

*Full Length Research*

# Citations and Self Citations of Indian Authors in Library and Information Science: A Study Based on Indian Citation Index

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Indian Citation Index database is a powerful tool to search, track, measure and collaborate in the sciences, social sciences, arts, and humanities. This paper is discussed the published research articles ,citations and self-citations in the library and information science journals which are available in Indian Citation Index. This study is based on the available sources from the Indian Citation Index database as on 20<sup>th</sup> May 2014. There are 15 journals listed in the Indian Citation Index, 444 (15.95%) article from SRELS Journal of Information Management and 303(10.88%) articles from Annals of Library and Information Studies published.

**Keywords:** Indian Citation Index; Strength of Articles; Citation Analysis; self Citations

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## INTRODUCTION

Citation Index is a tool for measuring the quantity and quality of publications published journals either printed or online. Likewise, there are many tools available to measure the publications quality and quantity. Impact factor is one tool for measuring the quality of publications. Impact factor has been measured flickering the average number of citations and the articles published in the journal. Citation is a quotation or citing contents from or reference to a book, paper, or author, especially in a scholarly work. For citing the journal articles, books, reports, etc are indexed and published as citation journals or citation database. Many countries are brought out their country citation index. In this direction, India is also brought out a citation index national level called

Indian Citation Index. This citation index was initiated by M/s Diva Enterprises Pvt. Ltd. This study is made an attempt to analysis the contribution of Indian Authors in the Indian Citation Index online database in the field of Library and Information Science during 2009-2013. Further it is to find out the journals which more cited and self cited.

## INDIAN CITATION INDEX (ICI)

Indian Citation Index (ICI) is an abstracts and indexing database for multidisciplinary objective information/knowledge contents from more than 1000 top

Indian scholarly journals. It has well defined policy for searching, evaluating and finding the citations of articles. It is useful for evaluating Indian authors for their subject expertise for identifying more citations. Since, it is the multidisciplinary nature, and very good search tool for the users need. Indian Citation Index (ICI) database is an abstracts and citation database. It has general literature search and evaluation using citations similar to international databases. It is regularly updated data for current and full-fledged online database. The research scholars are mostly used these data for citing their work with the previous work and give citation and references. It is known to others and the previous work and made this as archives for the future utilization and that is in the digital form. Indian Citation Index (ICI) made links by listing both cited and citing works. Like other indexes, ICI is also enables one to move back in time to previously published papers. But uniquely one can also look forward in time to determine who has subsequently cited an earlier piece of research.

## REVIEW OF LITERATURE

Nicholas and Ritchie in their books entitled "Literature on Bibliometrics" opined that bibliometrics provided information about the structure of knowledge and how it is communicated? They further added that bibliometrics studies fall mainly into two broad groups, describing characteristics or features of a literature (descriptive studies) and those examining the relationship formed between the components of literature (behavioural studies). More recently (Nicholas and Ritchie, 1978). Plotter had defined bibliometrics as "the study and measurement of the publication patterns of all forms of written communication and their authorship". Some of the recent study on bibliometric study has been reviewed (Potter, 1981). Mooghali et al using bibliographic records from the Social Science Citation Index, Science Citation Index, and Arts & Humanities Citation Index, tried to give a complete view of the evolution of the field of Scientometrics based on its literature published during 1980 to 2009. This is a descriptive survey using scientometric indicators (Mooghali et al, 2011).

Karpagam et al. analysed the growth pattern of Nanoscience and Nanotechnology literature in India during 1990-2009 (20 years). The Scopus international multi-disciplinary bibliographical database has been used to identify the Indian contributions on the field of Nano science and nanotechnology (Karpagam et al, 2011). Abramo made the study on the development of bibliometric techniques to suggest their integration or total substitution for classic peer review in the national research assessment exercises, as far as the hard sciences are concerned. They compare rankings lists of universities captured by the first Italian evaluation

exercise, through peer review, with the results of bibliometric simulations. The comparison shows the great differences between peer review and bibliometric rankings for excellence and productivity (Abramo, 2011). Lapon-Kandelshein and Prebor presented the state of bibliographical research in the discipline of Hebrew printing during a 30-year period, ranging from the latter quarter of the twentieth century until the beginning of the third millennium (1976-2006) (Lapon-Kandelshein and Prebor, 2011).

Krampen, Eye and Schui studied bibliometric data on psychology publications from 1977 through 2008 are modelled and forecasted for the 10 years following 2008 (Krampen et al., 2011). Kumar Suchetan and et. al. Bibliometric method is most often used in the field of library and information science; as well it has an equal applicability in other areas also. In fact, in many research fields use of bibliometric methods is carried out to explore the impact of their field, the impact of a set of researchers, or the impact of a particular paper etc. Bibliometrics are now used in quantitative research assessment exercises of academic output (Kumar, 2012).

## SCOPE OF THE STUDY

The main aim of the study is to analysis the productivity and citations of Library and Information Journals from Indian Citation Index articles for the period of 2009 to 2013.

## OBJECTIVES OF THE STUDY

Based on the sources the framed the following objectives:

1. To find out the publishers wise LIS journals in Indian Citation Index
2. To identify the LIS Journals Available for the year 2009-2013
3. To assess the strength of articles LIS Journals
4. To analyses the year wise citation and Self Citations

## METHODOLOGY

Library and information science journals are gradually increasing day by day. Basically the Citation analysis is one of the most widely used tools for measuring expertise in the field of study by way of calculating the impact factor, number of citations, etc. It is a control as well as measuring tools for country wise or subject wise. This study is aimed to discuss the analysis of the citation index in the field of Library and Information Journals



Figure 1. Home Page of Indian Citation index

Table 1. LIS Journals in Indian Citation Index

Sl. No	Name of Journals	Publishers	Year	Online/Print
1	Annals of Library And Information Studies	NISCAIR	1954	O/p
2	Arya Bhatta Journal of Mathematics and Informatics	Aryans Research and Educational Trust	2009	p
3	Collnet Journal of Scientometrics And Information Management	Taru Publications	2007	p
4	DESIDOC Bulletin of Information Technology	Defence Scientific Information and Documentation Centre	1980	p
5	DESIDOC Journal of Library & Information Technology	Indianjournals.com	2008	O/P
6	Electronics Information & Planning	Dept. of Information Technology, Ministry of Communications and IT Electronics	1973	P
7	Indian Journal of Information, Library & Society	Bharati Publications	1988	P
8	Information Studies	Indianjournals.com	1995	P
9	International Journal of Information and Computing Science	Dr. Dilip Kr. Chakraborty	1998	P
10	International Journal of Information Processing	I K International Pub. House Private Ltd.	2007	P
11	Journal of Digital Information Management	Digital Information Research Foundation	2003	P
12	Journal of Library and Information Science	University of Delhi, Department of Library and Information Science	1976	P
13	Journal of Library And Information Technology	Dr. C K Sharma	2005	P
14	PEARL: Journal of Library & Information Science	Indianjournals.com	2007	P
15	SRELS Journal of Information Management	Indianjournals.com	2000	P

articles and its citation. Further, it examines the patterns, graphs of citations in articles. The relevant sources and data are collected from Indian Citation Index on 20<sup>th</sup> May 2014. Based on the available sources the following discussions made for the period of 2009 to 2013. Figure 1

## ANALYSIS AND INTERPRETATION

The distributions of the Library and Information Science journals publishers wise and the year of establishment in Indian Citation Index and shown in the Table 1.

As per the Table 1, number of library and information

**Table 2.** Distribution of Complete LIS Journals in ICI with Publications

Sl.No.	Name of the Journals	Articles	Citations	Self Citations	Un cited
1.	Annals of Library And Information Studies	303(10.88)	375(40.11)	115(39.52)	52.15%
2.	Arya bhatta Journal of Mathematics and Informatics	188(6.75)	49(5.24)	47(16.15)	81.38%
3.	Collnet Journal of Scientometrics And Information Management	119(4.27)	25(2.67)	16(5.50)	84.87%
4.	DESIDOC Bulletin of Information Technology	70(2.51)	76(8.13)	1(0.34)	45.71%
5.	DESIDOC Journal of Library & Information Technology	309(11.10)	85(9.09)	18(6.19)	84.47%
6.	Electronics Information & Planning	23(0.83)	0	0	100%
7.	Indian Journal of Information, Library & Society	232(8.33)	19(2.03)	8(2.75)	94.4%
8.	Information studies	137(4.92)	55(5.88)	15(5.15)	74.45%
9.	International Journal of Information and Computing Science	102(3.66)	6(0.64)	3(1.03)	96.08%
10.	International Journal of Information Processing	214(7.69)	5(0.53)	3(1.03)	98.13%
11.	Journal of Digital Information Management	204(7.33)	10(1.07)	8(2.75)	95.59%
12.	Journal of Library and Information Science	113(4.06)	23(2.46)	6(2.06)	85.84%
13.	Journal of Library and Information Technology	84(3.02)	1(0.11)	0	98.81%
14.	PEARL: Journal of Library & Information Science	242(8.69)	28(2.99)	6(2.06)	90.91%
15.	SRELS Journal of Information Management	444(15.95)	178(19.04)	45(15.46)	76.13%
	Total	2784(100)	935(100)	291(100)	-

science journals are 15. Among the 15 journals, the Annals of Library and Information Studies started in the year 1954 by the NISCAIR (the then INSDOC) in New Delhi. DESIDOC Bulletin of Information Technology started in the year 1980 but it was renamed as DESIDOC Journal of Library & Information Technology from the year 2008. But all the journals are available in the printed format and only two journals are also published in online.

The data presented in the Table 2 shows the complete lists of library and information science journals which are available in the Indian Citation index along with their total number of articles, citations and self citations. Among the 15 journals, 2784 articles were published by 15 library and information science journals as on 20.5.2014. Out of 15 journals, 303(10.88%) articles from Annals of Library and Information Studies and 444 (15.95%) article from SRELS Journal of Information Management were published. Some journals like Journal of Library and Information Technology, Electronics Information & Planning were indexed below 100 articles as per the Indian Citation Index.

### Library and Information Science Journals in ICI

The authors have been selected data from relevant sources from Indian Citation Index on 20<sup>th</sup> May 2014 and the following discussions made for the period of 2009 to 2013. Remaining year's publications (Before 2009) will not be considered for this study.

The data presented in the Table 3 indicates number of articles published from library and information science

journals in Indian Citation Index. As per the Indian Citation Index 15 journals are available but some journals data were not available updated. So, in these circumstances only 13 journals were taken for this study for the period of 2009 to 2013. There are 1711 articles published from 13 library and information Science journals. Among the 13, SRELS Journal of Information Management occupies first position with 262 (15.31%) articles and DESIDOC Journal of Library & Information Technology occupies second rank with 261(15.25%) articles. The Arya bhatta Journal of Mathematics and Informatics is in third 188(10.99%) articles and Pearl: Journal of Library & Information Science is in fourth rank with 181(10.58%) articles from library and Information Science journals. It is pointed out that the frequency of the journals is varying and that is one of the reasons for the strength of articles. Further, in the year 2011, 389(22.74%) articles were published and it is highest when comparing other years.

The Table 4 shows the citations of the library and information science journals in Indian Citation Index for the years from 2009 to 2013. Among the 13 journals, 356 citations were available. Out of 356, Annals of Library and Information Studies occupy the first position with 119(33.43%) citations and DESIDOC Journal of Library & Information Technology is the second position with 64 (17.98%) citations for the 2009 to 2013. It is pointed out that among the 13 journals only two journals are having more than 50 citations for during the period but there is no single citation from Journal of Library and Information Technology.

The Table 5 represented the self citations of the library

**Table 3.** Distribution of LIS Journals in ICI from 2009-2013 Vs Articles

Sl.No.	Name of Journals	2009	2010	2011	2012	2013	Total	Rank
1	Annals of Library And Information Studies	34(1.99)	42(2.45)	36(2.10)	27(1.58)	34(1.99)	173(10.11)	5
2	DESIDOC Journal of Library & Information Technology	42(2.45)	43(2.51)	54(3.16)	64(3.74)	58(3.59)	261(15.25)	2
3	Indian Journal of Information, Library & Society	25(1.46)	22(1.29)	25(1.46)	21(1.23)	27(1.58)	120(7.01)	6
4	International Library Movement	15(0.88)	19(1.11)	19(1.11)	22(1.29)	11(0.64)	86(5.03)	9
5	Journal of Library and Information Technology	11(0.64)	7(0.41)	11(0.64)	10(0.58)	16(0.94)	55(3.21)	12
6	Library Herald	22(1.29)	16(0.94)	24(1.40)	13(0.76)	8(0.47)	83(4.85)	10
7	Library Progress (international)	22(1.29)	24(1.400)	32(1.87)	9(0.53)	17(0.99)	104(6.08)	7
8	Pearl: Journal Of Library & Information Science	47(2.75)	44(2.57)	43(2.51)	29(1.69)	18(1.05)	181(10.58)	4
9	Collnet Journal of Scientometrics And Information Management	15(0.88)	15(0.88)	16(0.94)	23(1.34)	20(1.17)	89(5.20)	8
10	Information studies	14(0.82)	16(0.94)	15(0.88)	15(0.88)	9(0.53)	69(4.03)	11
11	International Journal of Information and Computing Science	5(0.29)	10(0.58)	8(0.47)	10(0.58)	7(0.41)	40(2.34)	13
12	SRELS Journal of Information Management	43(2.51)	58(3.39)	59(3.45)	64(3.74)	38(2.22)	262(15.31)	1
13	Arya bhatta Journal of Mathematics and Informatics	8(0.47)	45(2.63)	47(2.75)	44(2.57)	44(2.57)	188(10.99)	3
<b>Total</b>		<b>303 (17.71)</b>	<b>361 (21.10)</b>	<b>389 (22.74)</b>	<b>351 (20.51)</b>	<b>307 (17.94)</b>	<b>1711 (100)</b>	

**Table 4.** Distribution of LIS Journals based on Citations from 2009-2013

Sl.No.	Name of Journals	2009	2010	2011	2012	2013	Total	Rank
1	Annals of Library And Information Studies	61(17.13)	37(10.39)	14(3.93)	6(1.68)	1(0.28)	119(33.43)	1
2	DESIDOC Journal of Library & Information Technology	22(6.18)	27(7.58)	15(4.21)	0	0	64(17.98)	2
3	Indian Journal of Information, Library & Society	1(0.28)	1(0.28)	1(0.28)	0	0	3(0.84)	9
4	International Library Movement	1(0.28)	0	0	0	0	1(0.28)	11
5	Journal of Library and Information Technology	0	0	0	0	0	0	-
6	Library Herald	3(0.84)	7(1.96)	3(0.84)	0	0	13(3.65)	6
7	Library Progress (international)	4(1.12)	0	1(0.28)	1(0.28)	0	6(1.69)	8
8	Pearl: Journal Of Library & Information Science	4(1.12)	7(1.96)	2(0.56)	0	0	13(3.65)	6
9	Collnet Journal of Scientometrics And Information Management	2(0.56)	2(0.56)	3(0.84)	1(0.28)	0	8(2.25)	7
10	Information studies	12(3.37)	10(2.80)	5(1.40)	1(0.28)	0	28(7.87)	5

**Continuation of Table 4**

11	International Journal of Information and Computing Science	1(0.28)	1(0.28)	0	0	0	2(0.56)	10
12	SRELS Journal of Information Management	21(5.90)	12(3.37)	10(2.80)	6(1.68)	1(0.28)	50(14.04)	3
13	Arya bhatta Journal of Mathematics and Informatics	2(0.56)	19(5.33)	16(4.49)	8(2.24)	4(1.12)	49(13.76)	4
	<b>Total</b>	<b>134(37.52)</b>	<b>123(34.55)</b>	<b>70(19.66)</b>	<b>23(6.46)</b>	<b>6(1.68)</b>	<b>356(100)</b>	<b>--</b>

**Table 5.** Distribution of LIS Journals based on Self Citations from 2009-2013

Sl.No.	Name of Journals	2009	2010	2011	2012	2013	Total	Rank
1	Annals of Library And Information Studies	19	8(6.35)	2(1.59)	1(0.79)	0	30(23.81)	2
2	DESIDOC Journal of Library & Information Technology	4(3.17)	6(4.76)	4(3.17)	0	0	14(11.11)	3
3	Indian Journal of Information, Library & Society	1(0.79)	1(0.79)	1(0.79)	0	0	3(2.38)	5
4	International Library Movement	0	0	0	0	0	0	--
5	Journal of Library and Information Technology	0	0	0	0	0	0	--
6	Library Herald	1(0.79)	2(1.59)	0	0	0	3(2.38)	5
7	Library Progress (international)	1(0.79)	0	1(0.79)	1(0.79)	0	3(2.38)	5
8	Pearl: Journal Of Library & Information Science	2(1.59)	1(0.79)	0	0	0	3(2.38)	5
9	Collnet Journal of Scientometrics And Information Management	2(1.59)	0	0	0	0	2(1.59)	6
10	Information studies	0	3(2.38)	2(1.59)	1(0.79)	0	6(4.76)	4
11	International Journal of Information and Computing Science	1(0.79)	0	0	0	0	1(0.79)	1
12	SRELS Journal of Information Management	8(6.35)	3(2.38)	2(1.59)	1(0.79)	0	14(11.11)	3
13	Arya bhatta Journal of Mathematics and Informatics	1(0.79)	19(15.08)	15(11.90)	8(6.35)	4(3.17)	47(37.30)	1
	<b>Total</b>	<b>40(31.75)</b>	<b>43(34.13)</b>	<b>27(21.43)</b>	<b>12(9.52)</b>	<b>4(3.17)</b>	<b>126(100)</b>	<b>--</b>

and information science journals which are available in Indian Citation Index from the year 2009 to 2013. Among the 13 number of Library and information Science journals 126 citations were identified for the period of 2009 to 2013. Out of 126, the Arya bhatta Journal of Mathematics and Informatics journal occupy the first position with 47(37.30%) self citations and Annals of Library and Information Studies is in the second position and 30(23.81%) self citations. Further SRELS Journal of Information Management is in third position 14(11.11%) self citations and Information studies occupy the fourth position with 6(4.76%) self citations. It is concluded that the two journals like International Library Movement and Journal of Library and Information Technology has no self

citations to the period of 2009 to 2013.

The Table 6 indicates Journals Citations index of the library and information science journals which are indexed in Indian Citation Index for the period of 2009 to 2013. Among the 13 number of journals only seven journals has journals citation index. Among the 7, Information has 0.333 JCI and it is the highest when comparing other library and information journals in India.

**CONCLUSION**

There are more than 175 journals available in Library and Information Science, in India, but only 15 journals are

**Table 6.** LIS Journals Vs Journals Citations Index (JCI)

Sl.No.	Name of Journals	2009	2010	2011	2012	2013	Total
1	Annals of Library And Information Studies	0.071	0.056	0	0.029	0	0.156
2	DESIDOC Journal of Library & Information Technology	0	0	0.019	0	0	0.019
3	Library Progress (International)	0	0	0.031	0	0	0.031
4	PEARL: Journal of Library & Information Science	0.021	0	0	0	0	0.021
5	Information Studies	0.071	0.062	0.133	0.067	0	0.333
6	SRELS Journal of Information Management	0	0	0	0.047	0.026	0.073
7	Arya Bhatta Journal of Mathematics and Informatics	0	0	0.064	0.091	0.091	0.246
<b>Total</b>		<b>0.163</b>	<b>0.118</b>	<b>0.247</b>	<b>0.234</b>	<b>0.117</b>	<b>0.879</b>

indexed in Indian Citation Index. It shows that Citation index has to add more journals in it and also other subjects the same way. India should make rules for providing data to national level citation indexing journals for citation purpose. The quality of research and quantity of research is made available through indexing journals with citations of various articles. There is lacking, for providing citations to other articles which authors cite. For reviewing the previous articles are very much important for supporting your article value added point for publishing. There are chance to read others view on the subject for getting more clarity and vision in the research in more deeply. It helps more extensive improve the research activity in a better way. From this study, it shows that very few journals are citing and cited properly and indexed with NCI. The self citation is comparing with normal citation, it is very less, self citation is shown the more exposure in the subject by author. It is a good practice to give self citation for their previous works and it is follow up of the previous one and improved one.

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