# Citation Analysis of Doctoral Theses in Library and Information Science Uploaded on Shodhganga by Universites of Southern India

#### Umesha S N

#### How to cite this article:

Umesha S N/ Citation Analysis of Doctoral Theses in Library and Information Science Uploaded on Shodhganga by Universites of Southern India/Indian J Lib Inf Sci 2023;17(1):41-46.

#### Abstract

Society's advancement and growth are entirely dependent on ongoing research. Citation analysis is a widely used research method for assessing the quality of research in any field. A bibliometric study would be beneficial to all LIS members. The study's objectives were met by the use of citation analysis techniques. The data comes from the Shodhganga repository, an online repository of Indian theses. According to current research, the LIS field needs to promote collaborative research and improve the quality of articles published in Indian research journals, and Indian academics should pay more attention to peer-reviewed journals for publication so that their research is visible to readers.

Keywords: Biblometrics; Citation Analysis; LIS, Shodhganga; Indian Theses.

#### INTRODUCTION

plethora of academic literature is available  ${f A}$ in many domains of knowledge, resulting in dynamic changes in the information demands of researchers in any subject. They require current

Authors Affiliation: Assistant Librarian, Venkateshwara College of Engineering, Bengaluru 562157, Karnataka, India.

Address for Correspondence: Umesha S N, Assistant

E-mail: umegee92@gmail.com Received on: 12.01.2023 Accepted on: 02.02.2023

Librarian, Sri Venkateshwara College of Engineering, Bengaluru 562157, Karnataka, India.

information at a specific point in time. There are a variety of electronic and print information options available to meet their information needs. Searching for information is an essential component of any research project. Making the right decision about any research requires having the right information at the right time. I this dynamic shift in researcher needs make it difficult for library professionals and researchers to choose the most relevant journals and scholarly databases for subscription. Because librarians only have a limited amount of money to distribute, selecting good information sources is critical. To address these issues, librarians and academics conduct bibliometrics studies to determine the information needs of researchers. One of the most widely used research methodologies in

the field of bibliometrics is citation analysis. The Citations system is based on the simple logic of resource utility: the more a resource is referenced in the literature, the more valuable it is in that field. Citation analysis is a popular research methodology or procedure that is used indirectly. It facilitates research citations of supplied references to other publications and journals and gives author credit for his work. Citation analysis identifies the current state of research in a specific field. It is compiled and evaluated from a variety of documents. Citation analysis also establishes a link between the cited and mentioned papers or documents.

#### REVIEW OF LITERATURE

A substantial amount of research has been conducted on citation analysis of doctoral theses, as revealed by a review of the literature.

In their study of bibliometric analysis in plant pathology, Lal and Panda (1996) compiled a ranked list of the 100 most frequently cited core periodicals. Buttlar (1999) conducted a citation analysis of 61 LIS dissertations and discovered that journal articles were cited more than books, book chapters, proceedings, theses, and other print resources, and that half of the works cited had been published within the previous ten years. In her study, Leiding (2005) discovered that the proportion of journal citations increased in comparison to book citations between 1993 and 2002. In their study, Olatokun and Makinda (2009a) discovered that journal articles and Textbooks received the most citations, while web resources received the fewest. In a study of 77 doctoral theses in sociology, Zafrunnisha (2012) discovered that books were cited the most when compared to other sources. In a similar study of doctoral theses from the Department of Economics, Nasir and Devendra Kumar (n.d.) discovered that books were the most commonly used form of citation.

# IMPORTANCE OF THE STUDY

 The study's findings will assist librarians and library science academics in good perspective the information needs of library and information science researchers.  Based on the study's findings, LIS departments and librarians may develop a much more accurate sampling development policy for their LIS collection.

# **OBJECTIVES OF THE STUDY**

- To gain knowledge about the areas covered in LIS research by scholars from Southern Indian universities.
- 2. To be familiar with the different types of information sources used by LIS researchers.
- 3. Count the number of citations used by LIS researchers.
- 4. Make a list of the top LIS journals, along with their geographical distribution.
- 5. Investigate the chronological arrangement of the cited documents.

#### SCOPE OF THE STUDY

The scope of the study is the study uploaded on shodhganga by universities in southern India, including Bangalore University, Mysore University, and Gulbarga University. A total of ten theses were discovered uploaded on the repository, and their citations were carefully examined. The chosen field of study is library and information science.

# **METHODOLOGY**

All ten doctoral theses' bibliographies and references were downloaded and analysed to determine their citation pattern (http://shodhganga.inflibnet.ac.in). These citations served as the primary source of information and are used as the basis for the current study.

#### **RESTRICTIONS OF THE STUDY**

The study is limited to theses in LIS that universities in India's southern region have uploaded to the Shodhganga ETD repository. Only ten doctoral theses were discovered in the repository by the Three Universities of Southern India.

### RESULTS AND DISCUSSION

Table 1: Research areas of Doctoral theses in LIS and there year Submission

Sl. No.	Name of Universites	No of Theses Uploaded	Year of Submission	Research Area
1	Bangalore University	3	2020	Application of web 3.0 Technology among medical college libraries in Karnataka A Study.
				Knowledge Sharing Among the Science faculties and researchers in university of Karnataka state an exploratory study.
				Awareness and use of information resources and services in private university libraries in Karnataka A study.
2	University of Mysore	4	2020	Citation analysis of research publications of faculty members and research scholars of University of Mysore and karnatak University.
				A study on the contributions of teachers of library and information science towards the profession in India.
				Trends in web citations in scholarly journals a study.
				Use of mobile devices for accessing electronic resources by the students of medical colleges in Karnataka a study.
3	Gulbarga University	3	2020	Public library as a motivator for the use of E governance services by citizens A case of Bangalore and kalburgi Districts Karnataka State.
				A study on library and information services of users in autonomous engineering college libraries in Karnataka.
				Status problems and prospects of library automation in first grade colleges in Karnataka state.

Table 1 show that University of Mysore had uploaded the maximum numbers of theses i.e. 4 in number followed by Bangalore University and Gulbarga Universities having 3 each. Different

areas of LIS were covered in the doctoral theses of these universities. Maximum theses were submitted in 2020.

Table 2: Form wise distribution of cited documents of theses of the 3 universities

Sl. No.	Form of Cited Documents	Bangal	Bangalore University University of Mysore		re	Gulbarga University					
1	Journal Citations	99	107	157	150	64	31	52	50	82	86
2	Book Citations	5	0	7	3	0	0	0	2	2	2
3	Web based Citations	19	0	20	7	0	1	0	62	38	4
4	Seminar/conference	13	1	6	4	1	1	0	7	1	2
	proceedings Citations										
5	Reports Citations	0	0	0	0	0	0	0	4	0	0
6	Theses/Dissertations	0	0	0	4	0	0	0	1	0	0
	Citations										
7	Dictionary Citations	0	0	3	2	0	0	0	1	1	2
	Total	136	108	193	170	65	33	52	127	124	96

The above table shows that Bangalore University theses have the highest number of journal citations (157) and Book citations (12). Web based Citations (102) are highest in the theses of Gulbarga

university. Reports, theses and Dictionary citations are the least cited documents. Bangalore University theses have highest number of cited documents.

**Table 3:** Form wise Distribution of total cited documents

Sl. No.	Form of Cited Documents	Total no. of citations	Cumulative Citations	Percentage	Cumulative Percentage
1	Journal Citations	878	878	79.8	79.52
2	Book Citations	21	899	1.9	81.43
3	Web based Citations	151	1050	13.6	95.1
4	Seminar/conference proceedings Citations	36	1086	3.2	98.36
5	Reports Citations	4	1090	0.3	98.73
6	Theses/Dissertations Citations	5	1095	0.4	99.18
7	Dictionary Citations	9	1104	0.8	100
	Total	1104	_	100	_

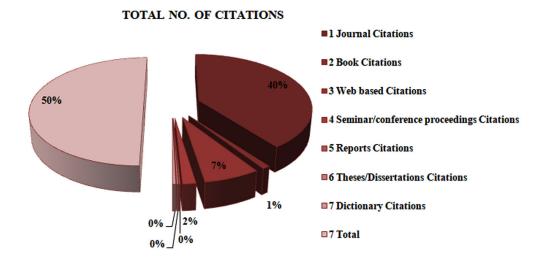


Table 3 and fig. 1 clearly depicts that maximum cited documents are the journals (80%) followed by books (2%), Web based (14%) and conference/seminar proceedings (3%). The least cited documents are Dictionary followed by theses and dissertations and reports. This shows that

researchers in the field of LIS mainly concentrate on printed journals for collecting information. Books are also considered as an important source of information in the research work. E-resources are found to be referred less compared to printed journals and books.

Table 4: Ranking of Journals by frequency of citations

Rank No.	Name of the Journal	Country	No. of Citations	Cumulative Citations	Percentage	Cumulative Percentage
1	Annals of Library & Information Studies	India	24	24	23.3	23.3
2	The Electronic Library	U.K	17	41	16.5	39.8
3	DESIDOC Journal of Library and Information Science	India	15	56	14.5	54.3
4	Journal of Knowledge Management	Nigeria	10	66	9.7	64
5	Journal of Library & Information Science	U.S.A	9	75	8.7	72.8
6	Journal of Information Science	U.K	7	82	6.8	79.6
7	Journal of Documentation	U.K	6	88	5.8	85.4
8	The Journal of Academic Librarianship	U.K	5	93	4.8	90.2
8	IASLIC Bulletin	India	5	98	4.8	95.1
8	SRELS Journal of Information management	India	5	103	4.8	100

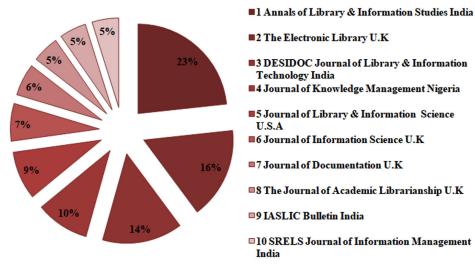


Fig. 2: Showing ranking of journals by frequency of citation

Table 4 and Fig. 2 show that Annals of Library and Information Studies is the most cited journal (23.3%) and is ranked first, followed by The Electronic Library (16.5%) and DESIDOC Library and Information Technology (14.5%). Journal

of Knowledge Management (9.7%), Journal of Library and Information Science (8.7%), Journal of Information Science (6.8%), and others were also frequently cited. It is also clear that Indian journals are cited more frequently than foreign journals.

Table 5: Shows	the distribution	of cited docun	nents by year

<b>Year Citations</b>	No. of citations	Cumulative	Percentage	Cumulative Percentage
1900-49	4	4	0.37	0.37
1950-59	2	6	0.18	0.54
1960-69	6	12	0.54	1.09
1970-79	15	27	1.36	2.46
1980-89	29	56	2.64	5.1
1990-99	69	125	6.29	11.4
2000-09	229	354	20.89	32.29
2010-19	742	1096	67.73	100
Total	1096	_	100	_

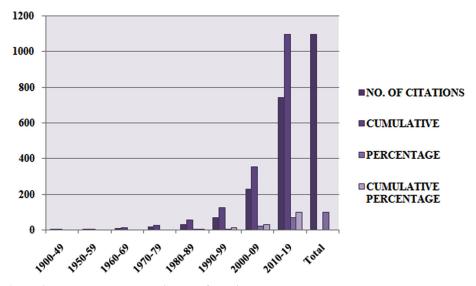


Fig. 3: Showing Year wise Distribution of citied Documents

According to the above table and figure, the most documents cited (67.73%) were published during the 2010-19 fiscal year, followed by documents published during the 2000-09 fiscal year (20.89%). The documents with the fewest citations (0.18%) were published between 1950 and 1959. Furthermore, out of a total of 1096 citations.

# The findings of the study can be summarized as follows:

The following topics are covered in doctoral theses: I the digitization process in Indian libraries; ii) digital resource management; iii) the growth of research outputs; iv) the use of online resources; and v) the management and preservation of audiovisual materials. vi) Citation pattern of doctoral dissertations vii) Information seeking behaviour in digital environment viii) Growth & development of libraries ix) Role of state and district libraries x) LIS education. The majority of theses were submitted in 2020.

Among the three universities under consideration, the doctoral theses submitted to Bangalore University had the most journal citations (363). The most book citations are found in Bangalore University theses.<sup>7</sup> The thesis from Gulbarga University has the most e-resource citations. The least cited documents are those from Bangalore University's theses and reports.

The maximum cited documents in the 10 doctoral theses are the printed journals (79.8%) followed by Web based Citations (13.6%). The least cited documents are the dictionary followed by theses/dissertations and reports.

Among the journals cited in the 10 doctoral theses, Annals of Library and Information Studies is ranked first with (23.3) citations, The electronic library is ranked second (16.5%), and DESIDOC Journal of Library and Information Technology is ranked third (14.5%). In addition, the study found that Indian journals were cited more frequently than foreign journals.

The greatest percentage of cited documents (67.73%) was published between 2010 and 2019. Only (0.18%) of the least cited documents were produced between 1950 and 1959. 6.9% of the documents were released between 1990 and 1999.

#### **CONCLUSION**

The findings show that the researchers from all four universities used various types of documents. The citation pattern of source documents in LIS as a whole indicates that journals have the most citations. This clearly demonstrates the importance of scholarly literature as well as researchers' reliance on journals for their research work. As a result of the study, it can be concluded that journals are the primary source of information for gaining access to a large volume of information in the field of LIS. It has also been discovered that research reports, theses/dissertations, and newsletters are the least used sources of information when compared to other sources of information. This could be due to a lack of knowledge about these sources. The journal ranking list depicts the most frequently cited journals by researchers. In addition, Indian journals are more frequently cited than foreign journals. E-resources are used far less frequently than printed documents. This study provides an overview of the research approach and citation behaviour, as well as information on the types of information sources sought for research studies in the field of Library and Information Science.

#### REFERENCES

- Available at http://shodhganga.inflibnet.ac.in/ (Accessed on 24/01/2023)
- Available at http://shodhganga.inflibnet. ac.in/moredetails/newmoredetails/about.html (Accessed on 24/01/2023)
- 3. Barman, B. (2012) Library and information science: UGC-NET guide. Guwahati: DVS Publisher.
- Buttlar, L. (1999). Information sources in library and information science doctoral research. Library & Information Science Research. 21(2), pp.227-245.
- Krishna, K.M. (2011). Studies on doctoral theses in agricultural sciences of Rajasthan Agricultural University, Bikaner. SRELS journal of information management. 48(4), pp.459-464.
- Abdi, A., Idris, N., & Alguliyev, R.M. (2018). Bibliometric analysis of IP & M Journal (1980-2015). Journal of Scientometric Research, 7(1), 54-62.
- Aina, L.O. & Mooko, N.P. (1999). Research and publication pattern in library and information science. Information Development, 15 (2), 114-119.
- 8. Chatterjee. A. (2015). An analysis of citation pattern of the journal Opsearch 2013-14: a case study. International Journal of Humanities and Social Science Invention, 4(7), 39-44.
- Jadhav, V., Khaparde, V., & Shelke, S. (2011). Citation analysis of University News Journal. Goa University, 681-690.
- Kousha, K., & Thelwall, M. (2006). Motivations for url citations to open access library and information science articles. Scientometrics, 68(3), 501-517.