

A bibliometric study on annals of library & information science during 2014-2016

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Abstract

This paper explain that bibliometrics studies on Annals Of Library & Information Science (2014 -2016) of library and information science three volumes (Vol. 61 to 63) containing three issues and one hundred and five articles were considered for the analysis.

Keywords: bibliometrics, ALIS, library & information science, citation analysis, prolific author

Introduction

The Bibliometrics is a quantitative study of patens of written communication of various books, journals & various printed and non-material. Bibliometrics are use for different scientific product & communication, it is called Scientometrics. Bibliometrics term was coin by Derek de solla price in 16th century, Eugene Garfield and Maurice Goldsmith also use the Bibliometrics term in various scientific production. The main source of factual data for this analysis is the science citation index & social science citation index.

Objective of the Present study

- To know year-wise dissemination of papers.
- To study the initiation example of papers.
- To examine the most productive commitments of papers.
- To examine subject-wise appropriation of the papers.
- To study initiate insightful dispersion of papers.
- To know the (land) state insightful dispersion of papers.

Hypothesis

These targets set clear objectives to present review. There are still possibilities that the review may stray from the goals as it advances. Thus, it is important to have a speculation which goes through the destinations. The present review depends on taking after speculations

- The Library and Data Science Specialist utilize an ever increasing number of electronic journals.
- An Exploration slants in Library and information Science is Evolving hugely.
- The domain name structures of web sites of Open access to electronic journals.
- Number of Site pages, Number of connection pages, the visibility, Website Rank.

Methodology

The methodology will be applicable in this study is Bibliometrics. The methodology applicable in the current study is bibliometric scrutiny, which is used to analyses in detail the bibliographic attributes of the articles published in the Annals of Library and Information Studies journal from

2014-2016. Three volumes (Vol. 61 to 63) containing twelve issues and one hundred and five articles were considered for the analysis. The information like authors, citations, length of the paper, states, institutions etc. are extracted from Indian Citation Index in MS Excel spreadsheet and further, manual coding was done.

Scope and Limitation of the study

This study gives a coordinated picture of research patterns in the field of Library and information Science by providing Bibliometrics study. The Present research is Limited only for open Access Electronic Journals Published in the field of Library and Information Science.

Following few limitations of the study are given below: a) Results are only valid to extent that citations are assumed to represent significant link between citing and cited documents in electronic environment. b) Technical issues identified with data obtained from citation indexes and bibliographies.

Literature Review

Mary K Sellen (1990) Selective and based upon the Library of Congress classification system, entries cover the universe of Bibliometric research from 1970 to 1990. Entries are organized according to the disciplines in the sciences, technologies, social sciences, and humanities.

Borgman (1990) once noted that Bibliometric studies can be classed according to which element of the scholarly communication system they studied (that is, the units of analysis under consideration)

Objective of the study

The main objectives of the study are:

- To examine the year-wise distribution of papers;
- To examine the authorship pattern of the contributions;
- To examine the most prolific authors
- To examine the volume-wise distribution of contributions and to find the average number of citations per volumes;
- To examine the average length of articles and average number of citations per contribution in the journal;
- To examine the types and number of publications cited in

the contributions of the journal and
 g) To know the institutions wise distribution of the contributions and geographical distribution of the

publications

Analysis and Interpretation

Table 1: Year Wise Distribution of Articles

Year	Volumn No	Issues	No of Contribution	% Of 105	No of Citation	Average citation per article	H-Index
2014	61	4	35	33.33	111	72.54	Result found:105 total Times cited: 153 Average citation: 1.45 H-index:3
2015	62	4	38	36.19	35	22.87	
2016	63	4	32	30.48	7	4.57	
Total	3	12	105	100.00	153	1.45	

The table 1 presents the year wise distribution of articles with citations. A total of 105 documents were produced by the journal from 2014-2016 with highest publication in the year 2015 (38 articles) and lowest in the year 2016 (32 articles). An average of 35 articles was published per year. Citations are considered as indicators of quality of articles. A total of 153

citations were recorded. Average citations rate per article was 1.45 and h index of 3. The articles published in 2014 enjoy highest rate of citation per document with 72.54 per article and lowest (1.45) was observed to the articles published in 2015. This finding is consistent in other study as the articles need sufficient time to accumulate citations.

Table 2: Issue Wise Distribution of Articles

Issue	61	62	63	Total	% of 105
March	9	6	10	26	23.81
June	10	7	8	23	21.90
September	11	9	8	28	26.68
December	7	16	6	29	27.61
Total	35	38	32	105	100

The table 2 reveals distribution of articles (Issue-wise). The highest no. of articles was published in the September and December issues, which accounts for the 26.68 % and 27.61% of total articles, respectively. The lowest articles were published in the March and June issues with 23.81% and 21.90% of the total articles, respectively. The reason for this

may be that journal might receive more submission in the month of September and December. The many researchers usually might not get sufficient time during January to March, as this is financial year ending time and one needs to settle the all the research project accounts. An average of 8.75 articles was published in each issue in ALIS.

Table 3: Authorship Pattern

Authorship	2014	2015	2016	Total	% of 105	Total Authors
One Author	13	18	8	39	37.14	39
Join Author	19	14	18	51	48.58	102
Three Author	2	4	3	9	8.58	27
Four Author	1	1	2	4	3.58	16
Five Author		1	1	2	1.90	10
Total	35	38	32	105	100	194

Table 3 provides details about authorship pattern in articles published in the Annals of Library and Information Studies during 2014-2016. A total 105 articles were contributed by 194 authors to the journal with average of 1.84 authors per article. The majority of the articles were contributed by join

authors (48.58 %) followed by single author (37.14 %) and remaining 8.58% of the articles were written by three authors. 3.58% of the articles are contributed by four authors and 1.90% of the articles are written by five authors during 2014-2016 in ALIS.

Table 4: Year Wise Authorship Pattern

Authorship	2014	2015	2016	Total	% Of 105
Single	13	18	8	39	37.14
Multiple	22	20	24	66	62.86
Total	35	38	32	105	100

Table 4 shown by the year wise authorship pattern was analyzed to determine the percentage of single and multiple authorship. The above table shows that out of 105 articles single author contributed 39 (37.14%) articles, while the rest

66(62.86%) articles were contributed by joint authors. maximum number of articles published by joint authors in the journal of Annals of Library and Information Science studies.

Table 5: Year wise references citations

Year wise cited reference	2014	2015	2016	Total	% of 105
0	1	-	2	3	2.85
1-10	7	8	10	25	23.80
11-20	12	18	10	40	38.09
21-30	7	9	5	21	20.00
31-40	5	2	4	11	10.48
41-50	2	1	1	4	3.80
Above 51	1	-	-	1	0.95
Total	35	38	32	105	100

Table 5 gives details of the number of references cited by the authors in their papers. For the 105 articles, 3 articles have not given by references. A total of 25 articles (23.80%) have 1-10 references. 40 articles (38.09) with 11-20 references, 21 articles (20.00%) with 21-30 references, 11 articles (10.48%) with 31-40 references and 4 articles (3.80%) with

41-50 references and 1 article (0.95%) with more than 51 references. (vol. 61 issue no 4 one article having 124 references, author: Mohammad Hanif Bhat and Sheikh Mohammad Shafi). Majority of the articles were prepared by referring or consulting 1-20 references

Table 6: Cited Reference Distributions Pattern

Year	Volume	No of Articles	Total Reference (%)	Average reference per Article
2014	61	35	803 (39.62%)	22.94
2015	62	38	652 (32.17%)	17.15
2016	63	32	572 (28.21%)	17.87
Total	3	105	2027 (100%)	19.30

Table .6 shown by the year wise reference distribution pattern. The highest reference are found in 2014 with 803 references. In 2015 with 652 references and in 2016 with 572 references.

The highest average references were found in the articles published in 2014 in the journal of Annals of Library & Information Science during 2014- 2016.

Table 7: Length of Articles

Pages	2014	2015	2016	Total	% in 105
1-5	5	12	4	21	20.00
6-10	22	20	20	62	59.04
11-15	7	6	7	20	19.04
16-20	-	-	-	-	-
21-25	-	-	-	-	-
Above 26	1	-	1	2	2.00
Total	35	38	32	105	100

An analysis of pagination pattern of papers is addressed in Table 7. The majority of articles 62(59.04%) have page length between 6-10 pages followed by 21 (20.00%) articles with page length of 1-5 pages, 20 (19.04%) articles with 11-15

pages and remaining 2 (2.00%) articles have the length of above 26 pages in the journal of Annals of Library and Information Studies during 2014-2016

Table 8: Prolific Authors

Author Name	Single Author	Two Author	Three Author	More Than Three Author	Total Contribution (% of 105)	Ranking
Sen B.K	4	5			9 (8.58%)	1
Garg K.C		4	1		5 (4.76%)	2
Tripathi Harish Kumar		3	1		4 (3.80%)	3
Pujar Shamprashad M	1	3			4 (3.80%)	3
Dutta Bidyarthi	1	2			3 (2.85%)	4
Dutta Bhairavi		3			3 (2.85%)	4
Nikam Khaiser		3			3 (2.85%)	4
Nishy P.		1	1	1	3 (2.85%)	4
Panigrahi Pijushkanti	1	2			3 (2.85%)	4
Ray Partha Pratim	1	1			2 (1.90%)	5

Table 8 reveals that among the 194 authors ‘Sen B K’ published 9 articles which accounts for 8.58% of the total

article and placed 1st rank among the all authors who contributed their research findings to ALIS followed by ‘Garg

K.C' published 5 articles (4.76%) and takes 2nd rank, 'Tripathi Harish Kumar' and 'Pujar Shamprashad M' placed in 3rd rank with 04 articles, ' Dutta Bidyarthi', 'Dutta Bhairavi', 'Nikam

Khaiser', 'Nishy P.', 'Panigrahi Pijushkanti' contributed 3 articles and they secured 4th rank respectively and Ray Partha Pratim had published 2 articles (1.90%) and placed 5th rank

Table 9: Institution Wise Distribution of Contributions (Top 10)

S. No	Institution	No of Record	% of 51	% of 105
1	National Institute of Science, Technology and Development Studies(NISTDS)	11	21.57	10.47
2	Indian National Science Academy(INSAs)	9	17.65	8.57
3	University of Calcutta,(UC)	4	7.8	3.80
4	Vidyasagar University (VC)	4	7.8	3.80
5	University of Colombo (UC)	4	7.8	3.80
6	University of Mysore (UM)	4	7.8	3.80
7	Jawaharlal Nehru University (JNU)	4	7.8	3.80
8	Indira Gandhi Institute of Development Research (IGIDR)	4	7.8	3.80
9	Indian Council of Agriculture & Research (AGRIS)	4	7.8	3.80
10	Jadavpur University (JU)	3	5.9	2.85
Total		51	100	48.49

Table 9 depicts the institution wise distribution of articles. Out of 105 contributions overwhelming majority with the highest numbers, i.e. 11 (10.47%) articles have been contributed by National Institute of Sciences, Technology and Development Studies, followed by Indian National Science Academy 9 articles(8.57%), University of Calcutta, Vidyasagar

University, University of Colombo, University of Mysore, Jawaharlal Nehru University, Indira Gandhi Institute of Development Research, Indian Council of Agriculture & Research 4 articles (3.80%), and Jadavpur University 3 articles (2.85%).

Table 10: City Wise Distribution of Contributions (Top 10)

S. No	City	Record count	% of 77	% of 105
1	New Delhi	34	44.15	32.38
2	Kolkata	10	12.98	9.52
3	Mumbai	8	10.39	7.61
4	Colombo	5	6.50	4.76
5	Thiruvananthapuram	4	5.20	3.80
6	Midnapore	4	5.20	3.80
7	Mysore	4	5.20	3.80
8	Dhaka	3	3.89	2.85
9	Sri Nagar	3	3.89	2.85
10	Hyderabad	2	2.60	1.90
Total		77	100	73.27

City wise analysis of contributions to ALIS is presented in the table 10. New Delhi is major contributor to the journal with 34 articles, which accounts for 32.38% of the articles, followed by Kolkata 10 articles (9.52%), Mumbai 8 articles (7.61%), Colombo (4.76%), Mysore, Thiruvananthapuram, Midnapore

4 articles (3.80%), Dhaka and Sri Nagar 3 articles (2.85%) and Hyderabad 2 articles (1.90%) respectively. Out of ten cities, eight are from India and two are from other than India. These ten cities have contributed 73.27% of the total articles published in ALIS in 2014-2016.

Table 11: State Wise Distribution of Contributions (Top 10)

S. No	State	Record Count	% of 92	% of 105
1	Delhi	33	35.87	31.42
2	West Bengal	19	20.65	18.09
3	Maharashtra	9	9.79	8.57
4	Karnataka	6	6.52	5.71
5	Kerala	6	6.52	5.71
6	Sri Jayewardenepura Kotte	5	5.43	4.76
7	Andhra Pradesh	4	4.34	3.30
8	Punjab	4	4.34	3.80
9	Jammu & Kashmir	3	3.27	2.85
10	Rajasthan	3	3.27	2.85
Total		92	100.00	87.57

Analysis of articles by state wise is applied by the many authors. The top ten states that had maximum contributions to the ALIS are presented in the table 11. The Delhi is the most contributed state with 33 articles (31.42%), followed by West Bengal with 19 (18.09%) articles found second place, Maharashtra with 9 (8.57%) articles, Karnataka and Kerala had contributed 6 (5.71%) articles respectively. Sri

Jayewardeneपुरa Kotte with 5 articles (4.76%). Andhra Pradesh and Punjab had contributed 4 articles (3.30%). Jammu & Kashmir and Rajasthan contributed 3 (2.85%) articles respectively. Out of ten cities, nine are from India and one are from other than India. These ten cities have contributed 87.57% of the total articles published in ALIS in 2014-2016.

Table 12: Country Wise Distribution of Contributions

S. No	Country	Record Count	% of 105
1	India	81	77.14
2	Sri Lanka	7	6.67
3	Nigeria	6	5.71
4	Bangladesh	3	2.86
5	United State of America (U.S.A)	2	1.90
6	Canada	2	1.90
7	Iran	2	1.90
8	Brazil	1	0.96
9	Tanzania	1	0.96
Total		105	100

Country wise distribution of articles is also reported in the many bibliometric research work on particular journal. The country wise contributions are provided in the table 12. Total 105 articles were contributed by 9 countries during 2014-2016. 81 (77.14%) articles were contributed by the India alone. The second major contributing country to ALIS is Sri Lanka with 7 (6.67%) articles and Nigeria with 6 (5.71%) articles placed in 3rd place. Bangladesh with 3 (2.86%) articles. U.S.A, Canada, Iran had contributed 2(1.90%) articles respectively. African country Brazil and Tanzania with 1(0.96%) articles

respectively.

The top ten most cited articles with their details are presented in the table 13. Out of ten articles, nine articles published in 2014, one in 2015 respectively. The articles citations ranged between 4 to 11 citation counts. Six articles were contributed by two authors, three articles by single authors and one article by three author. The article contributed by Shamprasad M Pujar and Sadanand Y Bansode has received maximum citations and has 9 references.

Table 13: Highly Cited Top Ten Paper (Top 10)

Rank No	Title of the paper	Author	Year	Citation	Reference
1	MOOCs and LIS education: A massive opportunity or challenge	Shamprasad M Pujar and Sadanand Y Bansode	2014	11	9
2	Application of Bradford's Law on journal citations: A study of Ph.D. theses in social sciences of University of Delhi	K P Singh and Bebi	2014	8	11
3	Scientometrics of collaboration pattern in solar cell research in India	Bharvi Dutta and Khaiser Nikam	2014	7	35
4	Semantic solutions for the digital libraries based on semantic web technologies	Shriram Pandey and K. C. Panda	2014	7	8
5	A biblianalysis of publications of the Chemistry Department, University of Pune, India, 1999-2012	Shubhada Nagarkar	2014	7	33
6	A study of ICT skills among library professionals in the Kerala University Library System	S T Seena and K G Sudhier Pillai	2014	6	16
7	Open access journals in library and information science: a study	Shamprasad M. Pujar	2014	6	9
8	Internet of Things and libraries	Shamprasad M Pujar and K V Satyanarayana	2015	6	21
9	Awareness and use of social media applications among library staff of power sector organizations	Rakesh Kumar Gupta, J N Gautam and V P Khare	2014	5	50
10	Trends in acquisition and usage of electronic resources at Indian Institutes of Technology libraries	Daulat Jotwani	2015	4	22

Findings of the study

1. Maximum No. of Article are contributed in the year of 2015.
2. In the year of 2014 published highest no of references that is 803
3. The highest number of citations are published in 2014 that is 111.
4. The highest proportion of articles were by two authors
5. The majority of articles 62(59.04%) have page length between 6-10 pages

6. B.K Sen published 9 articles which accounts for 8.58% of the total article and placed 1st rank among the all authors.
7. The institution who published highest number of articles out of 105 contributions, i.e. National Institute of Sciences, Technology and Development Studies,(NISTDS) contributed by 11 (10.47%) articles.
8. New Delhi is major contributor to the journal of ALIS with 34 articles, which accounts for 32.38% of the articles,
9. The Delhi is the most contributed state with 33 articles (31.42%).
10. Total 105 articles were contributed by 9 countries during 2014-2016.81 (77.14%) articles were contributed by the India alone.
11. The article contributed by Shamprasad M Pujar and Sadanand Y Bansode has received maximum citations that is 11 and has 9 references.

Conclusion

Annals of Library and Information Studies earlier published as Annals of Library and Documentation that brought out its maiden issue in the year 1952, is identified as one of the best referred journals in the field of Library and information Science in India with a publishing history of 65 years.

We analysed bibliometrics characteristics of 105 articles published in the ALIS in 2014-2016. Trend shows the some fluctuation from 2014-2016 and 153 citations were recorded for the articles with an average of 1.45 per article. The articles published in 2014 enjoy highest rate of citation per document with 72.54 per article and lowest 4.57 was observed to the articles published in 2016. A total of 194 authors were contributed with an average of 1.84 authors per article. Majority of the articles were contributed by the joint authors.. Most of the articles prepared by consulting 11-20 references and majority of the articles page length are between 6-10 pages. 'Sen B K' has emerged as most prolific author with 9 articles which accounts for 8.58% of the total article and placed 1st rank among the all authors. National Institute of Science, Technology and Development Studies (NISTDS) is the most contributing organization and Delhi is the most contributing State of India with 33 contributions. Nigeria, USA, Canada, Bangladesh, Sri Lanka, Pakistan, Brazil and Tanzania also contributed to the journal during the period.

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