

CITATION ANALYSIS OF THE INDIAN JOURNAL OF INFORMATION, LIBRARY AND SOCIETY

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[*Analyses the citations provided in articles of Indian journal of Information, Library and Society (IJILIS). Underlines the objectives, methodology and highlights the findings of the study.*]

1. Introduction

Library and Information Science is a multidisciplinary multicultural field of activity. It has the capacity to assimilate relevant ideas from different fields of knowledge. It incorporates practices from many authors from different fields of knowledge. The recorded knowledge comprised in the collection of a library is a surrogate for cultural transfer of knowledge from place to place. In fact, the knowledge transfer that occurs between professionals in many fields of knowledge is primarily through records. Librarianship has the capacity to adapt and adopt new ideas, practices, techniques for providing user oriented services. While international conferences provide scope for person to person transactions, as well as discussions on many professional topics, a majority of persons, who have no chance of attending such conferences, have to resort to the publication in the form of periodicals, books and other kindred materials to have international interactions in the field.

Citation analysis is defined as an activity involving analysis of the citations or references, which forms a part of the primary scientific communication. When the scientific paper makes mention of or makes reference to another scientific paper, the latter has been cited by the former as a source of information as the support for the points of view as authority for the statements of facts etc.

2. Choice of the Journal

The contributions to this journals i.e., *Indian Journal of Information, Library and Society* mostly belong to the Indian social community. The views expressed by them closely suits to the Indian environment. The progress is charged through developments seen

in developed countries. Therefore, the journal has been chosen for the purpose of study. The period covered in this study is 1995-1999 i.e, Vol. No.8 to 12.

3. Purpose of citation Analysis

Weinstock has pointed out the following purposes of citing previous works by the authors.

1. Paying homage to pioneers.
2. Giving credit to related works.
3. Identifying methodology, equipment etc.
4. Providing background reading
5. Correcting the works of others
6. Correcting one's own work.
7. Criticising previous work.
8. Substantiating claims.
9. Alerting to forthcoming works.
10. Providing leads to poorly disseminated, poorly indexed or uncited works.
11. Authenticating data and classes of facts, physical contents etc.
12. Identifying original publications or others work describing an eponymic concept of term.
13. Identifying original publication in which an idea or concept was discussed.
14. Disclaiming work or ideas of others (Negative claims).
15. Disclaiming priority claims of others (Negative homage).

4. USEFULNESS OF CITATION ANALYSIS

1) Citation analysis is used to study the citation links between scientific papers, technical notes and reviews; for example it may be used by the periodicals *Librarianship* for study of the structure of literature and to identify core journals.

2) Citation analysis provides relevant measures of utility and relationships of journals whose primary function is to communicate research results.

3) Citation analysis helps in identification of key documents and creation of core lists of journals.

4) It helps in clustering of documents according to common references and citations; and

5) Provides study of the attributes of literature including growth rate absence, citation practices.

5. The Proposed Study

Periodicals are sensitive indicators of the emerging new ideas in any discipline. They reveal the existing problems requiring solution, research pattern to solve these problems, the practices fixed to various areas etc. A careful evaluation of periodical literature may indicate a complete picture of the discipline, the profession with which it represents and everything connected with them.

The present study deals with the analysis of citations cited by various articles appeared in Indian Journal of Information, Library and Society- an esteemed journal on library and Information science.

6. *Indian Journal of Information Library and Society*

Indian Journal of Information, Library and Society (IJILIS) has started its publication in the year 1988 vide Regn. No 48191/88. The editor of the journal is Param Bhushan Dr. B.B.Shukla - an eminent, efficient and senior library professional, who has acquired two doctoral degrees with world's first D. Litt. in Library and Information Science.

The journal is being published from Cuttack, Orissa and is sponsored by Mrs. Bharati Shukla. It is a media for bringing into operation the new concepts and advances in the field of library and information science including national integration, international understanding and world peace. By the end of 1999 it has completed 12 volumes of its publication. The frequency of the journal is quarterly.

6.1 Special Numbers

The journal has so far published several special numbers on various occasions. Since the present study is limited to five years, the following special numbers are published during the period.

1. International Prof. Kaula special number
(Vol. 9 N 1 – 2, 1996)
2. International Prof. Triparti special number
(Vol. 10, N3 – 4, 1997)
3. Information Technology special number
(Vol.11, N 3– 4, 1998).

6.2 Special Features of the Journal

1. Papers on diverse library techniques, library systems and library science education i.e., Teaching and Research.
2. Book reviews of recent publications on library and information science.
3. Select annotated list of books by reputed authors.
4. News pertaining to conferences, seminars, workshops both at National and International in the field of library and information science.
5. International and other news pertaining to recent developments and changes in the field of library and Inf. science.
6. National and state level awards and honours. News pertaining to release of memorial volumes on library professionals.
7. Award of doctorates in the field of Library and Information science.
8. News pertaining to the obituries of eminent library professionals.

6.3 Present Status of the Journal

The Journal 'Indian Journal of Information library and society, is selected for citation analysis, because the journal has grown in status and set its own standards in professional Journalism. It is a national periodical completely dedicated to the field of library and Information science serving the professional community by publishing papers on diverse library techniques and library systems duly encouraging the authors- young and old around the globe.

It was interesting to analyse the citations of such a leading journal in the field so as to know the ranking of authors, types of documents, geographical location of publication etc.

6.4 Objectives of the study

To analyse the citations of Indian Journal of Information, Library and society is to know :

1. Citations per article
2. Types of documents cited.
3. Geographical distribution of journals cited.

4. Ranking of authors cited'
5. Ranking of titles.
6. Language cited.
7. Self citations
8. Bibliographic coupling
9. Co-citations
10. Ranking of journals.

6.5 Scope and Limations

Though the journal so far has completed 12 volumes considering half life of the documents, the presentd study is limited to only 5 volumes i.e., from 1995 to 1999 from volume 8-12. Further the study was limited to citations given by the article only.

6.6 Methodology :

Citation analysis method was used for the present study. For the collection of data the catalogue size cards were used to record the information of citing and cited documents. The numbers given to citing document cards were, 1,2,3 etc while numbers given to cited document cards were 1.1, 1.2, 2.1, 2.2 etc. All the bibliographic details of citing as well as cited documents were recorded according to AACR (1967). In all five (5) volumes, 138 citing articles cited 901 citations.

The study becomes much easier by feeding the references in a computer and getting the desired details in a shortest period of time. As traditional methods proved to be of much convincing in nature, the same has been adopted for the present study.

6.7 Findings of The Sutdy

6.71 Ciations articles / volume wise analysis

As 138 citing articles have cited 901 citations i.e., on anaverage 7 citations were cited per article.

The frequency distribution of citations per article showed that nearly 27% of the articles had no citations. 67.5% of the articles were having citations between 1 – 20 while nearly 3% of the articles have cited 20– 30 citations and only 1.5% of the articles have cited above 40 citations. The maximum citations were 65 while minimum was one. The volume wise analysis shown in

Table 1 reveal that out of 138 citing articles, 37 have no citations. Volume 12, 1999 have maximum number of 13 articles with no citations. As citations play vital role in framing/making new articles/further studies, the editor has to insist the authors to provide citations for their articles. This would not only provide base to their study but also give credit to the authors of citing articles.

Table 1 : Volume wise Analysis

S.No.	Vol/Year	Papers	Citations	%
			194	
			259	
			190	
			177	
			81	

6.72 Types of Documents cited

Nearly 89% of citations belonged to books and Journals, while nearly 11% of citations belonged to reports, conference proceedings, seminars, papers, theses, letters from library professionals etc. The dispersion of source literature is shown in Table. 2.

Table . 2 : Dispersion of Source Literature

S. No.	Type of Document	No. of	%
1.	Journals	370	41.07
2.	Books	428	47.50
3.	Theseas/ Dissertations	10	1.10
4.	Proc. of conference, seminar, workshop etc.	59	6.55
5.	Reports & letters	34	3.78
	Total	901	100.00

6.73 Geographical Distribution of Journals

It was feasible to analyse the citations under sample according to geographical distribution. Though some of the citations have

not given country of publication, it can be found from the sources like Ulrich's International Periodicals Directory. Since the authors have utilised the books rather than journals, it was observed that 60 % cited journals were from India, while 40% cited journals were from New York, London, USA, Europe and Asian Countries.

6.74 Ranking of Authors

It was interesting to know, who has been the famous author among library professionals. Taking into consideration of self citations also only first ten ranks have been given in Table 3.

Table : 3 : Ranking or authors - Distribution of citations

S.No.	Name of the Author	Times cited	Rank
1.	Ranganathan, S.R.	32	1
2.	Kalyane, V.L.	25	2
3.	Shukla, B.B.	12	3
4.	Kaula, P.N.	11	4
5.	Venkatappaiah, V.	8	5
6.	Grogan	7	6
7.	Lancaster	5	7
8.	Guha, B.	4	8
9.	Gupta, D.K.	4	8
10.	Krishna Kumar	4	8
11.	Mittal, R.L.	3	9
12.	Neelameghan	2	10

It can be observed from the table that Dr. S.R. Ranganathan ranked first, while Sri. V.L.Kalyane second, Param Bhushan Dr. B.B. Shukla third, Prof. P.N.Kaula fourth and V.Venkatappaiah fifth and so on. It is obvious that Dr. S.R. Ranganathan being the pioneering person in Indian Librarianship has been cited more, while Dr. B.B. Shukla, Prof. P.N. Kaula, Dr. V.Venkatappaih being distinguished library professionals have been cited several times.

6.75 Ranking of Titles

After analysis of data it has been proved that Ranganathan's idea of library science has been widely accepted by the authors because the books written by him are popular amongst the authors and hence rank 1 was secured by the books written by him.

6.76 Language of Cited Documents

After analysis 901 citations it was observed that cent percent of citations were in English. This may be because the source journal *Indian Journal of Information, Library and Society* is published in English and hence the articles written in English must have cited English articles only. Further, it is to note that when lot of literature is available in English language there is no necessity to search for literature in any other languages.

6.77 Self Citations

While analysing, citations tendency in authors was found. Of the 138 citing articles in 901 citations, only 17 cases of self citation were seen. This is only 14% of the citing articles taken for the study.

6.78 Bibliographic Coupling

It was observed that in some cases there were more than two articles which were cited by the same document. It was also observed that Dr. S.R. Ranganathan, Prof. Kaula and Dr. Shukla's works were cited by various authors and also through the works of others.

6.79 Co-Citations

While analysing 901 citations almost 110 co-citation cases were found. But it is interesting to note that only a couple of cases have been repeated. Works of Senior library professionals have been cited. Dr. S.R. Ranganathan's books were utilised by several authors more frequently. This indicates that Dr. Ranganathan's idea of Colon classification, Prolegomena to CC, Classified Catalogue code and other valuable books written by him are still popular.

6.80 Ranking of Journals

Though it is difficult to analyse the journals which were cited most frequently as 428 citations, out of 901 were from books and 370 citations were from journals-both from the disciplines of library and Inf. science and other disciplines. It is not justifiable to rank the journals from 370 total journal citations. In this regard, it is felt to note the LIS journals which are more frequently used by authors during the period under study are : *International Library Review*, *Library Trends*, *Library Herald*, *Library Science with a Slant to Documentation and Information studies*, *Herald of Library Science* and the source journal *Indian Journal of Information Library and society* etc.

7. Conclusions :

This analysis will be useful not only to the special library management but also specialist readers in selecting the relevant journals in their field of study.

The journal received 7 citations per article. About 67.5% of articles had 1–20 citations. More citations were from the books and periodicals than the other type of materials. Tendency of authors seems to cite indigenous work more as compared to the documents published in other countries. Out of 138 citing articles 37 articles have no references.

Dr. S.R. Ranganathan was first in the rank of authors whose valuable books have been utilised by several authors more frequently. English language was dominating amongst the cited articles, and it is cent percent. Only 14% citing authors had tendency of self citation, co-citation cases are 110, and only a couple of cases being repeated. More than 90% citations were from library and Information science journals. Each Journal received on an average of 7 citations.

References

1. GOPINATH, M.A. 1993. Across the frontiers : Impact of foreign journals in library science in India : A citation analysis : LSDIS; Vol 30 No.1, 17 – 24 pp.
2. PAUL MOHAN ROY, R. 1980 Citation analysis : A new tool for the modern librarian: IASLIC Bulletin 25(3), 109-116 pp.
3. SATARIANO W.A. 1978. Journal use sociology : Citation analysis verses readership patterns; Library quarterly 48(3) 293-300 pp.
4. SUBRAMANYAM, K. 1975. Criteria for journal selection; Special libraries, 366 p.
5. VAISHNAV, A.A. and DHARMAPURIKAR, R. 1992. Citation analysis of the Herald of Library science; Herald of Lib. Sci Vol. 29, N 3 – 4, 253 – 260 pp.
6. WEINSTOCK, N. 1971. Citation Indexes (In: Encyclopaedia of Library and Information science, Vol 15, Ed by Herold Lancour, Allen Kent, J.E. Dailer, New York, Marcel Deccker p.20.

