CORE JOURNALS IN THE FIELD OF LIBRARY AND INFORMATION SCIENCE

Mohan R. Kherde Librarian, M.V.D. College, Amravati (M.S.)

There are 1,300 journals of Library and Information Science being published all over the world. No single library can afford to procure all these journals. Bibliometric studies enable to make a judicious selection from the large number of journals. The present study analyses the citations appended to articles that appeared in popular Indian library and information science journals during the period 1996 and 2001 and attempts to identify the core periodicals in the field of library and information science. The study reveals that Annals of Library and Information Science (now Annals of Library and Information Studies) is most popular Indian Journal among researchers whereas College and Research Libraries is the most cited foreign journal.

INTRODUCTION

Library and information science is one of the most challenging subjects in the era of information technology. Library science professionals and researchers in library science have been contributing their thoughts in the various documentary and non-documentary forms of literature. An increasing emphasis on investigation, research and experimentation for an overall development of the library and information science field results in the growth of literature at ever increasing rate in various forms such as books, periodicals, theses, dissertations, patents, CDs, etc. Periodicals are popular amongst the professionals and scientists, as it covers the latest information with new discoveries. inventions and researches and it plays a crucial role in research work. Latest developments in a field are predominantly published in the scholarly journals. Professionals and scientists are interested in exhibiting their thoughts, ideas through articles in journals, which are the primary media of communication.

The first Indian library and information science journal was published in 1912 from Baroda under the patronage of Maharaja Saiyajirao Gaikwad with the title Library Miscellany. Thereafter so many journals on library and information science have been published in India. Presently over 1300 journals are being published in library and information science all over the world. No single library can afford to procure these journals for its readers within the limited funds. The exponential growth of periodicals, continuous increasing rate of their subscriptions, the deviating demand of readers and limited resources are the major challenges before today's librarians. It is difficult to make a judicious selection from the large availability of journals. Bibliometric studies have been used extensively for journal selection and to identify core journals.

OBJECTIVES

The objectives of the present study are:

- to find out the ratio on the use of periodicals to the total number of cited references;
- to identify the core periodicals in the field of library and information science;
- to prepare rank list of highly cited Indian periodicals in the field of library and information science; and
- to prepare rank list of highly cited foreign periodicals in the field of library and information science.

SCOPE

For the present study, most popular Indian journals published during the period of 1996 to 2001 have

Table 1: Sources of Citations

Sr. No.	Sources	No. of Citations	Percentage
1	Periodicals	1961	37.25
2	Books	1895	35.99
3	Conference Proceedings	346	06.57
4	Theses/Dissertations	157	02.98
5	Reports	158	03.00
6	Websites	123	02.34
7	Others	625	11.87
	Total	5265	100.00

been selected and the citations appended to the articles published in these journals were taken into consideration as the source data, which are listed below:

- Annals of Library Science and Documentation (Annals of Library and Information Studies)
- CLIS Observer
- DESIDOC Bulletin
- ILA Bulletin
- Indian Journal of Information, Library and Society
- Journal of Library and Information Science
- Library Science with a slant to Documentation
- IASLIC Bulletin
- Library Herald

ANALYSIS OF DATA

Ratio of use of the periodicals to the total number of cited references.

Table 1 provides the information about the sources used by the authors of the articles published in the source journals. This information reveals that authors prefer to refer the periodicals and books. Periodicals are still most popular sources amongst the authors. This table indicates that out of 5265 total references, 1961 references have been taken from the periodicals and the percentage of this is 37.25. It elucidates that the ratio of the use of periodicals to the total references is 1:2.68.

Core periodicals in the field of library and information science

Table 2 exhibits the rank list of highly cited journals in the field of library and information science. In the present study, 382 journals have been identified which are referred by the researchers for their study during 1996 to 2001. The data illuminates that *Annals of Library Science and Documentation* (*Annals of Library and Information Studies*) secured top position in the rank list receiving 114 citations followed by *College and Research Libraries*, which is being published from USA. The journals referred to less than 10 times by the researchers are not given place in the rank list. First 23 journals are referred 996 times during the period under study. It manifests 50.80% share of total citations i.e. 1961.

Table-3 and Table-4 show the highly cited Indian and foreign journals respectively. Among 382 identified journals, 10 journals each from India and other countries have been selected which were referred maximum number of times by the researchers. It clarifies that *Annals of Library and Information Studies* is the most popular Indian journal while *College and Research Libraries* is the most popular amongst foreign journals.

Bradford's Law of Scattering

Bradford described scattering pattern of journal in the area of applied geophysics and lubrication. He states that "if scientific journals are arranged"

Table 2: Rank list of highly cited journals

Sr. Rank		Name of Journals	Total Citations %		Cumulative Citations %	
No.	1 .	Annala of Libram, Saisman and Documentation	114	5.18	114	5.18
1.	1	Annals of Library Science and Documentation	78	3.18	192	9.79
2.	2	College and Research Libraries	65	3.32	257	13.11
3	3	IASLIC Bulletin				
4	4	Journal of Documentation	63	3.21	320	16.32
5	5	Library Science with a slant to Documentation	63	3.16	382	19.48
6	6	Herald of Library Science	61	3.11	443	22.59
7	7	Library Trends	60	3.06	503	25.65
8	8	Scientometrics	49	2.50	552	28.15
9	9	ILA Bulletin	48	2.45	600	30.60
10	10	Journal of American Society for Information Science	43	2.19	643	32.79
11	. 11	University News	36	1.84	679	34.63
12	.12	Library Quarterly	33	1.68	712	36.31
13	13		32	1.63	744	37.94
14	14	Libri	31	1.58	775	39.52
15	15	Aslib Proceedings	. 29	1.48	804	41.00
16	16	Library Journal	27	1.38	831	42.38
17	16	Collection Management	27	1.38	858	43.76
18	16	International Classification	27	1.38	885	45.14
19	17	DESIDOC Bulletin	26	1.33	911	46.47
20	18	Journal of Library & Information Science	22	1.22	933	47.59
21	18	Journal of Academic Libraries	22	1.12	955	48.71
22	19	Bulletin of Medical Library Association	21	1.07	976	49.78
23	20	International Library Review	20	1.02	996	50.80
24	21	Library Herald	19	0.97	1015	51.77
25	21	Journal of Information Science	19	0.97	1034	52.74
26	21	Special Libraries	19	0.97	1053 .	53.71
27	22	Indian Journal of Information, Library & Society	18	0.92	1071	54.63
28	22	Library Acquisition: Practice & Theory	18	0.92	1089	55.55
29	22	Program	18	0.92	1107	56.47
30	23	Computers Today	17	0.87	1124	57,32
31	23	Library Association Record	17	0.87	1141	58.21
32	23	JASIS	17	0.87	1158	59.08
33	24	ACM transactions on Programming Languages &	16	0.82	1174	59.90
33	2-7	Systems	,,0	1675	11//	57170
34	24	Information Processing & Management	16	0.82	1190	60.72
35	25	Online & CD-ROM Review	15	0.77	1205	61.49
36	26	CLIS Observer	14	0.71	1219	62.20
37	27	Dhaka University Studies	13	0.66	1232	62.86
38	27	Science	13	0.66	1245	63.52
39	27	IFLA Journal	13	0.66	1258	64.18
			13	0.66	1271	64.84
40	27	Knowledge Organisation	13	0.66	1284	65.50
41	27	Digital Library Magazine	12	0.61	1296	66.11
42	28	Library Science				66.72
43	28	Journal of Librarianship	12	0.61	1308	
44	29	Library Review	11	0.56	1319	67.28
45	29	IEEE Transactions on IT	11	0.56	1330	67.84
46	30	Journal of Education for Library & Information	10	0.51	1240	40.05
	22	Science	10	0.51	1340	68.35
47	3Q	International Information & Library Review	10	0.51	1350	68.86
48		Remaining 335 title cited less than 10 times	611	31.14	1961	100.00

20 Ann Lib Inf Stu

Table 3: Rank list of highly cited Indian Journals

S. No.	Name of Journals	No. of Citations
1	Annals of Library Science and Documentation	114
2	IASLIC Bulletin	65
3	Library Science with Slant to Documentation	62
4	Herald of Library Science	61
5	ILA Bulletin	48
6	University News	36
7	DESIDOC Bulletin	26
8	Journal of Library & Information Science	22
9	Library Herald	19
10	Indian Journal of Information, Library & Society	18

Table 4: Rank list of highly cited foreign journals

S. No.	Name of the Journals	No. of Citations
1.	College and Research Libraries	78
2.	Journal of Documentation	63
3.	Library Trends	60
4.	Scientometrics	49
5.	Journal of American Society for Information Science	43
6.	Library Quarterly	33
7.	Library Resources and Technical Services	32
8.	Libri	31
9.	Aslib Proceedings	29
10.	Library Journal	27

Table 5: Bradford's distribution of cited articles

Zone	No. of Journals	No. of Citations
First	10	643
Second	33	665
Third	339	653
Total	382	1961

Vol 50 No 1 March 2003 21

Table 6: Geographical distribution of highly cited journals

S. No.	Country	No. of Journals	No. of times cited	% of Journals	% of Citations
1.	India	12	502	25.53	37.18
2.	Foreign	35	848	74.47	62.82
		47	1350	100.00	100.00

in the order of decreasing productivity of articles in a given subject, they may be divided into nucleus of periodicals more particularly devoted to subject and several zones of groups containing the same number of articles as the nucleus then the zone will be $1: n: n^2...$ "

From Table 2 it is clear that, in the present study, 1961 citations are noted during 1996 to 2001. according to the Law of Scattering, if these citations are bifurcated into three zones, each containing roughly the same number of citations than it is observed from Table 5 that the number of journals in subsequent zone will be 10, 33,339 respectively. Bradford states that the number of journals following successfully in the three zones will be in the ratio 1: n: n². However in the present study, it is 10: 33: 339, i.e., approximately 1: 3: 30. The number in the third zone is far outnumbered to the expected value, i.e., 9. Thus this distribution is not following the Bradford's Law.

Geographical distribution of highly cited journals

In the present study, 382 journals have been identified. However in Table 6 showing geographical distribution of highly cited journals, only 47 journals are considered. It shows that 12 Indian journals are referred 502 times by the researchers whereas 35 foreign journals referred to 848 times.

CONCLUSION

The present study was undertaken with the main objective to identify the core periodicals in the field of library and information science. The thorough analysis of the data reveals that *Annals of Library Science and Documentation* (presently renamed

as Annals of Library and Information Studies) is the most popular Indian journal amongst the researchers whereas College and Research Libraries is the most cited foreign journal. It is evident from the study that the journals and books jointly contribute to the highest number of citations, the share of which is 73.24 %. It is therefore concluded that the researchers mainly depend on these two sources of information for their study.

REFERENCES

- BHATT (V G) and ELISHARAJU (R). Ranking of periodicals in the field fof astronautics and aeronautics. Annals of Library Science and Documentation. 24, 3-4; 1977; 114-118.
- BRACHOO (R R L), PESCADOR (S N) and REYES (R M A). The change from French to English and its effect upon the impact factor and ranking of the Pasteur journals. *Journal of Information Science*. 25, 5; 1999; 413-417.
- DESHMUKH (G R) and ASHOK KUMAR. Ranking of periodicals in the field of soil conservation. Annals of Library Science and Documentation. 29,1; 1982; 26-28
- 4. HADAYALI (P B). Frequently cited periodicals by Indian Economists: a citation analysis. *IASLIC Bulletin*. 28, 2; 1983' 59-66.
- LAL (A). Ranking of periodicals in the field of soil science. Annals of Library Science and Documentation. 37, 2; 1990, 67-73.
- MUSIB (S K). Periodicals in library and information science: Nature and growth patterns. *IASLIC Bulletin*. 31, 1; 1986; 35-38.
- 7. RAJU (R E) and KAVITHA. Core journals in synthetic organic chemistry. *Annals of Library Science and Documentation*. 32, 3-4; 1985; 115-121.
- SENGUPTA (I N). Ranking of periodicals in the field of medical sciences from the Indian scientists' point of view: Analysis of data for 1954-58. IASLIC Bulletin. 15; 1970; 120.