

Catholic Social Science Review (2002-2011): A Bibliometric Study

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Abstract – The Bibliometric study based on 98 articles in CSSR during the period 2002-2011. Single authored articles are dominant i.e. 87 (88.78%), the year wise distribution of articles was high i.e. 14 (14.29%), the mean of relative growth and Doubling Time for the 10 year was 1.6 and 0.45, The mean value for the overall degree of collaboration for the 2002-2011 is found to be 0.11, majority subject of the articles in Cultural studies i.e. 18.37%.

Keywords: Bibliometric study, Open Access, Authorship pattern, CSSR, Catholic Social Science Review.

I. INTRODUCTION

Bibliometrics is a type of research method used in Library and information sciences. It is an emerging area of research in the LIS field. The quantitative analysis and statistics to describe patterns of publication within a given field of body of literature are utilized. Researchers use bibliometric methods of evaluation to determine the influence of a single author or to describe the relationship between two or more authors or works. Bibliometric studies can be used to study regional patterns of research, the extent of cooperation between research groups and national research profiles. The main derivatives of bibliometrics are: publication counts, citation counts, co-citation analysis, co-word analysis, scientific 'mapping' and citations in patents. The word 'bibliometric' has been derived from the Latin and Greek words 'biblio' and 'metrics' which refer to the application of mathematics to the study of bibliography.

Periodicals are the primary source of information and an important media for communication. Information is one of the most important resources for a nation and forms the integral base for the economic, cultural and scientific development of the country as a whole and periodicals are the main carriers of nascent thought and information.

II. LITERATURE REVIEW

Thanuskodi (2010) in her analysis aimed at analysing the research output performance of social scientists on social science subjects. The analysis covered mainly the number of articles, authorship pattern, subject wise distribution of articles, average number of references per articles, forms of documents cited, year wise distribution of cited journals etc.

Krishnamurthy et al (2009) made an attempt to analyze the Diabetes literature indexed in the MEDLINE database for the period 1995-2005. They found out that the maximum number of records (13244) was during 2003, followed by 12690 in 2002 and 11061 in 2001. In their findings, Relative Growth Rate (RGR) was decreasing year wise. During their study they identified that USA was the largest contributor of literature on diabetes research.

Mohammed Nazim and Moin Ahmad (2008) aimed to offer an overview of research trends in the field of nanotechnology and characterized its most important aspects such as, growth of literature, authorship pattern, most productive journals, authors, countries etc. A total of 2675 articles for the period of 1991-2006 were collected from the Web of Science especially via the Science Citation Index. Authorship pattern and core journals

were examined using Lokta’s law and Bradford’s law of scattering respectively. Their yearly analysis showed that there was a rapid growth of nanotechnology research from the beginning of 21st century.

Asha (2007) analyzed articles and citations in Demography India for a period of ten years from 1972 to 2001. She identified the core areas demographic studies, institution-wise contribution of articles and geographical area pertaining to the articles. Using regression analysis, she formulated Lokta’s relationships and determined the value of constant K and index # relationship she also found out that Lokta’s relationship was only valid for authors with more than 3 publications. She identified most-cited journals and examined bibliographic forms cited documents, average age of citations and rate of citation per article.

III. OBJECTIVES OF THE STUDY

The objectives of the present study are:

1. To Study Year-wise Distribution of Papers.
2. To Study the Authorship Pattern of Papers.
3. To Study the Authorship Collaboration.
4. To Study Year-wise Length of Papers.

5. To Study Length- wise Distributions of Papers.
6. To find out the number of cited documents and the average number of references per article

IV. RESEARCH METHODOLOGY

Methodology applied in the present study is bibliometric analysis which is used to study in detail the bibliographic features of the articles and citation analysis of reference appended at the end of each article, published in Catholic Social Science Review from 2002-2011. The Catholic Social Science Review is published annually in September, publisher society for catholic social scientists in United States. Regarding 98 articles made from volume 7 in 2002 to volume 16 in 2011. Then they are tabulated and analyzed for making observations.

V. ANALYSIS OF THE STUDY

The average number of article publication was 98 articles for ten years. In the study, the Contribution of earlier five years (2005-2009) was less than the average publications per year. Out of 98 articles 14 (14.29%) articles were published in 2006 and 6 (6.12%) articles were in 2005, which are highest and lowest in ten years respectively.

TABLE I YEAR-WISE DISTRIBUTION

Year	Vol. No.	No. of Issues	No. of Contribution	Percentage	Cumulative Percentage
2002	7	2	12	12.24	12.24
2003	8	2	12	12.24	24.48
2004	9	2	9	9.19	33.67
2005	10	2	6	6.12	39.79
2006	11	2	14	14.29	54.08
2007	12	2	11	11.22	65.3
2008	13	2	9	9.19	74.49
2009	14	2	9	9.19	83.68
2010	15	2	8	8.16	91.84
2011	16	2	8	8.16	100
Total			98	100	

TABLE II YEAR-WISE DISTRIBUTION OF OUTPUT

Year	No. of Output	Cum No. of Output	W1	W2	R(a)	Mean R(a)1-2	Doubling time DT(A)	M Dt(a)1-2
2002	12	12		2.48				
2003	12	24	2.48	3.17	0.69		1.01	
2004	9	33	2.19	3.49	1.3		0.53	
2005	6	39	1.79	3.66	1.87		0.37	
2006	14	53	2.63	3.97	1.34		0.52	
2007	11	64	2.39	4.15	1.76		0.39	
2008	9	73	2.19	4.29	2.1		0.33	
2009	9	82	2.19	4.4	2.21		0.31	
2010	8	90	2.07	4.49	2.42		0.29	
2011	8	98	2.07	4.58	2.51		0.28	
Total	98					1.6		0.45

Table indicates the relative growth rates of articles output and also the doubling time for the publication. It could be observed that the relative growth rates of all sources of research output have decreased from 0.69 in 2003 to 2.51 in 2011. The mean relative growth rates for the periods 2002-2011. The study period has witnessed a mean relative growth rate of 1.6. The doubling time for publication have increased

from 1.01 in 2003 to 0.28 in 2011. The mean doubling time for publications for the periods of 2002-2011 was 0.45.

T Table IV calculates the year-wise degree of collaboration for 10 years, the results arise that in the CSSR of 10 years, single authored articles are highest and predominant on multi authorship.

TABLE III YEAR-WISE AUTHORSHIP PATTERN

Year	1 Author	%	2 Author	%	3 Author	%	Total
2002	9	10.35	2	22.22	1	50	12
2003	11	12.64	1	11.11	0	0	12
2004	9	10.35	0	0	0	0	9
2005	3	3.45	3	33.34	0	0	6
2006	12	13.79	2	22.22	0	0	14
2007	11	12.64	0	0	0	0	11
2008	8	9.19	1	11.11	0	0	9
2009	9	10.35	0	0	0	0	9
2010	7	8.05	0	0	1	50	8
2011	8	9.19	0	0	0	0	8
Total	87	100	9	100	2	100	98

TABLE IV DEGREE OF AUTHORS COLLABORATION

Year	Single Author	Multi Author	Total Number of Papers
2002	9	3	12
2003	11	1	12
2004	9	0	9
2005	3	3	6
2006	12	2	14
2007	11	0	11
2008	8	1	9
2009	9	0	9
2010	7	1	8
2011	8	0	8
Total	87	11	98

TABLE V DISTRIBUTION OF AUTHORSHIP PATTERN

Author	No. of Contribution	Percentage
Single Author	87	88.78
Co Author	11	11.22
Total	98	100

Degree of Collaboration

To determine degree of collaboration in quantitative terms, the formula given by K. Subramanyam (1983) was used.

The formula is

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

Where

C = Degree of collaboration

NM = Number of multi authored papers

NS = Number of single authored papers

In the present study the value of C is C = 0.11

TABLE VI DISTRIBUTIONS OF ARTICLES BY LENGTH-WISE

Year	1-10	11-20	21-30	31-40	>40	Total
2002	2	4	4	2	0	12
2003	1	7	2	2	0	12
2004	2	2	4	1	0	9
2005	1	4	1	0	0	6
2006	2	8	3	1	0	14
2007	1	6	2	0	1	11
2008	1	5	1	0	1	9
2009	0	2	6	1	0	9
2010	0	5	3	1	0	8
2011	0	8	0	1	0	8
Total	10	51	26	9	2	98

TABLE VII LENGTH - WISE DISTRIBUTIONS IN RESEARCH OUTPUT

No of pages	Total No. of Article	Percentage	Cumulative Article	Cumulative Percentage
1-10	10	10.21	10	10.21
11-20	51	52.04	61	62.25
21-30	26	26.53	87	88.78
31-40	9	9.18	96	97.36
>40	2	2.04	98	100
Total	98	100		

Regarding the Length of the majority of the papers, 51 (52.04%) papers ranged from 11 to 20 pages. 26 (26.53%) papers had length from 21 to 30 pages. Only 10 (10.21 %) papers had more than 1 to 10 pages. The maximum length of a paper was 45 pages.

TABLE VIII YEAR-WISE DISTRIBUTION OF ANNUAL RESEARCH OUTPUT (ARTICLES) VS RESEARCH PAGES

Year	Annual Research Output(Articles)	Total pages of research output	Average number of pages per Contribution
2002	12	255	21.25
2003	12	236	19.67
2004	9	186	20.67
2005	6	102	17
2006	14	245	17.5
2007	11	237	21.55
2008	9	183	20.33
2009	9	220	24.44
2010	8	156	19.5
2011	8	126	15.75
Total	98	1948	19.87

TABLE IX CITATIONS PER ARTICLE

Year	Total No. of Article	Total no. of Citations	C/A
2002	12	422	35.16
2003	12	572	47.67
2004	9	320	35.55
2005	6	236	39.33
2006	14	701	50.07
2007	11	661	60.09
2008	9	299	33.22
2009	9	518	57.55
2010	8	332	41.5
2011	8	260	32.5
Total	98	4321	44.1

The Year-wise analysis over the study period reveals the average number of pages per contribution for the total output is recorded as 19.87. From the above analysis it is clear that the growth of total output is increasing steadily, which is accounted from 6 to 14 from 2002 to 2011.

The CSSR Journal selected for study contains 98 publications of Articles and 4321 citations. The average rate of citations per article (C/A) was 44.1. But the rate of citations varied from 32.5 to 60.09.

The most popular subject covered within the period of this study is cultural studies with 18 (18.37%) articles. On the other hand, sociology were second with 16 articles (16.32%), and media studies and politics is third with 9 (9.19%) articles.

TABLE X SUBJECT AREA OF ARTICLES

Subject Headings	Total output	Percentage	Cumulative Percentage
Anthropology	1	1.02	1.02
Architecture	1	1.02	2.04
Business studies	2	2.04	4.08
Cultural Studies	18	18.37	22.45
Economics	1	1.02	23.47
Education Studies	3	3.06	26.53
Film Studies	3	3.06	29.59
Geography	1	1.02	30.61
Gender Studies	2	2.04	32.65
Historiography	3	3.06	35.71
History	1	1.02	36.73
International Relations	8	8.16	44.89
Language and Linguistics	3	3.06	47.95
Law	1	1.02	48.97
Literature	5	5.11	54.08
Media Studies	9	9.19	63.27
Narrative Studies	1	1.02	64.29
Philosophy	3	3.06	67.35
Politics	9	9.19	76.54
Popular Culture	1	1.02	77.56
Psychology	1	1.02	78.58
Public Policy	2	2.04	80.62
Religious Studies	3	3.06	83.68
Sociology	16	16.32	100

VI. SUMMARY OF FINDINGS

1. The Year-wise distribution of 98 articles published from 2002-2011 CSSR was seen. Maximum number of articles 14 (14.29%) were in the year 2006 and minimum number of articles 6 (6.12%) were published in the year 2005.
2. The Relative Growth Rate [R(P)] of publications are the mean value of 1.6 and mean value for the Doubling Time [Dt(P)] of 0.45.
3. Single authored articles are dominant i.e. 87 (88.78%), followed by two authored 9(9.18%) and three authored 2(2.04%) respectively.
4. In the collaborative measures in the field of CSSR. The mean value for the overall Collaborative Co-efficient and Degree of Collaboration for the year 2002-2011 is 0.11.
5. 5.18 (18.37 %) of records are in cultural studies. And less than 1 (1.02 %) of records Popular Culture, Psychology, Law, Narrative Studies, Anthropology, Architecture and Economics 1 (1.02%).

VII. CONCLUSION

The journal has published 98 articles during the period of study. The maximum numbers of articles (14.29 %) were published in the year 2006. The present study reveals that the maximum numbers of contributors are single authors with 88.78 %. Similarly most of the subjects are cultural studies (18.37 %). The study revealed that the average rate of citations per article (C/A) was (44.1 %) .The maximum numbers of contributions have the length of 11-20 pages with 52.04 %.

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