

Bibliometric analysis of journal of Indian Library association during 2015-2021

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ABSTRACT

The present study explores the publication trends of scholarly papers in Journal of Indian Library Association for the period of 2015-2021. The result showed that 203 articles are published during the study period. The study examines the content of papers published during 2015- 2021 including the authorship pattern, degree of collaboration, length of papers, distribution of citations, keywords, length of papers, etc. Collaboration was calculated using Subramanyam's formula, which is useful for determining the degree of collaboration in quantitative terms. Among 203 articles the study found that 93.69% of papers are multi-authored. The degree of collaboration is found to be 0.59%. The average author productivity is 1.86%. More than 22.16% of articles appeared on domain of Users Literacy and Reading. Nearly 57.06% of papers were contributed by the college representatives, the average librarian's paper are 40.76%. All the studies point towards the merits and weakness of the journal which will be helpful for its further development.

KEYWORDS: Bibliometrics, Degree of collaboration, Authorship Productivity, Authorship pattern.

INTRODUCTION

Many bibliometric studies on single journals have been derived from the literature of past studies, the primary review of a single journal on bibliometric studies was written by Tiew, single journal study creates a portrait of the journal and it will show the standard, maturity and productivity of the journal in any subject,1 across the nation or internationally . It also informs us concerning the analysis orientation that it supports to spread and its influence on author's alternative as a channel to speak or retrieve information for his or her research needs. Nebelong-Bonnevie and Frandsen showed that single journal studies provided an in depth multi-faceted image of the characteristics of one journal. The assessment tool used for single journal studies is nearly perpetually bibliometric indicators to uncover the characteristics, quality and standing of the journal. Bibliometric study could be a quantitative analysis of publication patterns of all macro and small communication together with their authorship by mathematical and

statistical calculation. Bibliometric will be applied to any branch of knowledge and to most of the issues involved with communication. In fact bibliometric has huge out of the conclusion that literature is growing and driving out of a rate so no skilled or information employee equipped with ancient tlisting skills and methods might follow. The term "Bibliometrics" was first coined by, Pritchard (1969) in preference to existing terminology 'statistical bibliography'. The word 'bibliometric' has been derived from the Latin and Greek words 'biblio' and 'metrics' respectively which refer to the application of mathematics to the study of bibliography. But its usage and practice started much before its origin in the second decade of this century.

SOURCE JOURNAL

The Journal of Indian Library Association (ILA) is a UGC care list journal, academic journal publishing on theories, concepts, models, frameworks, and philosophies in library and information science. The journal provides a forum for the dissemination of scholarly articles, research reports and critical reviews. The scope of the Journal of Indian Library Association (ILA) is broadly library and information science, encompassing all of the academic and professional disciplines which deal with recorded information. These include, but are certainly not limited to information science, library science, and related disciplines, information and knowledge management, information and knowledge organization, information seeking, information retrieval, human information behavior, and information and digital literacy. ILA is published quarterly since seven years (2015-2021).

OBJECTIVE OF THE STUDY

The objectives of the present study are:

1. To make an analysis of articles published in Journal of Indian Library Association during the period 2015-2021.
2. To study the year-wise distribution of articles.
3. To study the authorship pattern of the contributors.
4. To identify the degree of collaboration.
5. To study the length of articles.
6. To identify the domain wise distribution of articles.
7. To determine the average number of references per article.

METHODOLOGY

For the purpose of the present study, Journal of Indian Library Association (ILA) has been selected as the source journal. Twenty eight issues of seven volumes from 2015 to 2021 have been selected for the study. The relevant papers for the study have been downloaded from the ILA websites. The 203 papers selected for present study were entered into a Microsoft Excel spread sheet which identified variable such as author, author's affiliation, domain wise, year of publication, institution wise, length of papers etc. Collaboration was calculated using Subramanyam's formula, which is useful for determining the degree of collaboration in quantitative terms. It should be noted that guest editorials, short communications are excluded from the study. Finally, all relevant data were sorted, tabulated and assimilated in a logical order for analytical purpose.

REVIEW LITERATURE

Kotti Thavamani (2007 to 2013) examines the authorship trends of contributions in the “Indian Journal of Forensic Medicine & Toxicology” during 2007 to 2013. A total of 456 contributions and 1425 authors were examined by year wise contributions, author productivity, year wise single and multi-authored papers and Degree of Collaboration.

Gurjeet Kaur Rattan and Kamini Gupta (2007-2011) The present study is a Bibliometric Analysis of the journal titled Malaysian Journal of Library and Information Science from 2007-2011. Covers mainly the number of articles, authorship pattern, geographical distribution of authors, pattern of references etc. These results show that out of 100 articles, single authors contributed 27 (27%) articles while the rest 73 (73%) articles are contributed by joint authors. It has been revealed that most of the contributors are from Malaysia.

Mulla, K. R. & Dhanamjaya, M. (2000-2009) Bibliometrics analysis of 412 research articles appeared in the SRELS journal of information management during the period 2000 to 2009 this paper gave review on authorship pattern degree of collaboration author productivity and further it revealed that out of total 686 contributors 360(52.48% contributors contributed a joint authored paper that amount to 180 (43.69%) articles.

Ramesh, K. & Tayappa, A. (2011-2015) the majority of articles of bibliometrics analysis of the journals International Journal of Information Dissemination and Technology IJIDT for the period of 2011-2015. Among 254 articles the study found that 93.69% of papers are multi-authored. The degree of collaboration is found to be 0.59%. The average author productivity is 1.86%. More than 26% of articles appeared on domain of “Information technology” and “Library Technology.”

Velmurugan C and Radhakrishnan N (2007-2013) analyzed and used scientometric techniques on Indian Journal of Biotechnology during 2007- 2012. The maximum articles were contributed by Indian authors i.e. (18.99 %), followed by Australia and Iran (12.64%) with second rank. The maximum research output i.e. 40 contributions (50.64%) by multiple authors and the minimum research outputs of 39 contributions (49.36%) have been contributed by single author.

DATA ANALYSIS AND DISCUSSION

All the details such as authors, year of publication, pagination, subject domain, designation, Institution, etc. of all article published from 2015 to 2021 were recorded for the following analysis.

RESULTS AND DISCUSSION

Table 1: Year-wise Distribution of Publications

Year	Issue-wise no of paper contributions				Total	%
	1	2	3	4		
2015	5	3	5	4	17	8.38
2016	4	4	5	5	18	8.86
2017	6	4	5	5	20	9.86
2018	6	5	6	6	23	11.33

2019	6	5	8	8	27	13.30
2020	9	8	11	11	39	19.21
2021	12	16	15	16	59	29.06
Total	44	45	55	55	203	100

Table-1 shows the total number of papers published from 2015 to 2021 in ILA. On the whole, from 4 volumes and 28 issues of the journal under study, the total number of papers published is 203. The distribution of papers the number of papers was highest in 2021 with 59 (29.06%) papers. The number of papers was second highest in 2020 with 39(19.21%) and third highest in 2019 with 27(13.30%) Hence, it is concluded that there is no statistically significant difference between the year wise and number of papers published during the period under study.

Table 2: Authorship Pattern of Publications

Year	Authorship Pattern of Publications				Total	%
	One	Two	Three	More than four		
2015	12	6	0	0	18	8.86
2016	7	10	0	0	17	8.38
2017	7	12	1	0	20	9.86
2018	10	13	0	0	23	11.33
2019	12	14	1	0	27	13.30
2020	6	22	6	5	39	19.21
2021	14	29	15	1	59	29.06
	68 (33.49)	106 (52.23)	23 (11.23)	6 (2.95)	203	100

Table 2 reveals the authorship pattern of the articles published during the period of study. Maximum numbers of articles were contributed by two authors 106 (52.23%). The single author has contributed 68 (33.49%) of the total articles. This is followed by three authors with 23 (11.23%) articles; four authors contributed 6 (2.95%) articles.

Table 3: Author Productivity

Year of Publication	Number of Publication	Number of Authors	AAPP	Average Publication per Authors
2015	17	28	1.64	60.71
2016	18	37	2.05	48.64
2017	20	44	2.2	45.45
2018	23	47	2.04	48.93
2019	27	41	1.51	65.85
2020	39	58	1.48	67.24
2021	59	79	1.33	74.68
	203	334	1.64	60.77

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Note: Average Authors per Paper (AAPP) = Number of authors/ Number of papers. Productivity per author= Number of papers/ Number of authors.

Yoshi Kane calculated Average Author per Paper (AAPP) and Productivity per Author in their paper, which is published in Scientometrics journal. The formula is mathematically represented as below:

Average Author per Paper = No. of Authors/No. of Papers

$$\text{Result} = \frac{334}{203} = 1.64$$

Productivity per Author = No. of Papers/No. of Authors

$$\text{Result} = \frac{203}{334} = 0.67$$

Table 4: Degree of Collaboration

Year	Single Authored Publications(N _s)	Multiple Authored Publications(N _M)	N _M +N _s	Average Publication per Authors
2015	12	6	18	0.34
2016	7	10	17	0.59
2017	7	13	20	0.65
2018	10	13	23	0.56
2019	12	15	27	0.55
2020	6	33	39	0.85
2021	14	45	59	0.76
	68	135	203	

The formula given by K. Subramanyam is useful for determining the degree of collaboration in quantitative terms. The study followed the same formula which is mathematically shown as:

Where C = Degree of Collaboration
 NM = Number of Multi authored papers
 NS = Number of Single authored papers

In the present study

$$\begin{aligned} \text{NM} &= 135 \\ \text{NS} &= 68 \end{aligned}$$

Thus

$$C = \frac{135}{135+68} = 0.665$$

Thus the degree of collaboration in Journal of Indian Library Association is 0.665 which clearly indicates its dominance upon individual contribution.

Domain wise Distribution of Article

We have identified twelve domains adopted in “E- prints for LIS”, to classify all the source items Journal of Indian Library Association.

A - Information Technology and Library Technology.

B - Information Use and Sociology of Information

C - Information Source Support Channels

D - Libraries as Physical Collection

E - Theoretical & General Aspects of LIS

F - Library Management

G - Users Literacy and Reading

H - Industry Profession & Education

I - Technical Service in Libraries, Archives, Museums

J - Information Treatment & Information Services

K -Publishing & Legal Issue

L -Miscellaneous

Table 5: Domain wise Distribution of Articles

Domain	No. of Articles	% age	Cumulative Articles	%age
A	12	5.91	12	5.91
B	6	2.95	18	8.81
C	7	3.44	25	12.31
D	8	3.94	33	16.25
E	71	34.97	104	51.23
F	1	0.49	105	51.72
G	45	22.16	150	73.89
H	12	5.91	162	79.80
I	1	0.49	163	80.29
J	38	18.71	201	99.01
K	1	0.49	202	99.50
L	1	0.49	203	100
Total	203	100	203	100

The above Table 5- depicts the domain wise contribution of articles published in the ILA journal. during the period of study (2015-2021), majority 71 (34.97%) of articles appeared in the domain (E)Theoretical & General Aspects of LIS followed (G) Users Literacy and Reading domain with 57 (22.16%) articles; The domain (J) Information Treatment & Information Services with 38 (18.71%) articles, (A & H) Information Technology and Library

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Technology and Industry Profession & Education each 12 (5.91%) articles, (D) Libraries as Physical Collection 8 (3.94%) articles, (C) Information Source Support Channels 7 (3.44%) articles, The domain (B) Information Use and Sociology of Information 2 (2.95%) articles, (F, I, K & L) Library Management, Technical Service in Libraries, Archives, Museums, Publishing & Legal Issue and Miscellaneous each 1 (0.49%) articles.

Table 6: Designation Wise Contributions

Designation of the contributors	Number of Contributions	Rank	%age
Librarians	150	1	40.76
Lecturers	115	2	31.26
Research Scholar	62	3	16.84
Scientist	21	4	5.71
Others	20	5	5.43
	368		100

The table 6 shows the number of contributors 150 (40.76%) are from Librarian. The second highest contributions are from Lecturers 115 (31.26%). This is followed by research scholar 62 (16.84%) contributions and scientist 21 (5.71%). The lowest number of contributions from the category of others 20 (5.43%) each.

Table 7: Most Productive Institution

Institution	Total	%age
College	210	57.06
Universities	61	16.58
Research Centers	41	11.14
Government Org	24	6.53
Institutions	26	7.06
Others	6	1.63
	368	100

The distribution of published papers by institution wise the table 7 reveals that, out of 368 contributors, the highest number 210 (57.06%) of contributors are contributed from the Colleges. The Universities stand the second place with 61 (16.58%) contributors. The various types of research centers stand on third place with 41 (11.14%) contributors. The research institutes 26 (7.06%) government organization with 24 (6.53%) and others have contributed with 6 (1.63%) respectively.

Table 8: Length of paper published during 2015-2021

Year	Page Range				Total
	1-5	6-10	11-15	16-20	
2015	4	12	2	0	18

2016	6	8	3	0	17
2017	8	10	2	0	20
2018	6	13	3	1	23
2019	8	15	4	0	27
2020	12	16	9	2	39
2021	17	28	14	0	59
Total	61 (30.04)	102 (50.25)	37 (18.23)	3 (1.48)	203

Table 8 presents the length of articles published in Journal of Indian Library Association. Major portion of articles i.e., 102 (50.25%) are between 6 to 10 pages, followed by 1 to 5 pages in 61 (30.04%) articles are 37 (18.23%) articles are from 11 to 15 pages. 16 to 20 articles are 3(1.48%) respectively.

FINDING

This paper attempts to identify the Bibliometrics characteristic of GBRJ papers. Findings drawn from this study are:

1. The number of Two-authored papers is quite higher at 106(52.23%), followed by single authored papers 68(33.49%), three authored 23(11.23%), and more than four authored 6(2.95%) respectively.
2. Researchers measured the distribution of degree of collaboration over the years from 2015 to 2021 as a result the degree of collaboration in journal of library association is 0.665.
3. The above table shows that the data about author productivity and the average author per year. The highest number of productivity per author is 74.68 and the lowest number of authors is found 1.58.
4. The highest distributions have been contributed by Colleges and the least number of contributions were by Institutions and others respectively.
5. The domain wise contribution of articles published in the ILA journal. During the period of study (2015-2021), the highest number 71 (34.97%) of articles appeared in the domain Theoretical & General Aspects of LIS each 1(0.49%) articles.

CONCLUSION

The Bibliometrics pattern of journal in Indian Library Association is analyzed. The result underscores the significance of journals as an important information source. In particular, this study reveals a perceptual upward trend of collaborative research. It can be concluded that the result of this type of study would appear to be of great potential in the UGC care list of library journal collection. It is concluded that this kind of studies will help the researchers in identifying the primary sources of information from which citations have been made.

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