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Journal of Documentation: A Bibliometrics Analysis (2005-2018)

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Journal of Documentation: A Bibliometrics Analysis (2005-2018)

Abstract

The purpose of this article was to explore the pattern of publications, using bibliometric analysis, of Journal of Documentation for the period of 2005 to 2018. The results of the study shows that a total of 687 articles were published in the 14 years period from 2005 to 2018, with 71 (10.3%) articles being published the highest total in the year 2018. The study confirmed that the maximum number of articles i.e. 304 (43.9%), were published by single authors, out of which, a large number were on research articles. Out of total number of articles published 228 (33.1%) were 16-20 pages in length. Volume number 74 in 2018 had the highest number of citations with a total of 91 (13.6%). In addition, the study confirmed that the highest number of articles were research articles with a total of 493 (71.7), while others were case studies, conceptual studies, literature reviews, viewpoints and technical papers and short communications, *etc*.

Keywords: bibliometrics, India, Journals, references, articles, authorship, journal of documentation

Introduction:

Scientific Information plays a key role for the development of any nation. Journals and scientific magazines are the best and most important source for the latest and updated information. Academic journals and magazines are mostly used by the research scholars, teachers and other professionals for sharing their ideas, thought, innovations and discoveries, *etc*. Thousands of journals and scientific magazines have been published in the field of science and technology as well as in social science. There are so many reasons for which bibliometrics studies have been conducted worldwide. The main objectives of any bibliometrics studies are to assess the research output and overcome on a meticulous subject interest in a particular period of journals. This study also gives us an opportunity to build up a scientific judgement towards the scientific development in a respective subject. Journals are being a primary source of information as such to know the scientific growth of any journal in a particular subject is always advisable.

The study articles highlights the different aspects of all the scientific contents published by any journal during the review period, research output, publication and authorship patterns, geographical information of authors, and reference distribution, *etc.* In view of the above, the study carried out the research output of Journal of Documentation articles published during the period of 2005-2018. Journal of Documentation is one of the longest established academic scholarly journals in the field of library and information science providing a sole forum on theories, concepts, models, framework and philosophies related to documents and recorded knowledge published by Emerald Publishing. This journal is included in both Clarivate Analytics SSCI and SCOPUS. It published quarterly from 1945-1966, expanding to five issues per year from 1997-1999. Since 2000, it continues to publish six issues per year.

Scope and objectives

The present study is restricted to the articles published at volume number 61-74 from 2005- 2018 in Journal of Documentation. The study is carried out on the basis of articles communications, *i.e.* research articles, case studies, conceptual studies, literature reviews, viewpoints and technical papers, *etc.* Other communication like editorial information, technical comments, announcements and acknowledgments, reviewers, ethical standards, review process were excluded from the stud. However, the present study is carried out by the following specific objectives.

- 1. To investigate the literature published in the journal during 2005-2018
- 2. To analyse the year wise distribution of literature
- 3. To study the authorship pattern of published literature
- 4. To understand the average number of references per published literature
- 5. To discover the length of published literature.
- 6. To find out the geographical information about the authors.

Review of related literature:

Bibliometrics studies include the single journal, citation studies, and subject studies, *etc*. The major objectives of this bibliometrics studies is only to know the articles productivity of authors, sex, profession, designation, affiliation address/geographical location, *etc*, other objectives of the study is to know the co-authorship patters and degree of collaboration among the authors, affiliation and countries. There are so many bibliometrics studies have been conducted at national and international levels from some of them have been reviewed here.

Study conducted by Das and Sen, (2001)¹ on journal of Biosciences and found that 18.68% of the articles published as a single author, 52.71% were published as two authors and three authors and 28.61% were more than four authors. They are also found that among all the authors 30 were from India, 3 from foreign and 1 from India and foreign. Garg, Srivastava and Bebi, (2015)3 studied on Journal of Intellectual Property Rights and revealed that the highest number of papers published in the discipline of intellectual property rights and its related fields. They also revealed that near about 40 journals constitute the core of the cited journal and most of them from USA, UK and India and observed that most of the cited journals were to the subject from law, economics and management. Nagarkar, Veer and Kumbhar (2015)⁵ studied the bibliometrics analysis of papers published by faculty of Life Science departments of Savitribai Phule Pune University during 1999-2013 and reveals that almost all the faculties of the university have been published their article with the collaboration of international researchers and extended their research work interdisciplinary and also found that only a very few papers were published by single author and three or more than four authors papers have received more citations in comparison to single author publication. Siwach and Satish Kumar (2015)⁸ studied the bibliometrics analysis of research publications of Maharshi Dayanand University (Rohtak) during 2000-2013 and found that the highest numbers of papers (219) were published in the year 2013 and lowest (30) in 2001 and they also observed that the average citation per paper (ACPP) of MDU papers was 5.58 and this was lodged highest (13.20) in 2001, and the main collaboration Guru Jambeshwar University, Hisar with the 66 papers followed Kurukshetra University, Kurukshetra with 45 papers. A study conducted by Saini, et al. 2015⁷ on Journal of Knowledge and Communication Management during the period from 2011 to 2014 and they found that library science researchers, i.e. 52.21% were cited journals/serials publications in their research work published during the period of study. Siwach and Parmar, (2018)9 studied bibliometrics analysis of research contributions of CCS Haryana Agricultural University, Hisar and found that 15 year publication data of the university shows that 2649 paper were published from 2001-2015 receiving 15282 citation and also reveals that about 47% of the university research publications was published in ten journal and it has collaborated with many institutions at national and international level in its research publication. A study examined by Partap, Bhanu 2018⁶ on Indian Journal of Agricultural Library and Information Services from 2008-16 and observed that on an average, 18 research articles were published per volume in a year and 39.75% articles published with two authored followed by single authored, i.e. 32.36%, and the Karnataka state was in top rank among all other 20 states in India where the maximum contribution. A study conducted by Bhanu Partap (2019)¹⁰ and found that on an average, 11 articles were published per volume in a year during the period of study, whereas, maximum number (47%) of articles was single authored followed by two authored (27%). India is the leading country among all the 24 countries from where maximum number of contribution was in the journal. Dr. Margam Madhusudhan from India is the most prolific author with total contribution of eight articles in the journal during the period of study.

Research methodology:

Keeping in view of the above mentioned objectives of the study, the primary data has been obtained from the Emerald publishers' website (https://www.emeraldinsight.com/journal/jd) and the source journal is an open access journal. It is provide full text access to the journal site and offer wonderful content with authoritative search functionality and timely updates. The whole journals articles data related to study was

downloaded or scanned from the website for last 14 years from volume number 61 (2005) to volume number 74 (2018). The whole data formulated of year of publication with its volume number, author with geographical location, total number of authors, length of paper, number of references cited, by the article and special issues of the article, *etc*. Other data such as editorial information, technical comments, announcements and acknowledgments, reviewers, ethical standards, review process were excluded from the study. Basically the bibliometrics scrutiny method is used in research methodology, which is used for data collection and analysis of attributes of bibliometrics of the literature published in Journal of Documentation. Ranking list of contributing authors and their countries have been prepared based on the complete counting methods and normal counting method. All the data has been interpreted in tabulated and graph distribution.

Data analysis

The analysis of the collected data from the journal web page has analysis of collected data has explained a lot of stimulating findings which findings which indicate many scientific many scholarly characteristic of the source journal.

Table-1: Volume and issue wise distribution of articles

Year	Volume No.	No. of Issues	No. of Articles	Percentage
2005	61	6	43	6.2
2006	62	6	36	5.2
2007	63	6	41	5.9
2008	64	6	43	6.2
2009	65	6	42	6.1
2010	66	6	41	5.9
2011	67	6	43	6.2
2012	68	6	41	5.9
2013	69	6	42	6.1
2014	70	6	54	7.8
2015	71	6	61	8.8
2016	72	6	62	9.0
2017	73	6	67	9.7
2018	74	6	71	10.3
Total		84	687	

The data in table 1 shows that volume and issue wise distribution of articles published in Journal of Documentation during 2005-2018. The journal is published regularly with six issues per year. The data indicated that 687 articles were published in 84 issues during the period of 2005 to 2018. Thus, on an average 49.0 articles were published every year. In first nine years, *i.e.* 2005-2013 the number of article publication was less than average articles and from the years 2014-2018 the number of articles were more than average articles. The highest number of articles (71) was published in volume number 74 (2018).

The data in table 2 shows that authorship pattern paper published during 2005 to 2018 spread over the issues of the journal volumes. The data reveals that the highest 72 (10.0%) authors has been published their articles in volume number 74 (2018), followed by 69 (9.9%) authors has been published their articles in volume number 73 (2017), 62 (8.9%) authors has been published their articles in volume number 71 and 72 (2015-16), 53 (7.6%) authors has been published their articles in volume number 70 (2014) and below 7% authors of the total authors has been published their articles in volume number 61-69 (2005-13).

The single author contribution of papers published during the entire period of the study was 304 (43.9%), which is highest when compared to two, three, four and more than five author's contributions. 217 (31.4%) articles were jointly contributed by two authors, 93 (13.4%) articles were jointly contributed by three authors, 43 (6.2%) articles were jointly contributed by four authors and 34 (4.9%) articles were jointly contributed five or more than five authors.

Table: 2-Authorship pattern of papers published

Year Vol. No Single Two Three Four More than five Total %

2005	61	26	9	7	00	00	42	6.0
2006	62	16	7	7	5	00	35	5.0
2007	63	13	17	7	3	00	40	5.7
2008	64	18	18	7	2	00	45	6.5
2009	65	26	6	3	6	3	44	6.3
2010	66	18	17	00	2	2	39	5.6
2011	67	20	16	5	1	1	43	6.2
2012	68	19	14	6	1	1	41	5.9
2013	69	17	17	6	1	3	44	6.3
2014	70	23	16	10	2	2	53	7.6
2015	71	28	18	8	4	4	62	8.9
2016	72	28	15	9	3	7	62	8.9
2017	73	30	23	10	2	4	69	9.9
2018	74	22	24	8	11	7	72	10.4
Total		304 (43.9)	217 (31.4)	93 (13.4)	43 (6.2)	34 (4.9)	691	100

The data in table 3 shows the cited references in an article distribution pattern during 2005-2018 spread over the issues of the journals volume. The data shows that total 667 numbers of references have been quoted in all the articles published during the volume number (61-74) 2005-2018. The data also reveals that more than 51 number of references have been quoted in 314 (47.0%) articles from 2005-2018, followed by 31-40 number of references have been quoted in 135 (20.0%) articles, 41-50 number of references have been quoted in 104 (15.0%) articles, 21-30 number of references have been quoted in 72 (10.7%) articles, 11-20 number of references have been quoted in 29 (4.3%) articles and 1-10 number of references have been quoted in 13 (1.9%) articles only from 2005-2018. Some of the articles from 2007-2018 have not been quote any references in their articles.

Out of total references 667, the highest number of references 91 (13.6%) have been cited in volume number 74 (2018), followed by 67 (10.0%) references have been cited in volume number 73 (2017), 61(9.1%) references have been cited in volume number 71 (2015), 54 (8.0%) and 52 (7.7%) number of references have been cited in volume number 70 (2014) and 72 (2018) and rest of the volumes 61-69 from (2005-2013) have been cited below 50 number of references. The data also reveals that more than 100 number of references have been quoted in 11 articles published from 2005-2018.

Table 3 References in papers published during 2005-2018

No of	V	V	V	V	V	V	V	V	V	V	V	V	V	V	Total	%
ref	61	62	63	64	65	66	67	68	69	70	71	72	73	74		
1-10	5	1	0	0	1	1	0	1	2	1	0	0	0	1	13	1.9
11-20	5	4	4	4	2	0	1	1	5	1	1	0	0	1	29	4.3
21-30	6	6	6	10	3	4	6	3	3	8	4	0	6	7	72	10.7
31-40	7	13	9	10	8	12	9	8	9	13	9	6	8	14	135	20.2
41-50	7	3	7	7	7	9	4	2	9	8	8	8	10	15	104	15.5
>51	10	7	15	12	21	14	23	25	14	23	39	38	43	53	314	47.0
	40	34	41	43	42	40	20	40	42	54	61	52	67	91	(100)	100
	(5.9)	(5.0)	(6.1)	(6.4)	(6.2)	(5.9)	(2.9)	(5.9)	(6.2)	(8.0)	(9.1)	(7.7)	(10.0)	(13.6)	667	

The data in table 4 shows that the special issues publication from 2005-2018 The data reveals that during the coverage of the study four issues has been published as special issues on different aspects In Volume number 61 issue number 1 (2005) published as a special issue on LIS and the philosophy of science and the guest editor of this issue was Birger Hijorland In Volume number 63 issue number 1 (2007) published as a special issue on Human information behaviour and the guest editor of this issue was Amanda Spink and Allen Foster In Volume number 70 in issue number 2 and 6 published as a special issue on the future of research libraries and Festschrift in honour of Nigel Ford

Table 4 Special issues of different aspects

Year V Issue Theme	Guest editor's
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2005	61	1	LIS and the philosophy of science	Birger Hjørland
2007	63	1	Human information behavior	Amanda Spink and Allen Foster
2014	70	2	The future of research libraries	
2014	70	6	Festschrift in honor of Nigel Ford	

The data in table 5 signify that the length of paper published during 2005-2008 The data shows that total 687 numbers of pages have been used in all the articles published during the volume number (61-74) 2005-2018 The length of paper has been considered only the original articles except editorial, reviews of any books *etc* have been excluded from the study.

The data also reveals that the length of 16-20 pages have been used 228 articles, followed by the length of 21-25 pages have been used 186 articles, the length of 11-15 pages have been used 132 articles, the length of more than 26 pages have been used 87 articles and the length of 6-10 pages have been used 42 articles and the length of 1-5 number of pages have been used only 12 articles.

Table 5 Length of paper published during 2005-2018

No of ref	V 61	V 62	V 63	V 64	V 65	V 66	V 67	V 68	V 69	V 70	V 71	V 72	V 73	V 74	Total
1-5	5	1	0	0	0	0	0	0	2	1	1	1	0	1	12 (1.7)
6-10	8	4	1	4	1	1	1	4	4	2	3	1	3	5	42 (6.11)
11-15	9	9	6	9	8	10	5	9	6	4	9	11	16	21	132 (19.2)
16-20	8	9	11	14	10	12	15	10	13	26	17	26	31	26	228 (33.1)
21-25	8	9	17	11	14	12	15	13	12	13	24	14	12	12	186 (27.0)
>26	4	3	6	5	9	6	7	5	5	8	8	9	6	6	87 (12.6)
Total	42 (5.8)	35 (5.0)	41 (5.9)	43 (6.2)	42 (6.1)	41 (5.1)	43 (6.2)	41 (5.9)	42 (6.1)	54 (7.8)	62 (9.0)	62 (9.0)	68 (9.8)	71 (10.3)	687

Out of total references 687, the highest pages 71 (10.3%) have been used in volume number 74 (2018), followed by 68 pages in volume number 73 (2017), 62 (9.0%) pages have been used in volume number 71 and 72 (2015-16), 54 (7.8%) pages have been used volume number 70 (2014) and rest of the volume from 61-69 (2005-2013) have been used below 50 pages for writing any articles.

The data in table 6 explained volume wise distribution of types of articles such as research articles, case studies, conceptual studies, literature reviews, viewpoints and technical papers, *etc.* published during 2005-2018. The data reveals that 493 (71.7%) of the articles published from 2005-2018 related to research articles, followed by 126 (18.3%) of the articles published related to conceptual articles and below 5% of the articles published related to case studies, literature reviews, viewpoints and technical, *etc.*

Table 6 Volume wise distribution of types of article published from 2005-2018

Types of articles	V 61	V 62	V 63	V 64	V 65	V 66	V 67	V 68	V 69	V 70	V 71	V 72	V 73	V 74	Tot al	%
Research article	19	29	33	32	28	33	31	26	29	53	36	45	51	48	493	71.7
Case study	2		1				1		1	1	3	2	1	1	13	1.8
Conceptual	11	5	6	5		5	9	16	9		16	14	12	18	126	18.3
Literature Review	7	1		6	4	2	1	1	1		3	1	3	1	31	4.5
Viewpoint	6				2	2			2		4	2	1	1	20	2.9
Technical							1					1		2	4	0.5
Total	(6.5) 45	(5.0) 35	(5.8) 40	(6.2) 43	(4.9) 34	(6.1) 42	(6.2) 43	(6.2) 43	(6.1) 42	(7.8) 54	(9.0) 62	(9.4) 65	(9.8) 68	(10.3) 71	687	100

The data in table 7 identify the geographical diversity of contributing of authors of Journal of documentation during the study period. Countries name have been discovered from the corresponding affiliating institutions from their respective publications of the journal. The data shows that all the

contributors are from 54 countries over the entire world and published 687 different types of articles in journal of documentation during the study period. Out of which from entire world, European countries authors contributed more publications, followed by North America, Australia/ Oceania and Asia. A rank list has been arranged on the basis of affiliations of the contributing authors from different countries over the entire world with normal counting methods. United Kingdom has been contributed the largest number of authors 377 (28.77%) by affiliating institution, followed by United States of America 250 (19.08%), Finland 83 (6.33%), Sweden 82 (6.25%), Canada 69 (5.26%), China 58 (4.42%), Australia 50 (3.81%), Denmark 49 (3.74%), Norway 29 (2.21%), Belgium 25 (1.90%) and other 36 countries over the world 238 (18.16%). It is observed that top two countries, *i.e.* United Kingdom and United States of America were producing about 50% of the total authors of the entire world and indicated that authors of both the countries highly dominated towards the research.

Table 7 Geographical distribution of contributing authors of the JOD

Rank	Country	Frequency of authors	Percentage	Cumulative %
1	UK	377	28.77	28.77
2	USA	250	19.08	47.85
3	Finland	83	6.33	54.18
4	Sweden	82	6.25	60.43
5	Canada	69	5.26	65.69
6	China	58	4.42	70.11
7	Australia	50	3.81	73.92
8	Denmark	49	3.74	77.76
9	Norway	29	2.21	79.87
10	Belgium	25	1.90	81.77
11	Another 36 countries	238	18.16	99.93
Total	54 countries	1310	100	100

Conclusion:

Some major findings of the study are given as under:

The present bibliometrics study is based on data collected from Journal of Documentation from volume no 61-74 (2005-2018). The bibliometrics results may be different if selected different volume numbers. In this study the researcher exclude the entire editorial, book reviews, and other types of communications except research articles, case studies, conceptual studies, literature reviews, viewpoints and technical papers, *etc*.

Journal of Documentation has published 687 articles from 2005-2018. The highest (71) number of articles has been published in volume number 74 (2018). There is a significant growth in the number of articles published from 2005-18. The study shows that the maximum of 304 (43.9%) articles at single author contribution of papers published during the entire period of the study which was highest when compared to two, three, four and more than five author's contributions and 691 authors has been published their articles during the study period. Study reveals that total 667 references quoted and four special issues have been published during the study. European countries authors have been contributed more publications during 2005-2018, followed by North America, Australia/ Oceania and Asia.

The results of the paper shows that total 687 articles has been published during 2005-2018 and on an average 49.0% articles published every year. The highest (71) number of articles has been published in volume number 74 (2018).

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