

A citation study of *Annals of Library and Information Studies (ALIS)* and *DESIDOC Journal of Library and Information Technology (DJLIT)*

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The study presents an analysis of the number of articles published in *Annals of Library and Information Studies (ALIS)* and *DESIDOC Journal of Library and Information Technology (DJLIT)* during 2010-2013 and the citations obtained by these articles during 2010-2014 (April) using Google. The study develops immediacy index and impact factor of the two journals, besides, identifying the highly cited authors/papers. Findings reveal that *DJLIT* published more papers than *ALIS* and also received more citations. However, citation per paper for both the journals is almost equal. *DJLIT* have a better immediacy index than *ALIS*. Impact factor of both the journals was less than one in 2012; however, it increased in 2013 and was more than one in 2013.

Keywords: *Annals of Library and Information Studies*; *DESIDOC Journal of Library and Information Technology*; Citation analysis; Indian Library Science Journals

Introduction

Library and information science (LIS) has a rich legacy in India. The year 2011 was the centenary year of LIS education in the country. Education, training and research in library and information science are carried out in over 90 universities in India. Also, the year 2011 completed one hundred years of LIS journals in India. The first Indian LIS journal entitled *Library Miscellany* was published by the State Library Department, Baroda in the year 1912, though it ceased publication in 1919. However, it opened way for publishing LIS journals in India. After that many associations and institutions related to library and information science research were established in India which started publishing journals in LIS field. In spite of the 100 years history of publishing LIS journals in India, the country has failed to produce a journal in the discipline of LIS which can truly be called international in character. It is a matter of concern that no Indian LIS journal is indexed by *Web of Knowledge*, a prestigious multidisciplinary database of Thomson Reuters (USA). Not only that, *Library and Information Science Abstract* (UK) indexes only

four LIS journals published from India. Recently, Scopus, a multidisciplinary database of Elsevier, has started indexing *Annals of Library and Information Studies (ALIS)* published by National Institute of Science Communication and Information Resources (NISCAIR) and *DESIDOC Journal of Library and Information Technology* published by Defence Scientific Information and Documentation Centre (DESIDOC).

The source journals

Annals of Library and Information Studies: The founder editor of the journal was S.R. Ranganathan (father of library science in India). The journal started under the name *Annals of Library Science* in 1954 by the erstwhile Indian National Scientific Documentation Centre (INSDOC), now NISCAIR as a quarterly publication. The publication very quickly rose to become India's premier library science journal. As the discipline of library science evolved, so did Annals. The journal's title was expanded to *Annals of Library Science and Documentation* in 1964 symbolizing the widening scope of the journal.

Today after more than five decades, *Annals* as it popularly known, is a journal of repute and is still evolving. In the present information era, the emphasis has shifted from documentation to information per se. Thus, concerning the discipline of library and information science in the new information era vis-à-vis the role of *Annals*, the title of *Annals* was changed to *Annals of Library and Information Studies* in 2001. The new title implies the shifting emphasis on information and the enormous scope for newer studies in library and information science. The journal has completed sixty years of publication and is now available in open access at its website nopr.niscair.res.in/handle/123456789/66 from volume 1 issue number 1 (1954).

DESIDOC Journal of Library and Information Technology (DJLIT): The journal was started in 1980 by Defence Scientific Information and Documentation Centre (DESIDOC) as a four page newsletter under the title *DESIDOC Bulletin* and mainly published activities of DESIDOC. In 1985, the bulletin started publishing articles on IT applications to the discipline of LIS and grew in stature and circulation under the editorship of S.S. Murthy (the then Director of DESIDOC). It was renamed as *DESIDOC Bulletin of Information Technology (DBIT)* in 1992. Since then, it is being published as a bi-monthly publication. In February 2006, the editorial board of the journal was revamped and the journal started peer-evaluation of papers involving professionals and academicians from outside; and the secondary information in DBIT was done away with. In 2008, DBIT became a primary research journal and was rechristened as *DESIDOC Journal of Library and Information Technology (DJLIT)*. Since then, only primary research work, after peer-evaluation, is accepted for publication. In 2008, the journal adopted Open Journal System—an online publication management system, which helped in fast processing of papers, submitted for publication in the journal and reduced the time taken for publishing papers from usually 11 to 12 months to 6 to 7 months. Besides, it gave the authors facility to monitor the status of their papers online. The journal also became an open access journal from 2008 and the full-text of the articles being published in *DJLIT* is now also available on Internet at its website <http://publications.drdo.gov.in/ojs/index.php/djlit>.

Review of literature

In the past, several studies dealing with bibliometric analyses of journals have been reported in literature. These studies have explored the authorship pattern of published articles, institutional affiliation of publishing authors, average length of articles and the number of contributions with the number of references appended to them. *ALIS* and *DJLIT* have also been subjected to similar bibliometric analyses. For instance, Pandita¹ made a bibliometric analysis of articles published during 2002-2012 in *Annals of Library and Information Studies*, while Deshmukh² analyzed citations appended to articles published in *Annals of Library and Information Studies* during 1997-2010. A bibliometric analysis of *DESIDOC Journal of Library and Information Technology* has been undertaken by Kumar and Moorthy³ and Bansal⁴. However, no study has explored the citation pattern of articles published in these two journals. Although, Mahesh and Wadhwa⁵ have undertaken a study which dealt with ranking of Indian library science journals using Web of Science. The present study is an attempt to study the citation pattern of *ALIS* and *DJLIT* as reflected by citations in Google. Authors have chosen only these two journals for analysis as these are indexed by *Library and Information Science Abstracts* as well as Scopus.

Objectives of the study

- To find the number of articles published in the two journals during 2010-2013 and the citation obtained by these articles during 2010-2014 (April);
- To determine the extent of citations obtained by the journals;
- To identify highly cited authors;
- To calculate Immediacy Index for 2010 – 2013 and impact factor for the years 2012 and 2013.

Methodology

The data for the present study consists of articles published in *Annals of Library and Information Studies (ALIS)* and *DESIDOC Journal of Library and Information Technology (DJLIT)*. The data for the study was downloaded from the respective websites of the journals for the years 2010-2013 (four years). The downloaded data consisted of name of the

authors and their affiliations. Citations for the published articles were examined using Google for the period 2010-2014 (April). The results were tabulated and analyzed to meet the objectives mentioned above.

Results and discussion

Articles published during 2010-2013 and their pattern of citations

Table 1 presents the data on the number of articles published in the two journals during 2010-2013 and the citations obtained by them during 2010 – 2014 (April). Data presented in Table 1 indicates that during four years of study *ALIS* published 143 articles and *DJLIT* published 228 articles. Average number of articles published per year is 8.9 for *ALIS* and 9.5 for *DJLIT*. Thus, the average number of articles published by *DJLIT* is slightly more than *ALIS*. This difference may be due to the frequency of publication of the two journals. *DJLIT* is a bi-monthly and *ALIS* is a quarterly journal. Citations per paper for both the journals is almost equal. However, citation per paper for articles published in *DJLIT* in 2010 is slightly higher than *ALIS*.

Extent of citations

Table 2 presents the data on the extent of citations received by the two journals. It indicates that of the total articles published in *ALIS* and *DJLIT* articles that did not get any citation was 42% and 44% respectively. It indicates that the proportion of uncited articles is almost equal for both the journals. Further analysis of citation data for the two journals indicates that 15 articles in *ALIS* and 18 articles in *DJLIT* were cited more than six times. However, citation per paper for both the journals is almost the same. Table 3 and 4 lists papers which were cited more than 10 times during 2010-2014 (April). Data presented in Table 3

and 4 for highly cited authors indicate that of the 10 highly cited authors/papers, 8 papers were published in 2010 and two papers in 2011. Papers published in 2010 received more citations as these have a bigger citation window than papers published in later years.

Immediacy Index (II) and Impact Factor (IF) of the journals

Immediacy index is a measure of how quickly articles published in a journal are cited. Impact factor is basically a ratio of the number of citations a journal receives to the number of papers published over a period of time and is a measure of influence of the journal. Data on the citations received by the two journals in the year of publication of the paper is presented in Table 5. It indicates that more articles were cited in the year of publication itself in *DJLIT* as compared to articles published in *ALIS*. It implies that *DJLIT* has a better immediacy index as compared to *ALIS*.

Data on the number of citations for the calculation of impact factor is shown in Table 6. It indicates that the impact factor for both the journals in the year 2012 is less than 1 and *DJLIT* had more impact than *ALIS*. However, the impact factor has increased significantly in 2013 for both the journals and is more than 1. In 2013, the impact factor for *ALIS* is more than *DJLIT*.

Findings

- The analysis of data presented above indicates that average number of articles published in *DJLIT* are more than *ALIS* during the period of study. One of the possible reasons for this is that *DJLIT* is published six times in a year, while *ALIS* is published four times in a year. Since *ALIS* has already completed 60 years of its publication, it may now increase its frequency of publication as the flow of LIS papers has also increased in India.

Table 1—Year-wise distribution of articles and their citations

Years	<i>ALIS</i>			<i>DJLIT</i>		
	No. of articles	No. of citations	Citation per paper	No. of articles	No. of citations	Citation per paper
2010	43	146	3.3	47	176	3.7
2011	36	85	2.3	54	142	2.6
2012	27	33	1.2	66	72	1.0
2013	37	08	0.2	61	15	0.2
Total	143	272	1.9	228	405	1.8

Table 2—Distribution of citations of the articles

Citations (A)	<i>ALIS</i>		<i>DJLIT</i>	
	No. of articles (B)	Total citations (AXB)	No. of articles (C)	Total citations (AXC)
0	60	0	100	0
1	24	24	47	47
2	15	30	27	54
3	16	48	21	63
4	09	36	12	48
5	04	20	03	15
6-10	13	88	12	94
11-15	02	26	05	68
>15	0	0	01	16
Total	143	272	228	405

Table 3—Highly cited papers (*ALIS*)

Sl. no.	Name of the authors with their affiliation and title of the paper	No. of citations
1	Natarajan, K.; Suresh, B.; Sivaraman, P.; Sevukan, R., Annamalai University, Tamilnadu & Pudichery University, Puduchery, Use and user perception of electronic resources in Annamalai University: a case study, 57 (1) 2010, 59-64	14
2	Jalal, Samir Kumar; Biswas, Subal Chandra; Mukhopadhyay, Parthasarathi, Birla Institute of Technology, Ranchi, Jharkhand; University of Burdwan, West Bengal, Web impact factor and link analysis of selected Indian universities, 57 (2) 2010, 109-121	12
3	Leydesdorff, Loet, University of Amsterdam, Amsterdam, Eugene Garfield and algorithmic historiography: Co-Words, Co-Authors, and Journal Names, 57 (3) 2010, 248-260	10

Table 4—Highly cited papers (*DJLIT*)

Sl. no.	Name of the authors with their affiliation and title of the paper	No. of citations
1	Surendra Babu, K., Sarada, B. & Ramaiah C.K., SV University, Tirupati & Dravidian University, Kuppam, Use of Internet Resources in the S.V. University Digital Library, 30 (1), 2010 26-31	16
2	Manoj Kumar & Moorthy, A.L., Defence Scientific Information and Documentation Centre, Metcalfe House, Delhi, Bibliometric Analysis of DESIDOC Journal of Library and Information Technology from 2001-2010, 31 (3) 2011, 203-208	15
3	Koneru, Indira, ICFAI University, 23 Nagarjuna Hills, Hyderabad, ADDIE: Designing Web-enabled Information Literacy Instructional Modules, 30 (3) 2010, 23-34	14
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Table 5—Immediacy Index

Year	<i>ALIS</i>			<i>DJLIT</i>		
	No. of citations	No. of articles	II	No. of citations	No. of articles	II
2010	5	43	0.12	3	47	0.06
2011	0	36	0.00	9	54	0.17
2012	2	27	0.07	9	66	0.14
2013	5	37	0.14	9	61	0.15

Table 6—Impact Factor

Time period	<i>ALIS</i>		<i>DJLIT</i>	
	No. of times cited	No. of articles	No. of times cited	No. of articles
2010-2011 articles cited in 2012	52	79	81	101
IF for 2012	52/79 = 0.66		81/101 = 0.80	
2011-2012 articles cited in 2013	71	63	124	120
IF for 2013	71/63 = 1.13		124/120 = 1.04	

- *DJLIT* received more citations than *ALIS*. However, citation per paper for both the journals is almost equal.
- *DJLIT* published more papers than *ALIS* that were cited more than 10 times.
- *DJLIT* have a better immediacy index than *ALIS*. Impact factor of both the journals was less than one in 2012, but it increased in 2013 and was more than one in 2013.

Conclusion

Annals of Library and Information Studies and *DESIDOC Journal of Library and Information Technology* are the two leading LIS journals from India. A comparison of the two journals in terms of citations and calculated impact factor reveal that both the journals are more or less on equal footing. It is a matter of concern that Indian LIS journals have not been able to make an international mark and it is

about time that the leading Indian LIS journals make efforts to attain international stature.

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