

Bibliometric Analysis of Indian Journal of Library and Information Science

S. Rajeswari*, K. Praveena*

Abstract

Bibliometric analysis of 194 articles published in the Indian Journal of Library and Information Science, Volumes 6 to 10 during the year 2012-2016 has been undertaken for the study. It has been carried out to observe the distribution of contributions, authorship pattern, distribution of contribution, and number of pages used in each volume. Results indicate that the number of contributions is increasing in successive volumes. Highest numbers of papers have been written by joint authors. The growth and popularity of this journal is found to be showing an upward trend.

Keywords: Bibliometric Analysis; IJLIS; authorship pattern.

Introduction

Bibliometrics is a type of research method used in library and Information Science. It is a quantitative study of various aspect of literature on topics and is used to identify the pattern of publication, authorship and secondary journal coverage with the objective of getting an insight into the dynamics of growth of knowledge in the area under consideration.

British librarian a Pritchard first introduced the term bibliometrics as the "application of mathematics and statistical methods to books and other media of communication". A more elaborate definition has been put forward by L. Egghe who defined it as "the development and application of mathematical models and techniques to all aspects of communication".

Source Journal

Indian Journal of Library and Information Science

Author's Affiliation: *Assistant Professors, Department of Library and Information Science, Annamalai University.

Reprint's Request: K. Praveena, Assistant Professors, Department of Library & Inf. Science, Annamalai University, Annamalai Nagar, Tamil Nadu - 608002.
E-mail: praveenakrish07@yahoo.co.in

Received on 19.04.2017, Accepted on 09.05.2017

(IJLIS), has been selected as the source journal for the present study, It is one of the journal in library and information science and started publication in 2007 with three issues in an year.

Objectives

1. To examine the authorship pattern of the contribution.
2. To analyses the volume wise distribution of contributions and to find out the average number of contribution per volume.
3. To observe the number of pages used in different issue of various volume.
4. Dr. Subramanian's formula to analyses the degree of collaboration.
5. To indicate volume wise geographical distribution of contribution.

Scope

An attempt has been made to analyses the contribution in volumes 6- 10. The study period is from 2012 to 2016 i.e the five years of journal issues which are considered for this study.

The contribution of volumes of authorship, number of pages in each issue and volume was noted on cards. All the cards were subsequently examined, observed, analyzed and tabulated for making observations.

Analysis

An indicated in Table 1 the total number of contribution in 18 issue of 5 volumes of the source journal is 194 of which the highest number of contribution are in the volume 8 ; 44(14.10%), followed

by vol.7; 43(13.78%), vol.6; 41(13.14%), vol.10; 35(11.22%) and vol.9; 31(9.94%).

Table 2 presents the distribution on contribution issue wise. It is observed that the number of contributions is increasing in successive issues.

Table 1: Distribution of Contribution (Volume wise)

Year	Volume No	No. of Issues	No. of Contribution	Percentage
2012	6	4	41	21.14
2013	7	4	43	22.16
2014	8	4	44	22.68
2015	9	3	31	15.98
2016	10	3	35	18.04
5 years	5Volumes	18	194	100

Table 2: Distribution of Contribution (Issue wise)

Year	I issue	II issue	III issue	III Supplementary issue	Total
2012	9	11	11	10	41
2013	12	10	18	13	43
2014	11	13	13	7	44
2015	9	9	13	-	31
2016	8	18	9	-	35
	49	61	54	30	194

Table 3: Authorship pattern of Contribution

No. of Authors	No. of Contributions	Percentage
One	67	34.54
Two	95	48.97
Three	27	13.91
Above three	5	2.58
	194	100

Table 4: Authorship pattern of Contribution (Volume wise)

Year	One author	%	Two author	%	Three author	%	Above Three author	%
2012	17	25.37	19	20	5	18.52	-	-
2013	14	20.89	19	20	7	25.92	3	60
2014	19	28.36	19	20	5	18.52	1	20
2015	6	8.96	20	21.05	5	18.52	-	-
2016	11	16.42	18	18.95	5	18.52	1	20
-	67	100	95	100	27	100	5	100

Table 5: Calculation of degree of collaboration

Year	Single author	Multi author	Total	Collaboration
2012	17	24	41	0.585
2013	14	29	43	0.674
2014	19	25	44	0.568
2015	6	25	31	0.806
2016	11	24	35	0.685
-	67	127	194	0.655

Table 3 and 4 reveals that the two authored paper numbering 95(48.97%) tops the list in five years followed by single authored paper 67(34.54%), three authored papers 27(13.91%) and above three authored papers 5(2.58%).

Table 5 Shows the degree of collaboration is the concept of the ratio of the total number of research papers and the total collaborative research papers

during a certain period of time.

The suggested Subramanian's formula is

$$Nm$$

$$C = \frac{Nm}{Nm + Ns}$$

$$Nm + Ns$$

C = Degree of collaboration in a discipline

Nm = Multi authored papers

Ns = Single authored papers

The degree of collaboration = 0.655

A study of data in table 5 indicates the degree of collaboration in the main articles of the India Journal

of Library and Information Science (2012-2016). The degree of collaboration is 0.655 during the study period. i.e. Out of the total number of main articles published, only 65.46% of them are joint publication.

Table 6: Average pages: per volume per contribution

Year	Volume No	Total Pages	No. of Contribution	Average
2012	6	335	41	8.17
2013	7	381	43	8.86
2014	8	389	44	8.84
2015	9	270	31	8.71
2016	10	284	35	8.12
	5 volumes	1659	194	

Table 6 reveals the average pages per volume per contribution.

Average pages per volume = $1659 / 5 = 332$

Average pages per issue = $1659 / 18 = 92$

Average pages per contribution = $1659 / 194 = 8$

Number of pages in each volume is increasing as is the number of contribution. These factors clearly point out that the journal is becoming popular day by day as more and more researchers round the globe are contributing in the journals.

Table 7: Geographical Distribution of Contribution (Volume wise)

S. No.	Name of State	2012	2013	2014	2015	2016	Total	%
1.	Andhra Pradesh	1	-	1	-	1	3	1.55
2.	Delhi	2	2	-	3	2	9	4.64
3.	Haryana	4	5	2	4	2	17	8.76
4.	Karnataka	15	10	12	9	4	50	25.77
5.	Kerala	-	-	-	-	2	2	1.03
6.	Maharashtra	2	6	4	-	2	14	7.22
7.	Madhya Pradesh	1	-	1	-	2	4	2.06
8.	Mizoram	-	1	-	-	-	1	0.51
9.	Odisha	1	-	2	2	2	7	3.61
10.	Pondicherry	1	-	-	-	1	2	1.03
11.	Punjab	-	1	-	-	2	3	1.55
12.	Tamil Nadu	9	9	9	8	7	42	21.65
13.	Uttar Pradesh	-	4	5	3	6	18	9.28
14.	Uttarakhand	-	-	1	-	-	1	0.51
15.	West Bengal	3	4	4	1	2	14	7.22
16.	Other Countries	2	1	3	1	-	7	3.61
	Total	41	43	44	31	35	194	100

Table 8: Geographical Distribution of Contribution

S. No.	Name of State	Total	%
1.	Karnataka	50	25.77
2.	Tamil Nadu	42	21.65
3.	Uttar Pradesh	18	9.28
4.	Haryana	17	8.76
5.	Maharashtra	14	7.22
6.	West Bengal	14	7.22
7.	Delhi	9	4.64
8.	Odisha	7	3.61
9.	Other Countries	7	3.61
10.	Madhya Pradesh	4	2.06
11.	Andhra Pradesh	3	1.55
12.	Punjab	3	1.55
13.	Kerala	2	1.03
14.	Pondicherry	2	1.03
15.	Mizoram	1	0.51
16.	Uttarakhand	1	0.51
	Total	194	100

Table 7 & 8 reveals that the contributions have emanated from 15 Indian States and some are from other countries as well. The geographical distribution of the contribution has been decided on the basis of the affiliation and address of the first author. From the data analysis it is observed that the highest numbers of publication are from Karnataka with 50(25.77%) papers.

Next come Tamil Nadu with 42(21.65%) papers followed by Uttar Pradesh with 18(9.28%) papers. Haryana ranks fourth in the list with 17(8.76%) papers. It may be noted that the first four states are responsible for 65.46% of among 15 states. It is also noticed that the least number of papers i.e only one paper was emanated by Mizoram and Uttarakhand.

Findings

1. The contribution of articles to each of Indian Journal of Library and Information Science is constantly increasing from year to year.
2. The average number of pages per volume is 332.
3. Two authored paper are found to be the highest followed by single-authored and then three-authored papers.
4. The degree of collaboration in Indian journal of Library and Information Science is found to be 0.655.
5. The papers have emanated from 15 Indian states and some are from other countries as well.

Conclusion

The Journals have only a short history of nearly 10 years. Based on the study period i.e 2012-2016. In this short period the journal has tried to keep up its main aim of raising issues in field of Library and Information Science. The journal has published 194 articles during the period of study. The maximum numbers of articles 22.68% were published in the year 2014. The present study reveals that the maximum numbers of contributors are joint authors with 65.46%.

References

1. Asha Narang. Indian journal of pure & applied mathematics : a bibliometric study. *Annals of Library Science and Studies*. 2004;51(1):28-38.
2. Dalai (BK) and Ramesh (DB). Publication pattern in scientific and industrial research in India: a bibliometric study. *Annals of Library Science and Documentation*. 1995;42(1):35-38.
3. Dutta (Bidyarathi) and Sen (B K). Indian Journal of Pure and Applied Mathematics: an analysis of citation pattern. *IASLIC Bulletin*. 2001;46(4):221-226.
4. Egghe (L). Methodological aspects of bibliometrics. *Library Science*. 1988;25:179-191.
5. Pritchard (A). Statistical bibliography or bibliometrics? *Journal of Documentation*. 1969;25(4):348-349.
6. R. Senthilkumar Articles productivity of the journal of the literacy criterion : a bibliometric study. *Asian Journal of Information Science and Technology*. 2012;2(1):52-55.