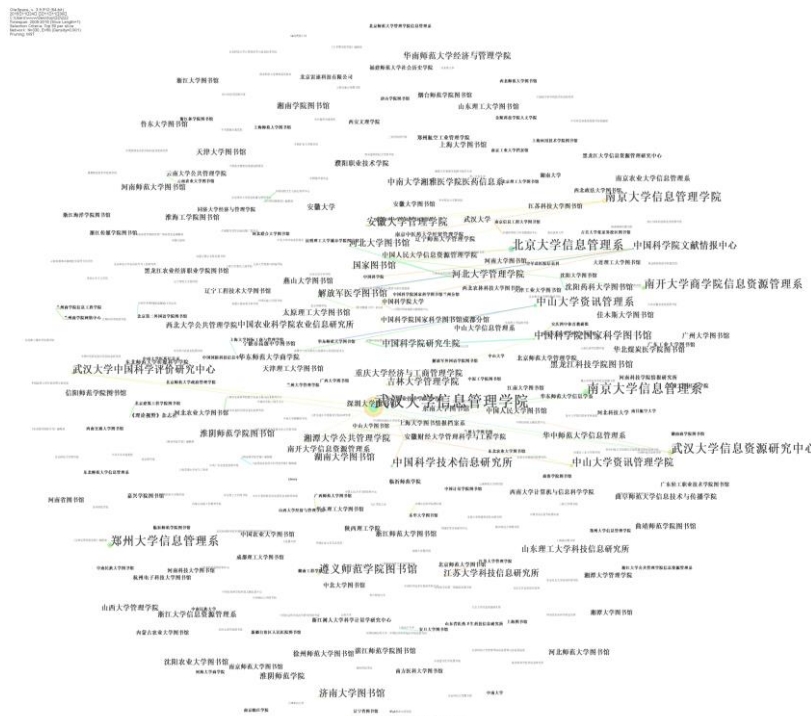

Figure 3. The atlas of universities (2005-2014)

Table 2. The published theses numbers of top five universities (2005-2014)

Number of published theses	76	12	12	7	6
University	Wuhan University	Nanjing University	Peking University	Zhengzhou University	Zhongshan University

According to the author's literatures in every university, it can be seen that the key research institutes of Library and information science are schools of information management in Wuhan University, Nanjing University and Peking University. In particular, the research of library and information

science, information management and other disciplines in Wuhan University gains the first place in our whole country. But it also reflects that our library and information education is too concentrated, mainly in several major universities. Therefore, strengthening the academic exchanges and sharing between universities is vital to the education of Library and information science and the cultivation of relevant personnel.

2.4 Analysis on Library and information science papers cited by other topics

Table 3. Number of citation by other topics (2005-2014)

year	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of citation	105	212	152	242	109	69	68	94	5

The citation of this paper can be used to study the degree of knowledge diffusion among many disciplines, in order to understand the radiation impact of information science and research the relationship between these disciplines [4]. All resources has been divided into 10 albums by CNKI academic journals, subdivided into 168 topics. This article uses "Library and information science" as the theme to set up retrieval items, excluding "Library and information and digital library" this sub topic on the citation of Library and information science for thematic retrieval. The statistical result shows that the library and information science papers (from 2006 to 2014) have been cited by other topics for the exact 1056 times, with the highest number of citations in 2009, reaching a maximum of 242 times. Although the number of citations has declined in recent years, but the overall growth model still shows that the impact of Library and information science to other disciplines and attention is also increasing.

3. Summary and recommendations

3.1 Summary

3.1.1 Hot topics in Library and Information Science

From the main research field of Library and information science literatures in the past ten years, most researchers mainly focused on knowledge management, informatization, information service, information resources management and construction, and so on. Since the beginning of 1990s the knowledge management has been widespread concerned, it integrates Library and information science, business management, computer science, communication science and other disciplines, its theoretical basis has the characteristics of multidisciplinary integration[5]. Since twenty-first Century, the research on knowledge management has shown a trend of rapid development, and a series of researches have been carried out from knowledge management strategy to knowledge management system.

From the macro level, promoting informatization is the only way for China to build an innovative country. The level of information ability indicates the power of innovation to a country. With the development of society and the reform of government, information technology in China appears vigorous. Such as the government informatization, education informatization, enterprise informatization and agricultural information, library and information workers should firmly grasp the current situation, based on the service in the construction of socialist modernization. Information resource management and construction has been the primary and key task of national informatization. In present new situation, how to carry out the management and development of information resources in the network environment, and how to realize the sharing of information resources, both of the two topics are always the hot academic problems in the field of Library and Information Science.

3.1.2 The popularity of Library and information science has improved

For a long time, in public impression library and information studies is considered to be a labor subject and a service subject. However, by the year of 2014, 18 universities (include academic institutions, such as Chinese Academy of Social Sciences and so on) have right to recruit students in

each degree level of this discipline. Although students from Library and Information Science are much less than other disciplines, the main thing is that more and more students and parents begin to pay attention to this discipline. At the same time, the volume of Library and information topics theses in CNKI increased from 133 in the year of 2005 to about 163 in the year of 2014. This means that the status of Library and information professionals has greatly improved to both students and scholars, it has already became a subject with developmental potential from an unpopular subject.

3.1.3 The resources of Library and information science education needs to be improved

From the results of the above analysis, it can be easily seen that most of the research achievements are from few famous universities (such as Peking University, Nanjing University and so on), but quite a few from other universities, If a new subject needs long-term breakthrough and development, it cannot rely on the support of few researchers and few academic institutions. Extensive resource sharing and academic exchange is necessary for the development of the subject.

3.2 Recommendations

3.2.1 Strengthening the brand construction of Library and Information Science

Subject brand is not only a process of reshaping the subject image and academic achievements, but also the process of releasing and popularizing the core competence of a subject. Although the library and information science has developed greatly, compared with the mature disciplines, there is a lot of deficiencies in this new discipline. At the same time, supporting the construction of brand should not be just surface work, we may pay more attention to the inner strength of Library and Information Science.

Firstly, teachers and talents of library and information science as innovators, creators, practitioners and forecasters, are the main components of this discipline. At present, most of the research achievements were put forward by only a small number of excellent teachers, education needs to be widen, so that we can cultivate more high-level educators. Secondly, expanding the application of Library and Information Science is very necessary. We should expand the research scope of application in practice, as the researcher Liang Zhanping said that it can make greater contribution to science and technology, economy and social development of our country by transforming theory into method, transforming method into tool, transforming tool into action.

3.2.2 Basic theory research needs to be further improved

Basic theory is the cornerstone of a discipline, determines the construction of disciplinary system and the future trend. Only by strengthening the in-depth study of basic theory can we sum up the new theory, new technology and new methods under the new technical situation. For the research object of Library Science, information science, basic theoretical subject problems of Library and information science, academic experts should give a unified understanding, and make integration of them into a unified theoretical system in order to guide the development of Library and information Science in China.

3.2.3 Strengthening cooperation in multi‑discipline research and application

Library and information science is generally divided into three directions: information management, library management, and archives management. It is also an inclusive discipline. The research field of Library and Information Science in China has been greatly expanded, and more and more new theories and new technologies of other disciplines are introduced into this subject. More and more new theories and technologies of other disciplines are combined with this subject, which is consistent with the trend of scientific and technological development. In addition, under the premise of protecting intellectual property rights, the scholars and students of Library and information Science should actively participate in academic meetings , exchange their research results and research theory with other researchers, learn from each other, look for the new direction of Library and information science development in communication and symbiosis, in order to find new directions of Library and Information Science and academic common ground in communication[6].

In the past, this subject is mainly used in the departments of library and intelligence. Library and information science should play a greater role under the promotion of the global information wave. Many application results should not just be limited to library and information work, it can be widely recognized and used in many other fields, such as e-government, e-commerce, social services, business competition and other fields. [7]Therefore, we should strengthen the application research of the library and information science, expand the social influence of Library and Information Science, so that the research achievements not only can improve its own discipline but also can contribute to the development of other disciplines.

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