# A bibliometric study: Journal of management research and analysis

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#### Abstract

The periodical is the main source of information and the most important communication medium. They play a major role in communicating the latest research results and publishing articles containing the latest developments in all areas of knowledge. This study of bibliometric analysis of a Journal of Management Research and Analysis carried out from the year 2014–2018. In this present bibliometric study, a total number of 183 contributions published in 17 issues of 5 volumes during the year 2014–2018. The detail like year/volume wise and issue wise distribution of contributions, year wise authorship pattern, geographical/state wise distribution of contributions, most productive author, year wise number of pages per article, year/volume wise citations with form of referred documents. The recorded data has been found that the majority contribution published in the journal are collaborative research, the degree of C.C. is 0.5737.

Keywords: Bibliometric analysis of JMRA, Distribution of contribution, Authorship pattern, Citation analysis, JMRA.

#### Introduction

Alan Prichard (1969) used for the first time the word "bibliometric" as "the application of mathematics and statistical methods to books and other means of communication". Dr. S. R. Ranganathan (1948) the similar terms was defining the form of Librametry. According to Tsay (2011), "bibliometric techniques using references to other documents can be applied to establish statistical models of the scientific communication flow". Bibliometric is a quantitative evaluation of the publication models of all macro and micro communications as well as their authors by mathematical and statistical calculation. (Sengupta, 1985) Also there have been several bibliometric analyses of specific subject areas such as Zhao & Logan (2002), Hols Apple & Luo (2003) and Cai & Card (2008).

Although bibliometric methods are most often used in the field of library and information science, bibliometric has many applications in other fields. In fact many research areas use bibliometric methods to explore the impact of their field, the quantitative analysis of publications, set of researchers/publications using bibliographic including author, publication year, citation, figure and graph, pages length in the text etc. The bibliometric study is a simple statistical method of bibliographic counting to evaluate and quantify the growth of a subject. This helps to observe the growth of literature and research trends. The bibliometric study is primarily a citation analysis technique that involves the process of collecting, counting, analyzing and explaining citations given in various types of literature, thus contributing to the recognition of important sources of information. It is an emerging research unit in the field of library and information sciences.

#### Literature Review

Desai, K. D. (2014) bibliometric analysis of Desidoc journal of Library and Information Technology, Roy, S. & Basak, M. (2013) a bibliometric study of Journal of Documentation, Kumar, Manoj & Moorthy, A. L. (2011) bibliometric study of DJLIT from 2001 – 2010, Thanuskodi,

S. (2011) a bibliometric analysis of Indian journal of Chemistry (2005–2009), Natter, S. (2009) scientometric analysis of Indian journal of Physics (2004–2008), Singh, Mittal & Ahmed (2006) a bibliometric study of literature on digital libraries, Paul, G. & Deoghurai, S. (2014) Indian journal of Physics from the year 2004 – 2013 and Vellaichamy, A. & Jayshankar, R. (2015) examined bibliometric analysis in the journal 'Webology' during the period 2004 -2013. Above past literature covers various parameters like distribution of contribution, authorship pattern, growth pattern, content coverage, degree of collaboration, geographical distribution, average number of reference per contribution, citation analysis, most prolific author and form of documents used by contributors.

#### **Need for the Study**

The expanding cost of periodicals and inadequate library budgets, the selection of exacting journal for a library very difficult. Therefore, library authorities are forced to reduce the number of journal subscriptions. Bibliometric analysis has many applications in the library and information science directory to identify trends in subject research, major journals and so on. These bibliometric studies will help librarians plan for better growth of collections.

### Scope/Limitation of the Study

The "journal of research and management analysis", published by the innovative publication Pvt. Ltd., New Delhi. Double-blind peer review that provides specialized academic support and an important reference for encouraging and disseminating research and practice in management research. Journal of management research and analysis is a quarterly international referred journal published to provide an online publishing platform for academic, management/multidisciplinary researchers and students to publish their original work. The full text of the is available online at https://innovativepublication.com/journal/JMRA. The journal is listed as follows: Google Scholar, Academia.edu,

Cite factor, Crossref, Infobaseindex, OAJI, Research Bible, SJIF and University Grants Commission (UGC). The study is limited to articles published in volumes 01 to 05 of the journal (JMRA) from 2014 to 2018 only. (https://innovativepublication.com/journal-about-us/JMRA).

## Objective

- To know year and volume wise distribution of contributions
- 2. To examine authorship pattern
- 3. To analyze geographical distribution of contributions
- 4. To find most productive author
- 5. To find the average length of articles
- To study the form of referred documents or year wise distribution of citations

## Methodology

For this study total number of 183 published articles in the 17 issues of 5 volumes. The recorded data (in Microsoft Excel) has been calculated and represented in tabular form and analyzed than interpreted.

### **Data Analysis and Interpretation**

Table 1 is representative year and volume wise distribution of articles. There are 183 contributions published in 01 to 05 volumes during 2014 – 2018. 78 out of 183 articles published in volume fifth of the year 2018, followed by 37 articles in the year 2015, 29 articles in the year 2017 and lowest articles published in volume first of the year 2014 i.e. 11 (6.01%). The highest article published in the month of January – March and lowest in the month of April – June.

Table 2 indicates author's contribution of published articles in different authorship patterns of the journal of management research and analysis. Total 183 published articles involve as a part of this study during 2014 – 2018.

The comparison of published publications of single authorship pattern by author for this study is (n=78). Out of total publication the highest publications published as a single authored in 2018 (n=27), followed by year 2015 (n=19) and the lowest publications by single authored pattern in 2014 (n=06).

The comparison of published publications of two authorship pattern by author for this study period is (n=76). Out of total publication the highest publications published as a two authored in 2018 (n=37), followed by year 2015 and 2017 (n=14) and the lowest publications by two authored pattern in 2014 (n=01).

The comparison of published publications of three authorship pattern by author for this study is (n=25). Out of total publication the highest publications published as a three authored in 2018 (n=12), followed by year 2014 and 2016 (n=04) and the lowest publications by three authored pattern in 2017 (n=02). The comparison of total published publications of Four and more than five authorship pattern by author for this study is (n=02).

Total single authored articles published by author is (n=78) and joint author publications (n=105). There are clearly shows that the majority authors are used publication patterns as a collaborative authored in the total publications of journal of management research and analysis. The collaboration coefficient (CC) measure collaborative research pattern by K. Subramanian, (1983) has been applied; the degree of authorship collaboration of the journal (JMAR) is 0.5737.

$$C\frac{NM}{NM+NS}$$

$$C = (105/105+78) = 0.5737$$

**Table 1:** Year and volume wise distribution of articles.

		 [				
Month	2014	2015	2016	2017	2018	Total Articles
	(01)	(02)	(03)	(04)	(05)	
January- March	11	10	09	05	15	50
April - June	00	10	05	06	21	42
July- September	00	10	07	08	22	47
October-December	00	07	07	10	20	44
<b>Total Contribution</b>	11	37	28	29	78	183
%	6.01	20.22	15.30	15.85	42.62	100

**Table 2:** Contribution of authors and authorship pattern

Year	Authorship pattern					Sub-total	Total	
	Single		Collaborative			(collaborative)	=(1 + Subtotal)	
		Two	Three	Four	Five & More			
2014	06	01	04	00	00	05	11	
2015	19	14	03	00	01	18	37	
2016	14	10	04	00	00	14	28	
2017	12	14	02	00	01	17	29	
2018	27	37	12	02	00	51	78	
Total	78	76	25	02	02	105	183	
%	42.63	41.53	13.66	1.09	1.09	57.38	100	

**Table 3:** Geographical distributions of articles

S. No.	State		Year v	Total	0/			
5. No.	State	2014	2015	2016	2017	2018	1 otai	%
1	Tamil Nadu	03	07	07	05	15	37	20.22
2	Maharashtra	02	08	05		03	18	9.84
3	New Delhi	02	02		03	11	18	9.84
4	Madhya Pradesh	01	06	05	01	04	17	9.29
5	Uttar Pradesh	02	03	01	04	07	17	9.29
6	Karnataka			02	03	08	13	7.10
7	Gujarat		03	02	04	02	11	6.01
8	Foreign	01	04	02	02	01	10	5.46
9	Odisha			02	03	04	09	4.92
10	Harayana		03			04	07	3.82
11	Punjab				01	05	06	3.28
12	West Bengal			01		03	04	2.18
13	Kerala		01			01	02	1.09
14	Rajasthan					02	02	1.09
15	Pondicherry				01	01	02	1.09
16	Telangana				01	01	02	1.09
17	Jammu and Kashmir					02	02	1.09
18	Arunchal Pradesh					01	01	0.55
19	Himachal Pradesh					01	01	0.55
20	Bihar					01	01	0.55
21	Chhattisgarh			01			01	0.55
22	Uttarkhand					01	01	0.55
23	Jharkhand				01		01	0.55
Total		11	37	28	29	78	183	100

Above table depict the geographical distribution of contributions of the journal under the study. Out of 183 contributions, the highest number (n=37) 20.22%, followed by Maharashtra and New Delhi (n=18) and Madhya Pradesh, Uttar Pradesh, Karnataka, Gujarat and Foreign are fourth, fifth, sixth, seventh and eighth place having (n=17), (n=13), (n=11) and (n=10) contributions respectively. Out of 183 contributions (National and International) (n=173) contributions have been made by Indian states.

**Table 4:** Productive authors

S. No.	Rank	Author	No. of paper
1	1	R. Ganapathi	17
2	2	Jayant Sonwalkar	09
3	3	Ashok Kumar Panigrahi	06
4	3	Chandan Maheshkar	06
5	4	Krunal Bhuva	03
6	4	Sachin Mittal	03
7	4	Sandeep Hegde	03
8	4	Sweta Singh	03
9	4	Thankachan Jose Kaitharath	03
10	5	Anjala Kalsie	02
11	5	Archana Singh	02
12	5	Ashwini	02
13	5	Atul Kumar	02
14	5	B. S. Bhatia	02
15	5	Bhumika Achhnani	02
16	5	Chandni Mehta	02
17	5	Daman Jeet	02
18	5	Garima Singh	02
19	5	H. Parshuram	02
20	5	K. N. Jayakumar	02

21	5	Kavita Khanna	02
22	5	Paresh Bali	02
23	5	Pooja Sehgal Tabeck	02
24	5	R. K. Gupta	02
25	5	R. K. Sharma	02
26	5	Raghavendra P. Kumar	02
27	5	Rama Krishna Mishra	02
28	5	Ranjita Behera	02
29	5	Rekha Sharma	02
30	5	Sandeep Malik	02
31	5	Sarwade Chetan W. K.	02
32	5	Shahid Ali	02
33	5	Suman Kalyan Choudhury	02
34	5	Vijaya Kumar S.	02

The most productive authors with their number of publications are given in the table. The most productive and ranking authors found in the study in order of the number of contributions is R. Ganapathi, first rank of the list with 17 publications, followed by Jayant Sonwalkar with 09 publications, Ashok Kumar Panigrahi and Chandan Maheshkar with 06 publications, five authors are published 03 publications and twenty five authors are secure fifth rank with 02 publications.

Table 5: Lengths of articles

Langth (nages)			Total	0/			
Length (pages)	2014	2015	2016	2017	2018	Totai	%
Three	00	01	05	03	03	12	6.56
Four	00	05	04	02	13	24	13.12
Five	00	05	07	09	18	39	21.31
Six	01	05	02	05	13	26	14.21
Seven	00	04	03	04	08	19	10.38
Eight	02	05	01	01	16	25	13.66
Nine	01	03	03	01	02	10	5.46
Ten & More	07	09	03	04	05	28	15.30
Total	11	37	28	29	78	183	100

Above table 5 represent length of articles of the journal for year 2014 - 2018, total 183 articles published. Out of (n=39) published article by author have the length of five pages, followed by (n=28) articles with ten and more pages, (n=26) articles with six pages, (n=25) articles with eight pages, (n=24) articles with four pages, and the remaining articles have below the length of fifteen pages.

Table 6: Forms of referred documents and distribution of citation per volume

		Year &	Total No. of	i			
Forms of Document	2014	2015	2016	2017	2018	Citation	%
	(01)	(02)	(03)	(04)	(05)	Citation	
Journals	68	298	373	192	803	1734	52.61
Books	12	82	75	51	155	375	11.38
Thesis/Dissertation	04	03	04	02	11	24	0.73
Conference/Workshop/Seminar/Symposi	17	72	50	55	130	324	9.83
a/Proceeding	17 72 50	33	130	324	9.83		
Manuals/Handbooks/Guides/Guidelines	04	17	32	23	67	143	4.34
Report/Projects	02	31	34	23	70	160	4.85
Software	00	00	00	00	00	00	00
Standard/Patents	00	00	02	02	01	05	0.15
Websites	35	95	57	60	284	531	16.11
Distribution of citation per volumes	142	598	627	408	1521	3296	100
%	4.31	18.14	19.02	12.38	46.15	3290	

Above table define forms of referred documents and distribution of citation per volume. Among total 3296 citations, highest in the year 2018 (n=1521), followed by year 2016 (n=627) and the lowest in the year 2014 (n=142) authors used various forms of referred documents. The contributors preferred journal as a sources of information and the top position with the highest number of citations (n=1734), the second highest position by websites with (n=531) citations, the form of document as a books with (n=375) and used by author the preparation of contribution other form of documents listed as per table.

This five year studies of JMRA, total 3296 citations used. It's growing nearly by 142 references in year 2014 to 1521 references in year 2018. The references referred the age of year 2011 to 2015 is (n=831), followed by references age of the year 2006 to 2010 (n=695), references age of the year 2001 to 2005 (n=552), small number of references used by author up to 1950. Also define most frequently cited journal used by contributors, the top cited journals are Journal of marketing, The Indian journal of industrial relations, African journal of business management and Journal of academy of marketing science.

## Findings and Conclusion

On the basis of above study the following major findings are describe.

- 1. Highest 78 articles was published in volume no. 05 and lowest 11 articles published in volume no. 01.
- 2. Majority of article are contributed by single authored (n=78) compare with two, three, four and more authorship.
- Among the Indian states, the national contribution is maximum.
- 4. Among the contribution of geographical distribution, Tamil Nadu has top the list of contributor.
- 5. R. Ganapathi is most productive author with seventeen (17) contributions.
- 6. The average number of references per articles i.e. 18.

It is concluded in the present study from the year 2014-2018, there are 183 articles published from volume 01 to 05 of JMRA. The highest number of articles published in the year 2018. Multiple authors have shown keen interest in making contributions from during the study year. Out of twenty three places, the contributions of 173 articles (94.54%) come from Indian states. The studies reveal that the majority of contributor preferred journal as a source of

information for writing papers. The average length of pages of the contributions is five pages with 21.31%.

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**How to cite this article:** Patel R. A bibliometric study: Journal of management research and analysis. *J Manag Res Anal* 2019;6(2):93-7.