BIBLIOMETIRC ANALYSIS OF DOCTORAL RESEARCH IN LIBRARY AND INFORMATION SCIENCE DURING 2001-2013

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Abstract

The paper describes Ph.D. theses of Library and Information Science awarded by Swami Ramanand Tirth Marathwada University Nanded during period 2001-2013, analysed using Bibliometic Analysis method.. The distribution of citations has been analysed by their bibliographic forms and found that 13 bibliographic form categorised in the forms of Journal, Book, Conference-Proceeding, Editorial work, Website, Reference Books, Thesis and others. Researchers used Journals as the most cited document with single authorship pattern.

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1. Introduction

Research is essential for expansion and diversification of any subject field. The scope of any subject will be determined by the quality of research it produces. Not only this, research is also vital to be undertaken for survival and sustenance of the existing subject. Usually the research activities are undertaken for the welfare and betterment of living especially for humans. Library and Information research has always been the ultimate vision of academicians and intellectuals as it directly or indirectly influences research in other fields whether scientific, technical, social or otherwise.

2. Library and Information Science Education in India

Research in Library and Information Science (LIS) in India has been a sporadic activity for about three decades increasing slowly until around 1986. Present growth in LIS research was fueled by parity in pay-scales and promotional avenues accorded by the University Grants Commission to library science professionals, bringing them in line with university teachers at time of the Fourth Pay-Commission. It has been further intensified with API (Annual Performance Indicators)-PABS (Performance Based Appraisal System) scoring system applicable to all university teachers and library professionals as per Regulation 2010 of UGC (University Grants Commission) in India. Developments in network technologies, scholarly communication, and Indian policy, National Knowledge Commission Report are challenging libraries and information science to find new ways to engage, interact with communities and enhance research output. Library and Information science faculty and librarians are responding with service innovations in areas such as bibliometrics and research data management. Surveys have investigated research productivity/output within India and other research services globally with small samples. Faculty members and librarians need a multifaceted understanding of the research environment. Research and development activities in science and technology and other fields of human endeavor have contributed significantly to a phenomenal growth in research themes. This has resulted in an information explosion and interdisciplinary approaches to research over the last seven decades. These developments have placed new demands on the services offered by libraries and information centers and conducting research having direct or indirect bearing on these services.

1.   Swami Ramanand Tirth Marathwada University Nanded

Swami Ramanand Teerth Marathwada University was established in 1994. Named after Swami Ramanand Teerth, it is located at Latur Road Nanded in Maharashtra, India. The university is intended to serve primarily the southern part of Marathwada, specifically the districts of Nanded, Latur, Parbhani, and Hingoli. The university has not library and information and information science department. The LIS courses BLISc and MLISc are run by the affiliated colleges.The Library and information science subjected is included in the faculty of interdisciplinary studies as per The Maharashtra public university Act 2000.

2.   Bibliometric

The term Bibliometric was coined by Pitchard in 1969 and he defined that bibliometric is the application of mathematical and statistical method for measuring quantitative and qualitative changes in collection of books, journals and other publications. By using quantitative and qualitative analysis it is possible to measure the scattering of article to different journals and also make to possible to measure growth and obsolescence of literature in different subjects. The most used bolometric method such as citation analysis, bibliographic coupling, and co-citation analysis can be used to map knowledge structure and the use of literature. Bibliometric technique have evolved over time and counting to do so. The counting of papers with attribution by country, by institution and by author, the counting of citations, to measure the impact of published work on the scientific community etc. All of these techniques combine to give more detailed and more effective measurement.

3.   Title of the Study

The study is titled as "Research in Library and Information Science: A Bibliometic Study"

Definitions of key terms in the title

The definitions of the key terms in the title are given below :

a)   **Doctoral Thesis:**   A descriptive research work prepared for award to Doctoral Degree.

b)   **University:** A Place of higher education and research .Indian university are created by the enactments of state Universities act.

c)   **Bibliometric** :   Bibliometric is " the application of quantitative analysis in the bibliographic reference of the body of literature.

4.   Objectives of the study

The major objectives of the study are as follows.

i)   To identify a change in trends in LIS research during past years as revealed by the doctoral these.

ii) To analyse the citation appended to these and find out:

a)   The extent of citation in theses

b)   Type of bibliographic form of documents uses by researchers.

c)   The ranking of core Journals used for research in LIS subject.

5.   Hypotheses

This study has following hypotheses

i)   Journals are the major documents used by researcher.

ii)   English language documents dominate other language.

6.   Methodology :

The source of data for the study is the doctoral dissertations produced by the Department of Library and Information Science, Swami Ramanand Tirth Marathwada University Nanded for which degrees were awarded 2001-2013. The research methodology for this study was Survey and Bibliometric Analysis. Survey was conducted through a personal investigation in the Main Library of The Swami Ramanand Tirth Marathwada University Nanded. Bibliometirc study was conducted on the basis of the information collected form in theses available for reference form above centre.

7.   Limitation of the Study

This study was limited to theses awarded for Doctoral Research in Library and Information Science in The Swami Ramanand Tirth Marathwada University Nanded from the year 2001 to 2013. All the awarded theses were considered for the purpose of bibliometric study.

8. **Analysis and Distribution of Citations**

The distribution of citations has been analysed by their bibliographic form, language and country of origin. The citations in 6 theses have been examined according to different sources of information used by researcher in their studies. It was found that 13 bibliographic forms were used by researcher excluding Newspapers, Acts, Bills, Reports, Standard and Dissertations included in other bibliographic sources which were presented in the following table.

8.1. Bibliographic form

Table 1. Bibliographic form wise Distribution of Citation

Type of Source	Citations	Percentage	Cumulative Frequency	Cumulative percentage of citations
Journals	392	41.39%	392	41.39%
Books	281	29.66%	673	71.05%
Conference Proceeding	59	6.23%	732	77.28%
Editorial Work	30	3.17%	762	80.45%
Websites	27	2.86%	789	83.31%
Others	110	11.62%	899	94.93%
Reference Book	43	4.54%	942	99.47%
Thesis	5	0.53%	947	100 %
Total	947	100 %	947	100 %

Table No.1 shows that the citation almost (41.39 %) share is of journal, followed by book (29.66 %). Apart from these sources has least citation as follows : Conference Proceeding (6.23 %), Editorial work (3.17 %), Website (2.86 %), Others (11.62 %) Reference Books (4.54%) and thesis (2.4 %) This may be the journals are easily accessible for research work.

8.2. Language

Table 2. Language wise Distribution of Citations

Language	Citations	Percentage of citations	Cumulative Frequency	Cumulative percentage of citations
English	940	99.26	940	99.26%
Marathi	07	0.74	7	100 %
Total	947	100 %	947	100 %

Table No. 2 clearly shows that English is the predominant language used in citation (99.26 %) as almost researcher cited information sources in English Language.

8.3. Country

Table 3. Country Wise Distribution of Citations

Sr. No	Country Name	Citations	Percentage of citations	Cumulative Number	Cumulative percentage of citations
1	India	633	66.84%	633	66.84%
2	USA	104	10.99%	737	77.83%
3	UK	81	8.55%	818	86.38
4	France	39	4.12%	857	90.50%
5	Others	90	9.50%	947	100 %
Total		947	100 %	947	100 %

The country wise distribution of citation in Table No.3 indicates that publication in India is more liked by researcher (66.84 %) followed by USA (10.99 %), UK (8.55 %), France (4.12%) and others (9.50 %). Main reason behind this is easy access to Indian literature comparing with the other country.

8.4. theses Citations

Table 4. Distribution of in theses Citations

Sr. No.	No. of Citation	No. of Thesis	Percentage	Cumulative Frequency	Cumulative percentage of citations
1	1-100	1	16.67%	1	16.67%
2	101-200	4	66.67%	5	83.36%
3	201-300	1	16.66%	6	100 %
Total		6	100 %	6	100 %

Table No.4 Indicated 66.67 % of the theses have cited maximum 101-200 citation, followed 16.66 % theses have cited 1-100 and 16.67 % these have cited 201-300. The average no of citation per thesis calculated 157.83 %.

8.5. Authorship Pattern

Table 5. Authorship Pattern of citations

Sr. No	Authorship Pattern	Citations	Percentage	Cumulative Frequency	Cumulative percentage of citations
1	Single author citation	639	69.46%	639	69.46%
2	Two author citation	170	18.48%	809	87.94%
3	Three author citation	03	0.33%	812	88.27%
4	More than three author	19	2.06%	831	90.33%
5	Corporate Author	89	9.67%	920	100%
Total		920	100 %	920	100 %

Table No. 5 The authorship pattern reveals that majority of citation are by single author 69.46 %, followed two author 18.48 % Three author 0.33 %, More than three author 2.06 % and Corporate Body author 9.67 % .

8.6. Journals

Table 6. Ranking of Journals

Sr. No.	Rank	Name of Journal	Citations
1	1	University News	36
2	2	Aslib Proceeding	29
3	3	Library Science with Slant to Documentation and Information Studies	28
4	4	IASLIC	22
5	4	Herald of Library Science	22
6	5	ILA	18
7	6	Library and Archival Security	15
8	7	Journal of library and Information Science	11
9	7	Special Library	11
10	7	Library of Herald	11
11	8	Library Journal	9
12	8	Annals of Library Science	9
13	9	Lucknow Librarian	7
14	9	Library Trends	7
15	9	Journal of Documentation	7
16	10	College and FResearch Library	6
17	11	Observer	5
18	11	International information Communication and Education	5
19	11	Indian Journal Library and Information Science	5
20	11	Nigerian Librarirs	5
21	12	American Libraries	4
22	12	Journal of Applied Psychology	4
23	12	African Journal of Library Archival and Information Science	4
24	12	Library Focus	4
25	12	Special Library	4
26	12	The Library Quarterly	4
27	12	University and Research Libarary	4
28	13	Journal of American Society for Information	3
29	13	ERIC Documentation Periodical	3
30	13	DESIDOC Bulletin	3

31	13	Indian Librarian Journal	3
32	13	Library Administration	3
33	14	Academic Management Journal	2
34	14	Journal of Agricultural Education	2
35	14	Library Association Record	2
36	14	Journal of Business Management	2
37	14	Information Today and Tomorrow	2
38	14	Indian Journal Library and Society	2
39	14	Illinois Library	2
40	14	Library Information Bulletin	2
41	14	Journal of Library and Librarianship and Information Science	2
42	14	Malaysian Journal of Library and Information Science	2
43	14	NISSAT News Letter	2
44	14	Nigerian Library Management	2
45	14	Library Progress	2
46	15	Journal Of American Librarianship	1
47	15	College News	1
48	15	Journal of Education	1
49	15	Education Quarterly	1
50	15	EPW	1
51	15	Ghana Library Journal	1
52	15	International Library	1
54	15	Inflibnet News Letter	1
55	15	Informatics Letter	1
56	15	ISI Bulletin	1
57	15	International Information and Library Review	1
58	15	Delnet News Letter	1
59	15	Journal of Information Management	1
60	15	INSDOC Bulletin	1
61	15	Journal of Information Technology in Construction	1
62	15	International Library Movement	1
63	15	Indian Journal of Technical Education	1
64	15	Indian Education Review	1

65	15	LIBRI	1
66	15	Library and Information Review	1
67	15	Library News	1
68	15	Library and Librarian	1
69	15	Library Scientific	1
70	15	Journal of Librarianship	1
71	15	Journal of Library and Information Technology	1
72	15	Journal of Leading Libraries and Information Centre	1
73	15	Law Library Journal	1
74	15	Journal of Management	1
75	15	Nigerian Library Movement	1
76	15	Public Opinion Quarterly	1
77	15	Library quarterly	1
78	15	Research Trends Library and Information Science	1
79	15	Reference Service Quarterly	1
80	15	Library System (Nigeria)	1
81	15	School Library Media Quarterly	1
82	15	SRTM Journals	1
83	15	Spring Summer	1
84	15	Special Library Association	1
85	15	Special Librarianship for Special Library	1
86	15	The Reference Library	1
87	15	The Serials of Librarians	1
88	15	The English Journals	1
89	15	University Bulletin	1
90	15	Unesco Bulletin for Library	
Total			392

Table No. 6 shows Rank list of journals, total 15 ranks awarded. Among these University News have First rank with 36 citations and followed by Aslib Proceeding Second rank with 29 citations, Library Science with Slant Documentation and Information Studies Third rank with 28 citations.

Testing of Hypotheses

On the basis of the analysis of the table and findings the hypotheses stated is tested

[1] Hypothesis- I

"Journals are the major documents used by researcher."

This hypothesis is proved to be true and valid form the analysis of table 1 and finding number 1 .

[2] Hypothesis- II

"English language documents dominate other language."

This hypothesis is proved to be true and valid form the analysis of table 2 and finding number 2

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9. Findings:

[1] The Major type of document used by researcher is identified as Journal and Indian Journals   are more   used for document citation.

[2] Language wise analysis of citation reveals that the almost all share of the literature is form English   Language.

[3] 16.67 % of theses have cited less than 100 documents, 66.67 % of these have been cited less than   200 document and 16.66 % theses have been cited more than 200.

[4] Single Author ship pattern citation documentation is 69.46%.

[5] First rank Journal is University News.

9.   Conclusion

On the basis of analysis of the data undergone and on the verification of the tenability of clear hypotheses we get a clear idea of the trend in LIS research in Department of Library and Information Science of Swami Ramanand Tirth Marathwada University Nanded. The study shows the most demand of information resource including ranked Journals and thus the research department should facilitate their research scholar with current literature in subject ; with the use of modern technological tools to access the data and encourage them to engage in research activities in future.

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