

# Authorship Pattern in Open Access Management Journals: A Bibliometric Study

Prasanna Raj<sup>1</sup> and J.Dominic<sup>2</sup>

<sup>1</sup>Research Scholar, Bharathiar University, Coimbatore - 641 046, Tamil Nadu, India

<sup>2</sup>University Librarian, Karunya University, Coimbatore - 641 114, Tamil Nadu, India

E-mail: rpraj05@gmail.com

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**Abstract** – This paper describes about the authorship pattern in open access Management Journals: A bibliometric study. The study has analyzed the distribution of publication by length of papers, the institution-wise distribution of Indian contributions, the journal-wise distributions of articles and authorship pattern, year-wise and subject-wise distribution of authorship pattern, the year-wise distribution of annual research output.

**Keywords:** Bibliometric Study, Open Access Journals

## I. INTRODUCTION

Bibliometric studies have been gaining momentum in the field of information science in recent years. It is interesting to note that during the last few years, bibliometric analysis has been increasingly used to evaluate the research performance of the scientists and the growth of various disciplines.

The enormous growth of scientific literature, increased cost of written communication and shrinking library budget have made it difficult for the library professionals to cater the information needs of the scientists. The situation demands for an effective means of measurement of the growth of scientific literature, recognition of scientists who have major impact in their discipline, recognitions of core journals in their discipline and identification of trends in the discipline etc for framing effective library policies by the professionals. Results of such studies also help the policy makers to decide priorities in resource allocation for scientific activities. In this direction, a number of studies have been undertaken by library and information professionals to evaluate written communication by

applying mathematical, statistical and operation research technique, commonly known as Bibliometrics. At present Bibliometrics has established itself as a viable and distinctive research technique for studying the science of science based on Authorship trend, bibliographical and citation data.

## II. REVIEW OF LITERATURE

Mallinath Kumbar and Girish Kumar (2011) attempted to identify the authorship trend and collaborative research in Genetics and Plant Breeding, based on the data collected from the Indian Journal of Genetics and Plant Breeding published during 1998-2002. The study revealed that two author papers were maximum 215 (44.24%). The degree of collaboration in research was 0.87 in genetics and plant breeding as a whole and ranged from 0.86 to 0.89 during 1998-2002. The Indian authors contributed 475 articles and a significant percent i.e., 107 (22.49%) was reported from Delhi State. Mohamed Esmail *et al* (2011) discussed the authorship trend and collaborative research in the field of agricultural extension. The required data had been collected from the “Journal of extension system” published during the period of 2000-2009. The result showed that multi-authored papers contribution was more in number compared to single authored papers.

Jeevan (2010) reported the extent of collaboration in research publications in library and information science based on the papers published in two successive years. The single authorship contribution had more publications. More than 55% of collaborated papers were with authors working in the same institution and another 17% with authors working in different institutions located in the

same place. Only 27 % of the collaborated papers were written by authors in different institutions from different places. Rakesh Mani Sharma (2009) studied a total of 2603 research articles published by the scientists of Central Potato Research Institute (CPRI) during 1991 to 2007 by scanning the annual reports of CPRI and the Journal of the Indian Potato association. In his analysis, he showed that majority of the Scientists preferred to publish research papers in joint authorship (82.67 %) having 0.82 degree of collaboration. There was no uniform pattern of Literature growth but factors like fund availability, Scientists' recruitment and years that had special occasions like Conferences, Seminars etc., had impact over scientific productivity of Scientists during the period under review.

Sudhier Pillai (2007) presented a case study of the trends in authorship pattern and collaborative research in Physics with a sample of 11,412 journals and 1328 book citations appended in the physics during 1999-2003. In his study, he found out that the team research was preferred in the field of Physics rather than solo research. The authorship collaboration was more in journal articles than in books and concluded that authorship pattern, degree of collaboration and average number of authors were different in journals and books. Biradar (2006) highlighted the authorship trend and collaborative research in environmental science during 1994, 1999 and 2004. The study found that team research is preferred in the field of environmental science rather than solo research. The degree of collaboration was calculated and found to be 0.85. The study also found that on an average, 11.595 references were referred to by each article.

## II. OBJECTIVES OF THE STUDY

The following are the objectives of the study.

1. To find out the distribution of publication by length of papers;
2. To find out the institution-wise distribution of Indian contributions;

3. To find out the journal-wise distributions of articles and authorship pattern;
4. To find out year wise and subject-wise distribution of authorship pattern;
5. To find out the year-wise distribution of annual research out put.

## III. METHODOLOGY

In this study, the Management Studies Journals in Open JGate has been selected as the source journal. The details regarding each published article such as title of the article, number of authors, their institutional affiliations and addresses, number of reference with list, page number, number of tables and figures etc., were recorded and analyzed for making observations. Tables are filled by tally mark system counting one by one reference and other data. The data were calculated and represented in tables. The emphasis is largely on quality forms and age of citations rather than on the subject content and the degree of its relevance to the citing documents.

## IV. ANALYSIS OF THE STUDY

The above table describes about the journal-wise distribution of articles. The management journals of contemporary management issues have published 347 articles and the percentage is 12.80% and it is the highest among all the Journals. The journal of Electronic commerce research has published 172 journals and the percentage is 6.34% and it is the lowest among all the journals. All the other journals are in between these two categories.

The above table describes about the Institutional-wise distribution of Indian contribution. The colleges have contributed 38 and the percentage is 52.78% and it is the highest among all the categories. The foundations have contributed one article and the percentage is 1.39% and it is the lowest among all the other categories. All the other categories are in between these two percentages.

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TABLE I JOURNAL-WISE DISTRIBUTIONS OF ARTICLES

S.No.	Journals	Articles	Percentages
1	Asian Academy of Management Journals	270	9.96
2	Electronic Journal of Business Ethics and Organization Studies	261	9.63
3	Environmental Engineering & Management Journal	282	10.40
4	Journal of Knowledge Management Practice	295	10.88
5	Journal of Interactive Advertising	242	8.93
6	Investment Analyst Journal	190	7.01
7	Management: Journal of Contemporary Management Issues	347	12.80
8	Research and Practice in Human Resource Management	233	8.60
9	Journal of Electronic Commerce Research	172	6.34
10	Management	245	9.04
Total		2709	100

TABLE II INSTITUTION-WISE DISTRIBUTION INDIAN CONTRIBUTIONS

S.No.	Institutions	Articles	Percentage	Cum. total	Cum. Percentage
1	Universities	15	20.83	15	20.83
2	Colleges	38	52.78	53	73.61
3	Women Studies Centers	03	04.17	56	77.78
4	Research Institutes	03	04.17	59	81.95
5	Foundations	01	01.39	60	83.34
6	Govt.	04	5.56%	64	88.90
7	Others	08	11.11	72	100
Total		72	100		

TABLE III DISTRIBUTION OF AUTHORSHIP PATTERN

Authorship Pattern	No. of Contribution	Percentage	Cumulative Percentage
1	732	26.43 %	26.43
2	740	26.71 %	53.14
3	532	19.21 %	72.35
4	324	11.70 %	84.05
5	195	7.04 %	91.09
6	104	3.75 %	94.84
7	71	2.56 %	97.40
8	46	1.66 %	99.06
9	24	0.87 %	99.93
>10	2	0.07 %	100
Total	2770	100	

The above table describes about the distribution pattern of authorship. The two authors have contributed 740 articles and it is the highest among all the categories. The

single author contributions are 732 and the percentage is 26.43% and it is the second highest. The above ten authors has contributed only two articles and it is the lowest. All the other categories are in between these two percentages.

TABLE IV YEAR-WISE DISTRIBUTION OF AUTHORSHIP PATTERN

Authorship Pattern	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total	%
1	32	37	41	62	40	65	68	58	58	65	79	63	64	732	26.43
2	28	33	39	61	40	58	41	74	59	64	71	79	93	740	26.71
3	7	16	18	23	25	38	35	43	40	44	66	78	99	532	19.21
4	1	1	2	13	1	43	24	26	17	32	40	57	67	324	11.70
5				7	5	9	6	10	8	25	31	42	52	195	7.04
6				2	1	4	4	11	4	8	20	30	20	104	3.75
7				2		1	1	10	1	7	16	19	14	71	2.56
8					1			3	2		20	17	3	46	1.66
9								2	1		20	1		24	0.87
>10						1						1		2	0.07
Total	68	87	100	170	113	219	179	237	190	245	363	387	412	2770	

The above table describes about the year-wise distribution of authorship pattern. In the year 2011 there are 412 articles published and three authors were published 99 articles and it is the highest among all the categories.

In the year 2010, there are 387 articles were published and two authors category has published 79 articles and it is the second highest. In the year 1999, there are 68 articles were published and it is the lowest among all the categories.

TABLE V DISTRIBUTION OF SUBJECT-WISE AUTHORSHIP PATTERN

Subfield/Authorship pattern	1	2	3	4	5	6	7	8	9	>10	Total
Finance	94	109	37	14	7	2	1				264
Production	10	14	12	10	5	2	1				54
Marketing	50	62	34	9	4						159
Entrepreneurship	5	3	3	2							13
Systems	95	116	82	30	8	5	1				337
HR	354	276	142	45	14	7	2	2			842
Ecology	3	6	8	6	2						25
Chemistry	84	113	147	128	125	68	48	37	23	2	775
Psychology	1										1
Energy	3	12	6	6	2				1		30
General	35	32	58	44	33	23	20	12			257

TABLE VI YEAR-WISE DISTRIBUTION OF ANNUAL RESEARCH OUTPUT (ARTICLES) Vs RESEARCH PAGES

Year	No. of Articles	Cumulative Total	RGR	Doubling Time
2000	87	87		
2001	100	187	0.765	0.906
2002	170	357	0.647	1.072
2003	113	470	0.275	2.521
2004	219	689	0.383	1.812
2005	180	869	0.232	2.986
2006	237	1106	0.241	2.874
2007	190	1296	0.159	4.372
2008	251	1547	0.177	3.915
2009	363	1910	0.211	3.288
2010	387	2297	0.185	3.757
2011	412	2709	0.165	4.202

The above table describes about the distribution of subject wise authorship pattern. The Human resource subject there are 842 authors has published the articles and it is the highest among the entire category. The chemistry subject has published 775 articles and it is the second highest. The psychology subject has only one author published one article and it is the lowest among all the categories.

The above table describes about the year-wise distribution of annual research output vs research pages. In the year 2007 there are 190 articles published and the doubling time is 4.372 and it is the highest. In the year 2011 there are 412 articles published and the doubling time is 4.202 and it is the second highest. In the year 2001 there are 100 articles published and the doubling time is 0.906 and it is the lowest among all the categories.

TABLE VII YEAR-WISE DISTRIBUTION OF AUTHORSHIP PATTERN

Authorship Pattern	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total	%
1	32	37	41	62	40	65	68	58	58	65	79	63	64	732	26.43
2	28	33	39	61	40	58	41	74	59	64	71	79	93	740	26.71
3	7	16	18	23	25	38	35	43	40	44	66	78	99	532	19.21
4	1	1	2	13	1	43	24	26	17	32	40	57	67	324	11.70
5				7	5	9	6	10	8	25	31	42	52	195	7.04
6				2	1	4	4	11	4	8	20	30	20	104	3.75
7				2		1	1	10	1	7	16	19	14	71	2.56
8					1			3	2		20	17	3	46	1.66
9								2	1		20	1		24	0.87
>10						1						1		2	0.07%
Total	68	87	100	170	113	219	179	237	190	245	363	387	412	2770	
CC	0.29	0.32	0.33	0.38	0.38	0.45	0.40	0.49	0.43	0.48	0.55	0.58	0.57	0.48	

The above table describes the year-wise distribution of authorship pattern. The year 2011 there are 412 articles and double author's articles are 740 and it is the highest among

all the categories. In the year 1999 there are 68 articles and 10 authors published one article and it is the lowest among all the other categories.

TABLE VIII DISTRIBUTION OF SUBJECT-WISE AUTHORSHIP PATTERN

Subfield/Authorship pattern	1	2	3	4	5	6	7	8	9	>10	Total	CC
Finance	94	109	37	14	7	2	1				264	0.37
Production	10	14	12	10	5	2	1				54	0.54
Marketing	50	62	34	9	4						159	0.40
Entrepreneurship	5	3	3	2							13	0.38
Systems	95	116	82	30	8	5	1				337	0.43
HR	354	276	142	45	14	7	2	2			842	0.34
Ecology	3	6	8	6	2						25	0.58
Chemistry	84	113	147	128	125	68	48	37	23	2	775	0.65
Psychology	1										1	0.00
Energy	3	12	6	6	2				1		30	0.57
General	35	32	58	44	33	23	20	12			257	0.63
Total	732	740	532	324	195	104	71	46	24	2	2770.00	0.48

The above table describes about the subject-wise distribution of authorship pattern. The double authors articles are 740 and Human Resource subject are 842

articles and it is the highest. The 10 authors have published one article in Psychology subject and it is the lowest among all the other categories.

## V.CONCLUSION

The Authorship pattern in Open access Management Journals: A Bibliometric study revealed that the distribution of publication by length of papers, the institution-wise distribution of Indian contributions, the journal-wise distributions of articles and authorship pattern, year-wise and subject-wise distribution of authorship pattern, the year-wise distribution of annual research output are normal and there is no much difference in authorship pattern in publications.

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