Italian Journal of Library and Information Science 2010-2014: a Bibliometric study

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Abstract
Bibliometrics / Scientrometrics are one of the ways to measure the literature outburst. The present study is also intended to discover the growth and authorship pattern of productivity of articles of source journal "Journal of Library and information science ". It was observed from the study that the year 2013 was most participating year during the study period 2010 - 2014. The Relative Growth Rate (RGR) was high in terms of literature productivity and Degree Collaboration (DC) was less in terms authorship pattern i.e., 31 out of 124 (0.25) and many more features were identified.

Keywords : JLIS.it, Bibliometrics, RGR, DC, Global Contribution.

Introduction

JLIS.it, Italian Journal of Library and information science is an academic journal of international scope and open access, aiming to ascribe value international research in Library and Information Science. It is a biannual peer-reviewed academic journal covering research in library and information science. It was established in 2010 and is published by the University of Florence. The editor-in-chief is Mauro Guerrini (University of Florence). The journal board encourages authors (students, researchers, librarians, archivists) to contribute with interdisciplinary or innovative papers, hoping that they can use JLIS.it as a virtual space for theoretical elaboration on the radical transformations happening to cognitive processes of knowledge fruition, and to professional practices due to digital culture innovations. JLIS.it publishes one volume in two six-monthly issues, in June and December.

Review of Literature

There are several studies by different authors analyzing the contributions of different journals of various fields. The growth of scientific research literature on Orissa published during 1985- 2004. It includes 875 research papers from forty different journals. The authorship pattern, year wise growth, subject wise break up of papers, category of journals, place of origin, length of papers, and productivity of journals, Mahapatra et.al. (2006).

The trend of publications such as the year wise distribution of articles, bibliographical distribution of citations, authorship pattern, citation pattern, average length of articles, number of tables and figures used, time lag, geographical distribution of authors and subject analysis have been studied, Jena et.al. (2006).

The productivity of authors and core periodicals has been determined using Lotka's and Bradford's law. Literature growth, country-wise distribution and language pattern has also been studied. Literature growth in this area of LIS has been found to be negative. Most of the papers have been contributed by single authors (72.8%) and two authors (20.69%) and 72 % of literature is published in 72 journals, Mittal et.al. (2006).

The authorship pattern and collaborative research in physics with a sample of 11,412 journals and 1,328 book citations appended

in the physics doctoral dissertations awarded by the Indian Institute of Science, during 1999-2003. The team research is preferred in the field of physics rather than solo research. The average number of authors per journal articles was 3 and for books it was 1.69. The degree of collaboration in different years was calculated and the average value of it for journals was 0.08 and 0.44 for books. The authorship collaboration is more in journal articles than in books. The authorship pattern, the degree of collaboration and the average number of authors were different in journals and in books, Pillai et.al. (2007).

Doctoral degrees awarded in library and information science during2003-2008 was collected from University News. Andhra Pradesh has produced the higher number of Ph.Ds during the period and information sources & services, user studies, library management and bibliometrics are the leading subject areas on which most of the research has been carried out, Madasamy et.al. (2009).

A total of 111 publications from 11 issues of JLIS were published during 1995 to 2010. It has outstanding contribution in the dissemination of LIS research on national and international level as it publishes both in print and electronic format. A bibliometric analysis of contributions published in the PJLIS from 1995 to 2010 has been presented. The study all 11 issues of this journal on the basis of different parameters, viz., author productivity, extent of authors' collaboration, authors' institutional affiliation, authors' geographic affiliation, type of publication, language of papers, number of citations used per article, length of papers, and yearwise distribution of papers, Nosheen et.al. (2011).

The citation patterns in the Malaysian Journal of Library and Information Science (MJLIS) from 2001-2006, the number of publications has increased from the 76

articles in the Tiew study to 85 articles here, with statistically significant changes in the types of article, in the numbers of references per article and in the lengths of the articles. The complete set of 161 articles attracted a total of 87 citations, 52 of which were self-citations, with 14% of the MJLIS articles having been cited at least once, Bakri et.al. (2008).

The 131 contributions of the journal entitled' Annals of Library & Information Studies' published during 1999-2005. It examines year wise, institutions wise, state wise distribution of contributions, authorship pattern, citation analysis, length of the contributions etc. Most of the contributions of this journal are contributed by single author and state wise distribution shows that most of the contributions are contributed from New Delhi. Citation analysis of 1456 citations includes finding out average number of citations per contribution, types of publications cited and preparing of ranked list of cited journals in contributions of this journal. The journals are the most cited publication amongst the library and information scientists and the source journal i.e. Annals of Library and Information Studies is the most cited journal in the contributions of this journal, Verma et.al. (2007).

The biomedical literature of Nigeria was drawn from 295 journals in Medline through which papers on Nigeria were published during the period 1967-2002. The journals according to their subject heading and examined the potential impact factors of a sample of the journals based on Thomson's ISI Journal Citation Reports. Multidisciplinary journals and papers dominated the source types and were also more highly co-authored than the other subject headings; they also have the highest potential impact factor. The implications of this pattern of journal choice on biomedical

research in Nigeria are highlighted, Williams et.al. (2006).

Methodology

The Italian Journal of Library and information science has been selected as the source journal for this study. Ten issues of five volumes from 2010 to 2014 have been selected for the study purpose.

Objectives

- ❖ To identify the Relative Growth Rate (RGR) of the subject.

- ❖ To identify the author contribution towards the subject and its authorship pattern in terms of Degree of Collaboration (DC).

- ❖ To identify the global contribution towards the subject.

Data Analysis

For the purpose of this study, the Bibliographical data was collected from JLIS.it database from website for the period of 2010 to 2014. Collected data were statistically analyzed, calculated, tabulated and presented by using RGR method, Doubling Time and K. Subramanian's formula for Degree of Collaboration for its growth rate of the literature, author contribution and their collaboration, global participation towards the subject, trend of the subject growth and its grey areas etc.

Table 1 Year wise distribution

Serial No.	Year	Articles	% of Records
1	2010	19	15.33
2	2011	19	15.33
3	2012	21	16.93
4	2013	42	33.87
5	2014	23	18.54
TOTAL		124	100

The table represents the year-wise distribution of articles published in JLIS.it. It shows that details regarding the distribution of 124 articles published from 2010-2014. Maximum 42 (33.87 %) articles was published in 2013 and minimum number of contributions i.e., 19 (15.33%) in the year 2010 and 2011.

Table 2 Author wise distribution of records

Authorship pattern	2010	2011	2012	2013	2014	TOTAL	% of Records
Single	16	18	9	34	16	93	75
Double	2	1	2	3	2	10	8.07
Triple	1	0	0	3	5	9	7.25
More than three	0	0	1	2	0	3	2.43
Without Authors	0	0	9	0	0	9	7.25
TOTAL	19	19	21	42	23	124	100%

The above table depicts the details about the different pattern of authorship collaboration was held during the study period for contributing an article. Out of 124 articles, individually responsible authorship owned about 93 (75%) and it was maximum score

in the overall productivity during the study period. In 2012, maximum articles were contributed by one author i.e., 34

Next to it, the 10 (8.07%) articles were contributed by two different authors collaboratively. and more than three authors was contributed only 03 (2.43%) and nine articles rather documents were published without any contributor and it was the least contribution in overall study period.

Table 3: Authorship pattern with Degree of Collaboration

Year	Volume	No. of Authors		Total	Degree of Collaboration
		Single	Multiple		
2010	1	16	03	19	0.157
2011	2	18	01	19	0.052
2012	3	09	12	21	0.571
2013	4	34	08	42	0.181
2014	5	16	07	23	0.304
Total		93	31	124	

$$DC = \frac{31}{93+31} = 0.25$$

It was observed that the Degree of Collaboration was high i.e., 31 (0.25) in terms of collective contribution and individually responsible authors' contribution was less towards the subject. (i.e., 93) The result was extracted by using the K. Subramanian's formula for Degree of Collaboration.

Table 4: Country-wise Distribution of Records

Serial No.	Name of Country	2010	2011	2012	2013	2014	Total	% of Records
1	Italy	16	16	20	28	17	97	78.226
2	Canada	01	00	00	01	00	02	1.613
3	Croatia	01	00	00	00	00	01	0.806
4	India	01	01	00	00	00	02	1.613
5	UK	00	01	00	02	00	03	2.42
6	US	00	01	00	03	01	05	4.034
7	Argentina	00	00	01	00	00	01	0.806
8	France	00	00	00	02	00	02	1.613
9	Spain	00	00	00	01	00	01	0.806
10	Germany	00	00	00	04	00	04	3.226
11	Sweden	00	00	00	01	00	01	0.806
12	China	00	00	00	00	02	02	1.613
13	brazil	00	00	00	00	01	01	0.806
14	Austria	00	00	00	00	01	01	0.806
15	Switzerland	00	00	00	00	01	01	0.806
	TOTAL	19	19	21	42	23	124	100%

Out of 124 contributions of the study period during 2010- 2014, it was observed that there were 15 countries (including India) had contributed towards the subject field. Among them, Italy was the highest contributor during the study period i.e., 97 (78.225%) and according to the study that the year 2013 was remarkable year in terms of articles productivity. And the United States was the highest contributor among the foreign counties towards the subject field i.e., 5 (4.032%). Rest of the foreign countries had also contributed to the subject field during the study period.

Table 5: Institution-wise Distribution of Records

Serial No.	Institutions	No. of Authors	% of Records
1	University	62	50
2	Information centre	16	12.9032258
3	Others	14	11.2903226
4	National Library	11	8.87096774
5	Unknown	10	8.06451613
6	Special Library	5	4.03225806
7	Archives	3	2.41935484
8	Digital Library	2	1.61290323
9	College	1	0.80645161
	Total	124	100%

Others category includes Library Associations, Companies, Commission etc and Unknown category indicates without any information regarding author. The table shows institution wise distribution of contributions of this JLIS.it. Out of 124 contributions, the highest number, i.e., 62 (50%) has been contributed by University and lowest number, i.e., 1 (0.806%) has been contributed by College.

Table 6: Relative Growth Rate and Doubling Time

Year	Volume	No. of Issues	Total No. of Output	Cumulative Total	RGR w1	w2	(w2-w1)	Doubling Time
2010	1	2	19		2.94			
2011	2	2	19	38	2.94	3.63	0.69	1
2012	3	2	21	59	3.04	4.07	1.03	0.66
2013	4	2	42	101	3.73	4.61	0.88	0.78
2014	5	2	23	114	3.13	4.73	1.6	0.43

The above table represents the literature growth pattern based on relative growth rate (RGR) and Doubling Time (DT). Based on the study relative growth rate was high and doubling time was correspondingly less than RGR. It was identified from analysis that growth of the literature was gradually increases.

Conclusion

There was steady growth of research contribution among the Library and Information Science researchers during 2010 to 2014. More number of academic institution as well as LIS professionals to be actively and specifically involved in the subject areas such as Cataloguing, RDA, E-Resources, Information and Communication Technology, Bibliometrics /Scientometrics, Information Sources and Services, LIS Education, Classification and Indexing and Information Literacy which are most popular subjects of LIS are published.

References

- *Bakri, A. & Willett, P. (2008). The Malaysian Journal of Library and Information Science-2006: A bibliometric study. Malaysian Journal of Library & Information Science, 13(1), 103-116. http://drdo.gov.in/drdo/English/index.jsp?pg=vision.jsp*
- *Jena, K.L. (2006). A bibliometric analysis of the journal 'Indian Journal of Fibre and Textile Research, 1996-2004'. Annals of Library and Information Studies, 53(1), 22-30.*
- *Bibliometric analysis of literature on diabetes (1995 - 2004), Annals of Library and Information Studies, 56(3), 150-155.*
- *Mahapatra, R.K. & Jena, P. (2006). Scientific research productivity on Orissa: A bibliometric analysis. Annals of Library and Information Studies. 53(1), 18-21.*
- *Mittal, R., Sharma, A. & Singh, G. (2006). Periodical literature on library and information science education: A bibliometric study. Annals of Library and Information Studies. 53(4), 224-229.*
- *Pillai, K.G. & Sudhier (2007). Authorship patterns in physics literature: An informetric study on citations in doctoral theses of the Indian Institute of Science. Annals of Library and Information Studies. 54(2), 90-94.*
- *Madasamy, R. & Alwarammal, R. (2009). Doctoral degrees in library and information science in India during 2003-2008: A study. Annals of Library and Information Studies, 56 (4), 262-266.*
- *Warraich N.F. & Ahmad, S. (2011). Pakistan Journal of Library and Information Science: A bibliometric analysis. Pakistan Journal of Library & Information Science, 12, 1-7.*
- *Verma, N., Tamrakar, R. & Sharma, P. (2007). Analysis of contributions in 'Annals of Library and Information Studies'. Annals of Library and Information Studies. 54(2), 106-111.*
- *Williams, E.N. (2006). Bibliometric analysis of quantity and quality of nigeria's biomedical literature. Library and Information Science Research Electronic Journal, 16(2).*
- *Hussain, A., Fatima N. & Kumar, D. (2011). Bibliometric analysis of the 'Electronic Library' journal (2000-2010). Webology, 8(1).*
- *http://leo.cineca.it/index.php/jlis/issue/archive accessed on 12.08.2014*
- *http://en.wikipedia.org/wiki/JLIS.it accessed on 08.08.2014*