

# Citation Analysis of Doctoral Theses in LIS Uploaded on Shodhganga by Universities of South Region in India

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## Abstract

The research paper deals with the citation analysis of doctoral theses of library and information science submitted to the South Region Universities with the special reference to Shodhganga website. This study is based on 968 total citations in the 10 doctoral theses. The purpose of this study was to identify the most cited sources of Information, rank list of core journals and country-wise publication in library and information science. The study revealed that 77.59% of total citations are cited by the journals followed by web-based sources with 11.69% followed by book citation with 4.02% citations. The library philosophy and practice has ranked first with 54 citations with 22.31% of total citations and 16.11% of citations of Scientometrics was ranked second. The results of citation analysis can be used to evaluate the importance and relevance of a publication, determine the impact of a researcher or researcher group, and identify key authors and research areas in a field. It is commonly used in the field of academic research, but can also be applied to other areas such as patent analysis and media analysis.

**Keywords:** Doctoral theses; LIS; University of South region in India; Shodhganga ETD repository.

## INTRODUCTION

Citation analysis is an important area of study. Citation analysis is the study of references within one text to another and the location of those references. Citation analysis can assist you in understanding topic relationships, author

effectiveness, publishing trends, and other topics. One of the most common bibliographic techniques is citation analysis. Citation analysis examines and quantifies the frequency, patterns, and bibliographic sources used to connect researchers to other scientific studies. One of the most popular methods for locating core journals for a subject is through citation analysis. It also displays author patrons, country publications, and documents cited by year. As a result, it aids in determining the quality of the references used in dissertations. The Inflibnet Center has developed Shodhganga, a website for electronically evaluating papers and papers from all Indian universities. When writing a research paper, review article, or dissertation, researchers or scholars should always refer to previous work relevant to their field and analyse

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citations to determine the types of documents, topics, and topics used by scholars to identify distributions, rankings, and so on comprehend the half-life duration of the journal documents used.

The current study covers doctoral dissertations in library and information science uploaded to the Shodhganga ETD repository by universities in southern region of India. Universities included in this study are Alagappa University, Annamalai University and Tumkur University. Examining the doctoral dissertation bibliographies of these universities gives insight into the types of sources used by researchers in southern region in India.

## LITERATURE REVIEW

According to survey of the literature, various studies have been done on citation analysis of doctoral theses, Citation analysis is a bibliometric techniques, it is structure and direction it is evaluate the usefulness of documents as well as the relationship between their author and their documents. Citation analysis is the become the one of most popular methods for the studying subject relationship patterns, impact and publication trends in the any research activity.

Citation analysis has been extensively studied in the field of bibliometrics, which uses quantitative approaches to survey the scholarly literature. The history and development of citation analysis, the many metrics and methods used, and strengths and weaknesses of the strategies are all covered in the literature review.

The history of citation analysis can be traced back to the early 20th century with the development of the Science Citation Index (SCI) by Eugene Garfield in the 1960s. The SCI was the first database to provide large-scale citation information and was a major breakthrough in bibliometrics. Since then, many other databases and software tools have been developed to support citation analysis. Web of science, scopus, google scholar.

In conclusion, Citation analysis is a popular method in academic research for determining the impact and influence of publications or researchers. It has a long history, and various methods, metrics and tools for citation analysis have been developed. However it has limitations and biases of its own and should be used with caution.

## OBJECTIVES

- To know about the areas covered in LIS research by the scholars of the universities of south region
- To determine the principal forms of literature used in dissertations by doctoral theses
- To prepare a ranked list of periodicals based on frequency of use by doctoral students
- To determine country wise distribution of literature used by doctoral students
- To know the number of citations used by the research scholars in LISc

## SCOPE OF THE STUDY

The research is based on theses posted on Shodhganga by universities in southern India, such as Alagappa University, Annamalai University, and Tumkur University. The repository housed ten theses, all of which were heavily cited. The field of study chosen is library and information science.

## METHODOLOGY

The bibliographies and references for all Ten doctoral theses found at the end of the chapters were downloaded and their citation styles were examined (<http://shodhganga.inflibnet.ac.in>). These citations served as the primary source of data and form the foundations of the current study.

## LIMITATION OF THE STUDY

The study is limited to the theses of Library and Information Science that have been uploaded to the Shodhganga ETD repository by universities in India's southern region. The Three Universities of South India discovered only ten doctoral theses in the repository.

## ANALYSES AND INTERPRETATION

Ten theses in the field of library and information science were uploaded by the three South Indian universities. The research studies covered a wide range of LIS topics, which are detailed below:

## RESULTS AND DISCUSSION

**Table 1:** Research areas of doctoral theses in LIS and the year of submission

| Sl. No. | Universities Name    | No. of Theses Uploaded | Submission Year | Research Area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------|----------------------|------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | Alagappa University  | 6                      | 2020            | Perception and use of open access scholarly Communication a study among research Scholars of Karnataka state universities.<br>Research output on chromosome Anomalies an empirical analysis.<br>Mapping of marine pollution literature a scientometric study.<br>Information seeking behavior and knowledge Sharing pattern among teachers of international Schools in Chennai an analytical study.<br>Research output in seed technology a scientometric study.<br>Scientometric analysis of leather research Output a global perspective. |
| 2       | Annamalai University | 2                      | 2020            | Access and utilization pattern of e resources among the library users of selected colleges affiliated to solapur university a study.<br>User awareness and perception on e resources and services a study with special reference to nursing colleges in madurai district.                                                                                                                                                                                                                                                                   |
| 3       | Tumkur University    | 2                      | 2020            | E Resources perception and use by Ayurvedic medical college library users of North Karnataka.<br>Trends decay and recovery of Web citations a comparative study of electronic theses and dissertations in sciences and social sciences.                                                                                                                                                                                                                                                                                                     |

Table 1 Show that Alagappa University had uploaded the maximum numbers of theses i.e. 6 number followed by Annamalai university and Tumkur Universities having 2 each.

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

| Sl. No | Form of Cited Documents                  | Alagappa University |    |    |    | Annamalai University |    | Tumkur University |    |     |     |
|--------|------------------------------------------|---------------------|----|----|----|----------------------|----|-------------------|----|-----|-----|
| 1      | Journal Citations                        | 75                  | 80 | 37 | 10 | 106                  | 72 | 84                | 42 | 117 | 128 |
| 2      | Book Citations                           | 13                  | 5  | 10 | 3  | 5                    | 1  | -                 | -  | 1   | 1   |
| 3      | Web based Citations                      | 56                  | 5  | 11 | 1  | 2                    | -  | 2                 | -  | 29  | 7   |
| 4      | Seminar/conference proceedings Citations | -                   | 2  | 1  | 2  | 1                    | 2  | 1                 | 34 | 2   | -   |
| 5      | Theses/Dissertations Citations           | 6                   | -  | -  | 4  | 1                    | 1  | -                 | -  | -   | 1   |
| 6      | Dictionaries                             | 7                   | -  | -  | -  | -                    | -  | -                 | -  | -   | -   |
|        | Total                                    | 157                 | 92 | 59 | 20 | 115                  | 76 | 87                | 76 | 149 | 137 |

The above table shows that Tumkur University theses have the highest number of journal citations (128 and 117) Followed by Alagappa University (106 and 72). Annamalai University has journal citations (84 and 42). Alagappa University theses have highest number of book citations (13 and 10). Web based e-resources citations (56) are highest

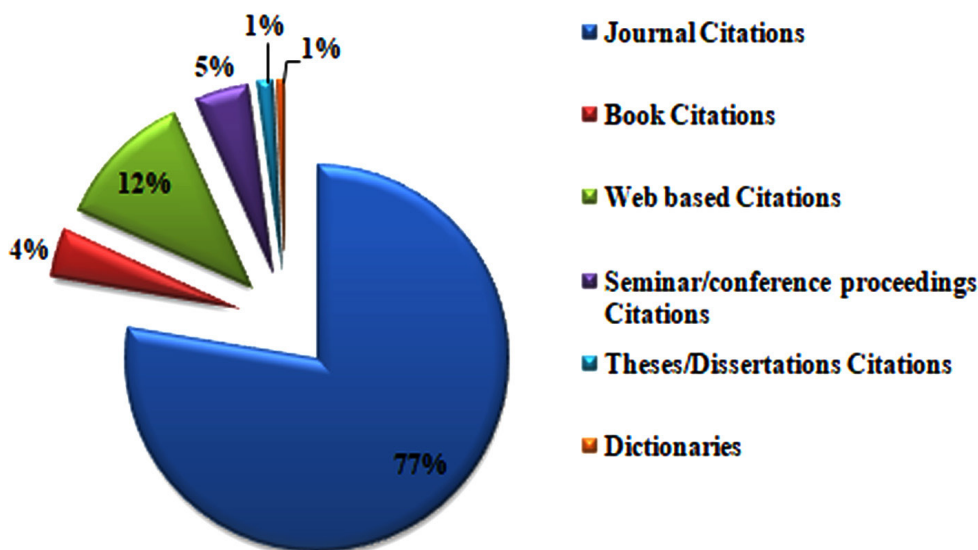
in theses of Alagappa University followed by Tumkur University (29), Theses and Dictionaries are the least cited documents. Annamalai University Proceedings has the highest number of cited documents followed by proceedings of Alagappauniversity and Tumkur University.

**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       | 751                    | 751                  | 77.59      | 77.59                 |
| 2       | Book Citations          | 39                     | 790                  | 4.02       | 81.61                 |

|   |                                          |     |     |       |       |
|---|------------------------------------------|-----|-----|-------|-------|
| 3 | Web based Citations                      | 113 | 903 | 11.69 | 93.28 |
| 4 | Seminar/conference proceedings Citations | 45  | 948 | 4.64  | 97.93 |
| 5 | Theses/Dissertations Citations           | 13  | 961 | 1.34  | 99.27 |
| 6 | Dictionaries                             | 7   | 968 | 0.72  | 100   |
|   | Total                                    | 968 |     | 100   |       |

**PERCENTAGE OF CITED DOCUMENTS**



**Fig. 1:** Showing form-wise distribution of cited documents

Table 3 and fig. 1 clearly show that journals (78%) are the most frequently cited documents, followed by books (4%), Web based (12%), and conference/ seminar proceedings (5%). Dictionaries are the least cited documents, followed by theses/dissertations.

This demonstrates that LIS researchers primarily rely on printed journals to gather information. Books are also regarded as a valuable source of information in research. E-resources are referred to less frequently than printed journals.

**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        | Library Philosophy and Practice                                   | USA     | 54               | 54                   | 22.31      | 22.31                 |
| 2        | Scientometrics                                                    | India   | 39               | 93                   | 16.11      | 38.43                 |
| 3        | Desidoc Journal of Library & Information Technology               | India   | 37               | 130                  | 15.28      | 53.71                 |
| 4        | The Electronic Library                                            | U.K     | 31               | 161                  | 12.81      | 66.52                 |
| 5        | Annals of Library Science and Documentation                       | India   | 24               | 185                  | 9.91       | 76.44                 |
| 6        | International Journal of Information Dissemination and Technology | India   | 22               | 207                  | 9.09       | 85.53                 |
| 7        | International Research: Journal of Library & Information Science  | India   | 14               | 221                  | 5.79       | 91.32                 |
| 8        | International Journal of Digital Library Services                 | India   | 7                | 228                  | 2.89       | 94.21                 |
| 9        | Library Herald                                                    | India   | 6                | 234                  | 2.49       | 96.69                 |
| 10       | SRELS Journal of Information Management                           | India   | 4                | 238                  | 1.66       | 98.34                 |
| 10       | New Library World                                                 | India   | 4                | 242                  | 1.66       | 100                   |

**RANKING OF JOURNALS BY FREQUENCY OF CITATION**

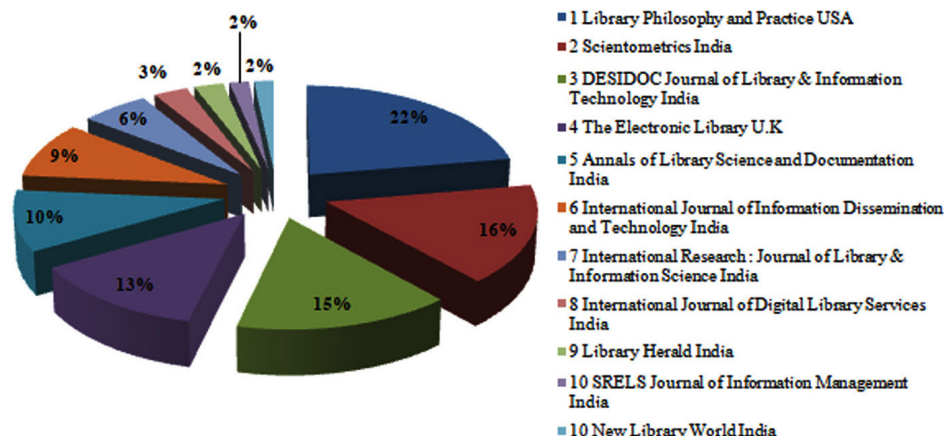


Fig. 2: Showing ranking of journals by frequency of citation

It is evident from Table 4 and Fig. 2 that Library Philosophy and Practice (22%) and is ranked 1st followed by Scientometrics (16%) ranked 2nd. DESIDOC Journal of Library and Information Technology (15 %) is ranked 3rd. The other journals which were cited frequently are The Electronic Library (13%), Annals of Library Science and

Documentation (10%), International Journal of Information Dissemination and Technology (9.09%), International Research: Journal of Library & Information Science (6%) etc. Also it is evident that Indian Journals are cited mostly compared to foreign Journals.

Table 5: Year wise distribution of cited documents

| Year Citations | No. of Citations | Cumulative | Percentage | Cumulative Percentage |
|----------------|------------------|------------|------------|-----------------------|
| 1900-49        | 7                | 7          | 0.8        | 0.8                   |
| 1950-59        | 1                | 8          | 0.11       | 0.91                  |
| 1960-69        | 10               | 18         | 1.14       | 2.06                  |
| 1970-79        | 11               | 29         | 1.26       | 3.32                  |
| 1980-89        | 23               | 52         | 2.63       | 5.96                  |
| 1990-99        | 28               | 80         | 3.21       | 9.17                  |
| 2000-09        | 210              | 290        | 24.08      | 33.25                 |
| 2010-14        | 582              | 872        | 66.77      | 100                   |
| Total          | 872              | -          | 100        | -                     |

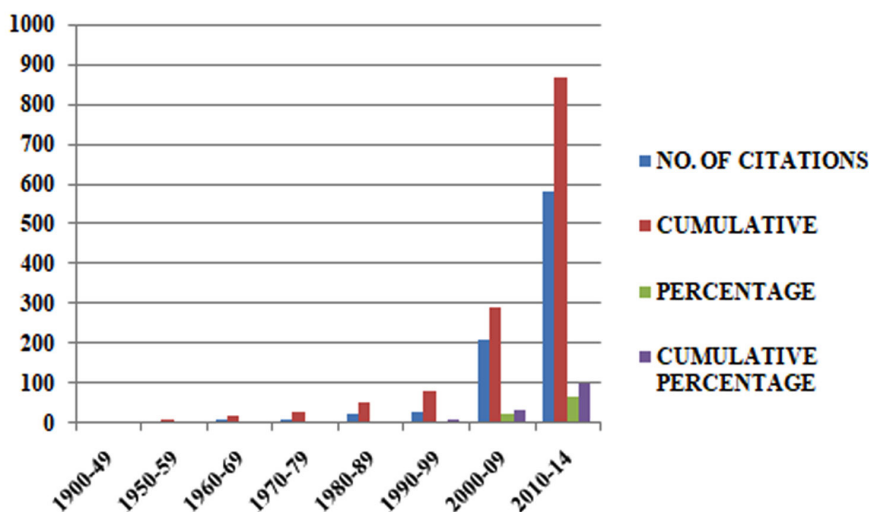


Fig. 3: Showing year wise distribution of cited documents



## RESULTS

The Finding of the study can be presented as follows:

- The doctoral theses cover the following topics :i) will discuss the digitization process in indian libraries, ii) will discuss digital resource management, iii) will discuss the growth of research outputs, iv) will discuss the use of online resources, and v) Doctoral dissertation citation pattern vi) Information seeking behaviour in a digital environment, vii) Library growth and development, viii) The role of state and district libraries) LIS education in 2020, the majority of theses were submitted.
- The doctoral theses that have been submitted Tumkur University has the highest number of journal citations among the three universities under consideration (128 and 117). Alagappa University theses have the most book citations (13 and 10). Alagappa University has the many e-resource citations. The Dictionaries, and Proceedings the least cited documents.
- The Printed journals have received the most citations in the ten doctoral theses (77.59%) following that books (4.02%), followed by web-based sources (11.69%). The least cited documents are the conference proceedings and dictionaries. Books are referred to less frequently than journals and web-based journals resources.
- Among the journal cited in the 10 doctoral theses, Library Philosophy and Practice (22%) and is ranked 1st, Scientometrics (16%) ranked 2nd and DESIDOC Journal of Library and Information Technology (15%) is ranked 3rd, Also the study revealed that indian journals were cited mostly compared to foreign journals.
- Maximum numbers of documents cited were published during 2010-14 accounting to 66.77% followed by documents published during 2000-09 accounting to 24.08%. Least cited documents were published during 1900-49 (0.80%). 3.21% of the documents cited were published during 1990-99. Also out of the total of 872 citations, 900 citations had their publication date and the rest i.e. 28 citations had no publication date most of which were website citations.

## CONCLUSION

The Findings show that researcher's at all

Three universities used a variety of Documents. Journals are most frequency cited in the overall citation pattern of LIS source documents. This emphasizes the significance of scientific literature and researchers' reliance on journals for their research activities. We can conclude from the research that the journals is the primary data source for accessing a large amount of information in the field of LIS. We also discovered that, when compared to other types of information, research reports, articles and dictionaries were the least used sources of information. This could be due to a lack of understanding about these sources, Journal ranking displays the most important journals that researchers frequently cite. Furthermore Indian journals are mentioned more frequently than journals from other countries. Books are used Significantly less than printed journals. This overview discusses the various types of sources required for library and information science research, as well as research methodologies and citation patterns.

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