Research Papers



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SRELS JOURNAL OF INFORMATION MANAGEMENT (2006-2011): A BIBLIOMETRIC STUDY

UADAY KUMAR WATTI AND BRAJESH TIWARI

Asstt. Librarian, Indira Gandhi Krishi Vishwavidyalaya, Raipur (Chhattisgarh),INDIA Associate Professor, Deptt. of Library and Information science, Guru Ghasidas Vishwavidyalaya, Bilaspur (Chhattisgarh),INDIA

Abstract

This papers examines the articles published in SRELS Journals of Information Management from 2006-2011 for authorship pattern, Year wise distribution, length of article, degree of collaboration and geographical distribution of authors. The study carried out for this paper found that majority of papers occurred is multiple authored. The degree of collaboration is found to be 0.60. The geographical distribution reveals that the authors of Karnataka contributes the highest number of published articles in India.

KEYWORDS:

Bibliometrics, Librametrics, Scientrometrics

1.INTRODUCTION:

Information is an important thing, which removes much uncertainty, but it mainly depends on the quantity and quality of its availability. It also helps to determine the development of a community.

The information which is systematically organised collected and arranged in such a way that it can be retrieved easily to develop resources of the country and that resources can be directed towards economics, social and cultural growth. As the amount of available data increases, the problems in managing the information become more difficult, this can lead the information overload.

2. DEVELOPMENT OF BIBLIOMETRIC:

Bibliometric studies have been enormously carried out now - a -days at National and International levels. The word 'Bibliometric' is derived from Latin word' Biblio' and the Greek word 'Metrics'. Bibliometric means the application of mathematics to the study of Bibliography. Information managers have adopted quantitative methods in recent years in order to evaluate library resources and services more objectively and effectively. Bibliometric is known as a Sub-discipline in Library and Information Science.

The term 'Statistical Bibliography' was first introduced by Mr. E.W. Hulme in 1923, as mentioned in a footnotes. It refers to "the application of quantity techniques to libraries".

Dr. S.R. Ranganathan coined the term 'Librametry' and presented his concepts at the Aslib conference held at Lemington Sea in 1948. He said that Librametrics was used for library management and to solve the day to day problems in applied mathematics and statistical techniques.

British Librarian Alan Pritchard first introduced the term 'Bibliometric' in 1969 and defined it as

study of the "Application of Mathematics and Statistical methods to books and other media of communication".

A more elaborated 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 communications. The word "Scientrometrics" was first coined by Vassily V. Nalimov and Z. M. Mulchenko in 1969. They found that this term has grown in popularity and used to describe the study of science: growth, structure, inter-relationship and productivity. In practice, Scientrometrics is often used same as such as bibliometrics and it is a measurement of the impact of scientific publications.

The term "Webomatrics" was first coined by Almind and Ingwersen (1997). It helps to measure the world wide web (www) to get knowledge about the number and types of hyperlinks, structure of the www and usage patterns. In the era of information explosion, it is very essential to organise the information resources for effective and efficient use. These types of studies are generally used to identify the publication pattern, authorship, citation and or secondary journal coverage.

3. OBJECTIVES:

- 1. To study the year wise distribution of publication.
- 2. To study the authorship pattern of the publications.
- 3. To study of geographical distribution of publication.
- 4. To study subject wise distribution of publication.
- 5. To study length of papers.
- 6. To study degree of collaboration.
- 7. To study the citations.

4. REVIEW OF LITERATURE:

- 1.Asha Narang (2010) studied the Indian Journal of Pure and Applied Mathematics and worked on Authorship patterns. He found that a single author contributes 37.5% and two authors contribute 40.75% out of total authorship patterns. This clearly indicates the trends of collaborative research with citation and the journal article are the most cited document i.e. 77.47%.
- 2.Patil (2010) studied the journal "Herald of Library Science" from 1995-2005 and evaluate the distribution of articles, authorship pattern, Degree of collaboration among the authors and geographical distribution of papers. He found that maximum number of articles 69.88% had been contributed by single authors and geographical distribution of papers highlights the journal which is dominated by the host country (i.e. India), as most of the articles are contributed by the professional for India.
- 3.Balasubramonian (2010) studied the University News from 2002 to 2006. He analyse the number of papers published, reference mode, authorship pattern, average lengths of papers and found that the publication of articles increased about 1-2% in university news every year. In case of authorship patterns, single author contributed about 30.4% and collaboration authors were 50.3%. This shows that collaboration worked is growing day by day.
- 4.Amudha (2009) evaluated the Indian Journal of Marketing from 2001-2005. He found that 332 articles were published in 5 years. In case of references, 46.4% papers are including 1-5 references and 32.5% papers including 5-10 references. Single author contribution was 30.4% and collaboration authorship was 50.3%. The highest numbers of papers have been written by two authors.
- 5.Nandi (2008) conducted the study of Indian Economic Review from 1998 to 2002 with the objectives to find out the type of documents used by the authors of economics review, authorship pattern and geographical distribution of authors. He found that journal and books contribute the highest number of citations (i.e. 52.69%). Papers of single author were contributed 66.17% and multiple authors contributed 33.82%. The degree of collaboration of authors in this journal from 1998-2002 is 0.33. The maximum contribution of economic review was 52.17% and 27.17% from Indian and USA, respectively.
- 6.Senthilkumaran (2003) evaluated the journal "Spice India" from 1997-2001. His finding shows that one author contribution is 51.29% and three and more than three contributions are only 15%. In case of length of article, 1-3 pages contribution was 82.84%. This trend indicated that most of articles were

popular articles/statistical reports/events which were very helpful to planters/farmers in spice crop cultivation

5. Methodology: For this study, SRELS Journal of Information Management, a leading Journal of Library and Information Science (2006-2010) was selected. Its publication was started in 1964 with four issues in a year. This journal is published by Sharda Ranganathan Endowment for Library Science Bangalore. The study of Bibliometric in this journal was evaluated from Vol. 42 to 46 (2006-2010). Each of Vol. (i.e. 42 to 45) was published in 4 issues in a single year but Vol. 46 (2010) had published in 6 issues in a year.

6. LIMITATION OF THE STUDY:

The study was conducted only for the published articles, not for the guest editorial and book review.

7. ANALYSIS AND DISCUSSION:

7.1 Year wise distribution:

Year	Vol. & No.	Total no. of papers	Percent (%)
2006	43(1-4)	35	12.15%
2007	44(1-4)	36	12.50%
2008	45(1-4)	49	17.01%
2009	46(1-4)	44	15.27%
2010	47(1-6)	62	21.52%
2011	48(1-6)	62	21.52%
Total		288	100%

Year wise Distribution of Papers: This table shows the numbers and period of publications in the Journal and revealed that out of 288 articles (total), highest numbers of articles i.e. 62 were published in the year 2010 & 2011. Whereas, the lowest number of publications i.e. 35 were in year 2006.

7.2 Author wise distribution:

No. of Author	2006	2007	2008	2009	2010	2011	Total	Percent (%)
One Author	10	19	17	16	18	19	99	34.37%
Two Author	18	13	26	26	31	36	150	52.08%
Three Author	5	2	5	2	10	04	28	9.72%
More Than Three	2	2	1	-	3	03	11	3.81%
Total	35	36	49	44	62	62	288	100%

Authorship pattern of Publication: This table mentions the period of study and the extent of collaboration in research. The publications were categorized as single, two, three and more than three authors work. The authorship pattern was analyzed to determine the percentage of single and multiple authorships. The results revealed that majority of publications are of multiple authored articles which constitute 55.08% out of the total papers followed by 34.37% and 09.72% by single authors and by three authors, respectively. This shows that the majority of authors have a tendency to publish their research

work in multiple authorship modes.

Degree of Collaboration among co-authors: The degree of collaboration among authors is measured by the following formula given by K. Subramanyam:

$$C = \begin{array}{c} Nm \\ Nm + Ns \end{array}$$

Where,

C = Degree of collaboration

Nm = Number of multi authored article

Ns = Number of Single authored article

In present study the degree of collaboration,

$$C = \frac{150}{150 + 99} = 0.60$$

So, the degree of collaboration in SRELS journal of Information Management is 0.60, which clearly indicates the degree of collaboration increase during 2006 to 2011.

7.3: No. of authors according to state wise distribution:

Name of State	2006	2007	2008	2009	2010	2011	Total
Andhra Pradesh	1	1	4	1	1	3	11
Assam	-	-	1	-	-	-	1
Gujarat	-	-	1	6	6	-	13
Haryana	-	-	1	-	1	-	2
Jammu Kashmir	-	5	-	-	-	2	7
Kerala	2	2	4	1	3	8	20
Karnataka	29	20	38	54	66	44	251
Maharashtra	13	8	10	1	11	6	49
Madhya Pradesh	-	1	5	-	2	5	13
New Delhi	2	5	2	-	3	3	15
Orissa	2	-	1	-	-	4	7
Punjab	1	5	2	1	3	7	19
Rajasthan	2	1	-	1	4	2	10
Tamil Nadu	9	2	2	5	6	15	39
Utter Pradesh	4	2	3	1	3	6	19
West Bengal	2	7	7	1	9	7	33
Himachal Pradesh	-	1	-	-	1	-	2
Chhattisgarh	-	-	1	-	1	-	2
Pondicherry	-	-	1	-	-	-	1
Uttrakhand	3	-	1	1	-	-	5

Above table compares the authors distribution of different states of India in which authors of Karnataka lead (i.e. 251) which is increasing year after year followed by Maharashtra (49 authors) and

the remaining state having the less number of authors as compared to both states.

Country wise distribution of authors

S.No.	Region	No. of contributors	%
1	India	519	97.92
2	Foreign	11	2.07
Total		530	100

Geographical distribution of authors: The geographical distribution is indicated by two subcategories i.e. Indian and foreign countries. Indian contributes 519 numbers (97.92%) and the foreign contributions are only 11 numbers (i.e. 2.07%).

7.4 Length of Articles

No. of Pages	2006	2007	2008	2009	2010	2011	Total	%
1-5	-	3	3	-	5	5	16	5.55%
6-10	15	17	33	29	36	34	164	56.94%
11-15	14	9	10	11	13	12	69	23.95%
16-20	5	3	3	3	6	9	29	10.06%
>20	1	4	-	1	2	2	10	3.47%
Total	35	36	49	44	62	62	288	100%

Above table shows the length (number of pages) wise distribution of publications. The study resulted that articles written in 6-10 pages contributes largest i.e. 164 (56.94%) followed by 69 (23.95%) articles in the range of 11-15 pages and 10 (3.47%) articles having more than 20 pages.

7.5: Study of citations

No. of References	2006	2007	2008	2009	2010	2011	Total	Percent (%)
0	-	-	1	-	1	1	3	1.04%
1-3	1	3	9	5	3	2	23	7.98%
4-6	9	8	14	11	9	16	67	23.26%
7-10	12	6	6	12	18	14	68	23.61%
11-15	5	7	7	9	13	13	54	18.75%
>15	8	12	12	7	18	16	73	25.34%
Total	35	36	49	44	62	62	288	100%

Above table shows the analysis of numbers of citations given at the end of each articles from the analysis of data. It has been found that out of 288 articles, 73 (25.34%) articles have more than 15 citations, 3 articles have no citations, 68 (23.61%) articles had 7-10 citations and 67 (23.26%) articles

had 4-6 citations.

7.6 Subject wise distribution of papers

S. No.	Keyword	No. of Papers	S. No	Keyword	No. of Paper
1	Academic Library	9	25	Knowledge Management	14
2	Archive	1	26	Library automation	6
3	Bibliometrics	32	27	Library Management	18
4	Classification	3	28	Library Movement	2
5	Collection development	8	29	Library Profession	15
6	Consortia on line Journals	17	30	Library security	1
7	Digital Library	9	31	Library services	10
8	Digitization	7	32	LIS Education	7
9	e-commerce	1	33	Marketing	1
10	e-database	5	34	Mobile banking	1
11	e-governance	1	35	Networking	2
12	e-learning	4	36	OPAC	3
13	Electronic resources	6	37	Open access journals	8
14	HRM	3	38	Public Library	6
15	Impact factor	1	39	Reading Habit	3
16	Indexing	1	40	Reading Skills	1
17	Information Retrieval	8	41	Research Productivity	5
18	Information security	1	42	Subject Heading	1
19	Information seeking	5	43	TQM	1
20	In formation sources and services	11	44	User Satisfaction	1
21	Information Technology	10	45	Users	7
22	Intellectual Property Right	3	46	Virtual Library	2
23	Internet	22	47	Web Technology	4
24	Knowledge communication	1			

Above table shows that the maximum numbers of papers (32) were related to Bibliometric study, followed by 22 paper of Internet, 18 of Library management, 17 paper of Consortia, 14 papers of Knowledge management.

SUGGESTION:

- 1.In this journal, the contribution of foreign authors was too less in respect of publication, which shows that this journal is not so much popular world wide. So, we have to do something to increase the popularity of this journal for increasing the contribution of foreign authors in article publication.
- 2. We have to aware and encourage the authors of different states for increasing the contribution in article publication such as like contributed by authors of Karnataka state.

CONCLUSION:

1.Out of 288 articles, highest numbers of articles i.e. 62 were published in the year 2010 & 2011 in the

Journal. Whereas, the lowest number of publications i.e. 35 were in year 2006.

- 2. The majority of publications are of multiple authored articles which constitute 52.08% out of the total papers followed by 34.37% and 09.72% by single authors and by three authors, respectively. This shows that the majority of authors have a tendency to publish their research work in multiple authorship modes. 3. Karnataka leads the highest authors distribution (i.e. 251) which is increasing year after year followed
- by Maharashtra (49 authors).
 4.Indian authors contribute 519 numbers (97.92%) of article publications and the foreign contributions are only 11 numbers (i.e. 2.07%).
- 5. The articles written in 6-10 pages contributes largest i.e. 164 (56.94%) followed by 69 (23.95%) articles in the range of 11-15 pages.
- 6.Out of 288 articles, 73 articles (25.34%) have more than 15 citations, 3 articles have no citations, 68 (23.61%) articles had 7-10 citations and 67 (23.26%) articles had 4-6 citations.
- 7. The maximum numbers of papers (32) were related to Bibliometric study, followed by Internet (22), Library management (18), Consortia (17) and (14) paper are Knowledge management.

REFERENCES:

- 1. Amudha, S., Baskaran, N. and Mary, A. Lawrence. 2009. Indian Journal of Marketing: A Bibliometric study. IASLIC Bulletin. 54(1):55-58.
- 2. Anand, Manish and Khode, Subhash. 2010. Bibliometric study of Library Herald: 2002-2007. Indian Journal of Information, Library and Society. 23(3-4): 252-257.
- 3.Balasubramonian, P. 2010. University News: a bibliometric study. IASLIC Bulletin. 55(3):189-192
- 4.Hood, Willium W. and Concepcion, S.Wilson. 2001. The literature of Bibliometric, Scientrometrics and Informetrics. Scientrometrics. 52(2): 291-314.
- 5.Kaur, Amritpal and Aggrawal, Sangeeta. 2010. Bibliometric analysis of research publications of department of Chemistry, Guru Nanak Dev University, Amritsar. IASLIC Bulletin. 55 (1):20-28.
- 6.Nandi, Amitava and Bandyopadhyay, Amit Kumar. 2008. Indian Economic Review (1998-2002): a bibliometric study. SRELS Journal of Information Management. 45(1): 95-100.
- 7. Narang, Asha and Anil Kumar. 2010. A Bibliometric study of Pure and Applied Mathematics. SRELS journal of Information Management. 47(1): 31-40.
- 8.Patil, S.B. 2010. Herald of Library Science: A Bibliometric study. SRELS Journal of Information Management. 47(3):351-358.
- 9. Rajendiran, P. 2006. Quantitative analysis of research publications of Raja Ramanna centre for advance technology, Indore: a bibliometric study for 1995 to 2004. IASLIC Bulletin. 51(4):228-233.
- 10.Saravanan, T. and Ponnudurai, R. 2006. Report on the potential aspects of Research in astronomy in G7 countries: a bibliometric analysis. IASLIC Bulletin. 51(3):169-177.
- 11. Senthilkumaran, P. and Vadivel, V.2003. Spice India: a bibliometric study. SRELS journal of Information Management. 40 (4):431-438.
- 12. Shukla, Anil Kumar, Goswami, Prashant and Sharma, Umesh .2010. Bibliometric analysis of Ph.D. Theses in Botany. IASLIC Bulletin. 55(2): 88-102.
- 13.www.wikipedia.com retrieved date 05.04.2013