

The Coverage of Library and Information Science Literature in Web of Science

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Abstract - The main objective of this study is to explore scholarly communication trends in the field of Library and Information Science Literature. A total of 28056 records from Web of Science database, Library and Information Science collected from 1989 to 2017, were analyzed. It examines based on its publication output in Library and Information Science during 1989-2017, based on several parameters, including the country annual average growth rate, global publication share, national publication output, etc. The study uses 29 years (1989-2017) publications data in Library and Information Science drawn from Web of Science Database.

Keywords: Library and Information Science, Bibliometrics, Literature, Web of Science

I. INTRODUCTION

There is an extensive amount of Library and Information Science writing produced each year. While there is general awareness regarding the variety of literature, there is no certainty on the percentage of the collection that we can call research. This project is an important first step in answering the question. Analysis of Library and Information Science in web of science. Bibliometrics Measures of a scientific writer's influence are called Bibliometrics. Techniques for discerning this influence, or impact, range from simple counts of publications to sophisticated mathematical equations. Bibliometrics is a set of methods used to study or measure texts and information. While bibliometric methods are most often used in the field of library and information science, bibliometrics have wide applications in other areas. In fact, many research fields use bibliometric methods to explore the impact of their field. The last three decades have seen a growing interest in Library and Information Science research and its applications. Library and Information Science scholars and practitioners are sharing their ideas, applications, standards, research findings and implementation ideas through various communication channels.

II. LITERATURE REVIEW

Libraries also use bibliometric data for various purposes, including developing and accessing the effectiveness of their collections. Many libraries use journal impact factor as one of the criteria for selecting and cancelling journal titles (Guryev and Mazov 2013). Vallmitjana and Sabaté (2008)

pointed out that citation analysis data can help libraries identify the most frequently consulted journals and obsolescence rate of journals in a particular subject area.

Some bibliometric studies have also investigated publication of Library and Information Science trends in different types of literacy. Bankson (2009) analyzed literature on health literacy Science held during 1997-2007 and found a gradual growth in articles in this discipline. Tsay and Fang (2006) also found a steady increase in information literacy literature, mostly publication of Library and Information Science published in English language journals. They reported that more than 66% of the LIS literature was published Library and Information Science held in the USA and Great Britain. Their study also revealed that the most productive authors were primarily female university faculty and their major research fields were Library and Information science, bibliographic instruction and information technology.

III. OBJECTIVES OF THE STUDY

The main focus of the study is

1. To identify the annual distribution and growth of Library and Information science during the period 1989-2017.
2. To analyze the publication share in global level growth of research output during the period 1989-2017 in Library and Information science.
3. To analyze the productivity of type of literature output in WOS.
4. To find out the highest productivity language of the literature.

IV. METHODOLOGY

This study is based on the publications output as indexed by Web of Science database for the period 1989-2017. The data collection up to September 2017. MS Excel as well as his cite analytical tools were used for data analysis. Some areas covered in the data analysis included: annual growth in Library and Information science publications, top countries producing Library and Information science literacy

literature. The study focuses on the publication patterns of research output in 28056 records are analyzed.

V. RESULTS AND DISCUSSION

TABLE I YEAR WISE CITATION OF GLOBAL DISTRIBUTION OF RESEARCH LITERATURE IN LIBRARY AND INFORMATION SCIENCE

S. No.	Publication Year	Recs	Percent	LCS	GCS
1	1989	876	3.1	507	794
2	1990	874	3.1	644	1113
3	1991	994	3.5	1115	2493
4	1992	992	3.5	1392	2659
5	1993	1002	3.6	1170	2937
6	1994	1035	3.7	1077	2560
7	1995	1037	3.7	1112	2659
8	1996	991	3.5	1555	3362
9	1997	916	3.3	1266	1946
10	1998	899	3.2	1204	3836
11	1999	871	3.1	1552	1309
12	2000	311	1.1	739	1734
13	2001	749	2.7	1522	3991
14	2002	860	3.1	1636	4526
15	2003	852	3	1599	3882
16	2004	800	2.9	1746	4213
17	2005	931	3.3	2094	4924
18	2006	986	3.5	2057	4842
19	2007	1005	3.6	1892	5532
20	2008	1098	3.9	1982	4896
21	2009	1067	3.8	1699	4098
22	2010	1072	3.8	1783	4400
23	2011	1042	3.7	1607	1735
24	2012	956	3.4	1379	2675
25	2013	1007	3.6	1078	1979
26	2014	1085	3.9	697	1535
27	2015	1656	5.9	474	865
28	2016	1805	6.4	126	271
29	2017	287	1	2	6
Total		28056	99.9	36706	81772

Year wise distribution of the Library Science research at global level found up and down Growth and over the years of study. It could revealed that the highest growth particularly in the year 2016 have got more than 1805 publications covered by the source database. In year 2000 registered Lowest number of publications as 311, which is followed by 2001 (749). It is inferred that the total local citation score is 36706 and the total global citation score for the study period 81772.

TABLE II YEAR-WISE DISTRIBUTION OF LIBRARY AND INFORMATION SCIENCE RESEARCH OUTPUT AT GLOBAL LEVEL

S. No.	Publication Year	Records	Percent	Cumulative Publication	Cumulative % to Publication
1	1989	876	3.1	0	0
2	1990	874	3.1	1750	6.2
3	1991	994	3.5	1868	9.7
4	1992	992	3.5	1986	13.2
5	1993	1002	3.6	1994	16.8
6	1994	1035	3.7	2037	20.5
7	1995	1037	3.7	2072	24.2
8	1996	991	3.5	2028	27.7
9	1997	916	3.3	1907	31
10	1998	899	3.2	1815	34.2
11	1999	871	3.1	1770	37.3
12	2000	311	1.1	1182	38.4
13	2001	749	2.7	1060	41.1
14	2002	860	3.1	1609	44.2
15	2003	852	3	1712	47.2
16	2004	800	2.9	1652	50.1
17	2005	931	3.3	1731	53.4
18	2006	986	3.5	1917	56.9
19	2007	1005	3.6	1991	60.5
20	2008	1098	3.9	2103	64.4
21	2009	1067	3.8	2165	68.2
22	2010	1072	3.8	2139	72
23	2011	1042	3.7	2114	75.7
24	2012	956	3.4	1998	79.1
25	2013	1007	3.6	1963	82.7
26	2014	1085	3.9	2092	86.6
27	2015	1656	5.9	2741	92.5
28	2016	1805	6.4	3461	98.9
29	2017	287	1	2092	99.9
Total		28056	99.9	54949	

Table II show year wise publication of Library and Information Science research at global level.

This study covers the analysis of research papers publication in Library and Information Science in twenty nine year during 1989-2017. It is observed that the highest productivity is reordered in 2016 with 1805 (6.4%) of the publications. It is followed by 2015 with 1656 records (5.9%).

TABLE III GEOGRAPHICAL DISTRIBUTION OF PLACE OF PUBLICATION

S. No.	Country	Records	Percentage
1	USA	11010	39.2
2	Unknown	7627	27.2
3	UK	2284	8.1
4	Canada	1161	4.1
5	Australia	779	2.8
6	Germany	620	2.2
7	Spain	468	1.7
8	Peoples R China	351	1.3
9	India	323	1.2
10	South Africa	296	1.1
11	Brazil	240	0.9
12	New Zealand	237	0.8
13	Nigeria	225	0.8
14	Taiwan	193	0.7
15	Italy	165	0.6
16	Japan	152	0.5
17	Iran	147	0.5
18	South Korea	137	0.5
19	Malaysia	129	0.5
20	Netherlands	117	0.4
21	Sweden	117	0.4
22	Finland	109	0.4
23	Turkey	104	0.4
24	Denmark	103	0.4
25	Singapore	100	0.4
26	France	97	0.3
27	Mexico	94	0.3
28	Greece	87	0.3
29	Israel	87	0.3
30	Belgium	86	0.3
31	Pakistan	76	0.3
32	Ireland	75	0.3
33	Norway	63	0.2
34	Saudi Arabia	60	0.2
35	Ghana	59	0.2
36	Slovenia	58	0.2
37	Botswana	48	0.2
38	Russia	46	0.2
39	Kuwait	45	0.2
40	Portugal	43	0.2
41	Austria	41	0.1
42	Poland	40	0.1
43	Switzerland	38	0.1

44	Lithuania	36	0.1
45	Serbia	36	0.1
46	Argentina	31	0.1
47	Croatia	29	0.1
48	GDR	28	0.1
49	Hungary	25	0.1
50	Colombia	23	0.1
51	Qatar	21	0.1
52	Bangladesh	19	0.1
53	Cuba	19	0.1
54	Czech Republic	18	0.1
55	Romania	16	0.1
56	USSR	14	0
57	Bulgaria	13	0
58	Egypt	13	0
59	Jordan	13	0
60	Tanzania	13	0
61	Thailand	13	0
62	Chile	12	0
63	Oman	12	0
64	U Arab Emirates	12	0
65	Estonia	11	0
66	Jamaica	11	0
67	Kenya	11	0
68	Ethiopia	10	0
69	Slovakia	10	0
70	Trinidad & Tobago	10	0
71	Papua N Guinea	8	0
72	Uganda	8	0
73	FRG	7	0
74	Sri Lanka	7	0
75	Venezuela	7	0
76	Ecuador	6	0
77	Hong Kong	6	0
78	Iceland	6	0
79	Malawi	6	0
80	Peru	6	0
81	Vietnam	6	0
82	Lebanon	5	0
83	Philippines	5	0
84	Sierra Leone	5	0
85	Zambia	5	0
86	Algeria	4	0
87	Kazakhstan	4	0
88	Malta	4	0

89	Uruguay	4	0
90	Zimbabwe	4	0
91	Costa Rica	3	0
92	Indonesia	3	0
93	Luxembourg	3	0
94	Namibia	3	0
95	Sudan	3	0
96	Latvia	2	0
97	Moldova	2	0
98	Nepal	2	0
99	Niger	2	0
100	Swaziland	2	0
101	Syria	2	0
102	Ukraine	2	0
103	Albania	1	0
104	Armenia	1	0
105	Bahrain	1	0
106	Benin	1	0
107	Burkina Faso	1	0
108	Byelarus	1	0
109	Cambodia	1	0
110	Cyprus	1	0
111	Czechoslovakia	1	0
112	Fiji	1	0
113	Iraq	1	0
114	Lesotho	1	0
115	Macedonia	1	0
116	Maldives	1	0
117	Mauritius	1	0
118	Montenegro	1	0
119	Morocco	1	0
120	Mozambique	1	0
121	Senegal	1	0
122	Senegambia	1	0
123	Seychelles	1	0
124	St Lucia	1	0
125	United Kingdom	1	0
126	W Ind Assoc St	1	0
127	Yemen	1	0
128	Yugoslavia	1	0
	Total	28984	100

Table III reveals the countries of origin of the authors. Library and Information Science research literature output is found to have been contributed by scholars from 128 countries of the world among which USA takes the lead forming 11010 records. The second leading country is

United Kingdom 2284 records (8.1%) followed by Canada (11.61%). Australia is in the 4th place while Germany is in the 5th. Spain has contributed 1.7 per cent of the total world output while India has contributed 1.2 per cent of the total output.

It is noted that nearly 72 per cent of the total research output has been contributed by countries forming 0 per cent of the total of 128 countries involved. The 7627 records show unknown countries with 27.2% of the total countries. This table helps to know the fact that certain countries gives more research output in Library and Information Science Subject it is also help to know the countries that are leaders in the field. So Library and Information Science publication was released from 178 countries.

TABLE IV DISTRIBUTION OF PUBLICATION BY TYPE OF DOCUMENTS

S. No.	Document Type	Records	Percentage
1	Article	15653	55.8
2	Book Review	6467	23.1
3	Editorial Material	1571	5.6
4	Unknown	1491	5.3
5	Article, Proceedings Paper	1110	4
6	Review	460	1.6
7	News Item	441	1.6
8	Note	211	0.8
9	Letter	179	0.6
10	Meeting Abstract	126	0.4
11	Reprint	87	0.3
12	Software Review	54	0.2
13	Correction	52	0.2
14	Biographical-Item	46	0.2
15	Bibliography	36	0.1
16	Database Review	24	0.1
17	Correction, Addition	18	0.1
18	Item About an Individual	15	0.1
19	Discussion	12	0
20	Hardware Review	2	0
21	Fiction, Creative Prose	1	0
	Total	28056	100

The literature on the subject Library and Information science has been published in many different forms such as Article, Book review, letter, news item etc. The main objective of this analysis is to know the forms in which the literature on the subject 'Library and Information Science' is being published. This study helps the information scientist/librarians in knowing the most productive form of literature on the subject.

Table IV shows the Research productivity in Library and Information Science is available in various formats like

journal articles, Proceedings paper, book reviews, editorial Material, meeting abstract, etc. Journal articles take the major share of 15653 records with 55.8 per cent of the total output followed by Book Review (23.1%). Editorial Material 5.6 per cent of the total output taken for study. 1491 Publication shows in known document type. Article proceeding papers 4% of the total 28056 records. The collection of data divided in to 21 types of Document. Review and news item reach sixth and seventh place of document type. It is followed by note, letter, meeting abstract and reprint shared by 0.8%,0.6%,0.4% and 0.3% of the publication. Some of the Publication covered Software, Hardware and Database Review.

TABLE V DISTRIBUTION OF PUBLICATION BY LANGUAGE OF PUBLICATION

S. No.	Language	Records	Percentage
1	English	24552	87.5
2	Unknown	1491	5.3
3	German	1010	3.6
4	Spanish	474	1.7
5	Portuguese	204	0.7
6	Japanese	99	0.4
7	Italian	80	0.3
8	Turkish	59	0.2
9	French	44	0.2
10	Russian	22	0.1
11	Catalan	12	0
12	Chinese	4	0
13	Hungarian	4	0
14	Multi-Language	1	0
	Total	28056	100

Table V observed the language wise publication of Library and Information Science research output during the period of study. Library and Information Science research literature is available in 14 languages. Out of 28056 publications about 24552 papers appeared in English, which is ranked first covering 87.5 per cent of the total output. The second major contribution is in German followed by Spanish. Here it is to be noted that Indian languages does not find any place in the research output on Library and Information Science. Indian contributions are there in English, yet Indian languages did not find place in Library and Information Science research literature. Though there are many publications from various countries like France, Germany, China, etc. having different regional languages, it is found that the scholars from these countries prefer to published Library and Information Science in English only. These table show only one publication cover Multi language, and 5.3% totally 1491 publication shows unknown Language.

Table VI shows the Triennial Publications. The triennial publications output in Library and Information Science

showed that only 8718 (31.39%) articles during 1989 - 1997, 7259 (26.13 %) of papers in 1998 - 2006 and 11793 (42.46 %) of papers in 2007 - 2016.

TABLE VI TRIENNIAL PUBLICATION OUTPUT OF LIBRARY AND INFORMATION SCIENCE FROM 1989 – 2016

Year	Record	Cumulative Record	Terineel %	Cumulative %
1989-1997	8718	8718	31.39	31.39
1998-2006	7259	15977	26.13	57.53
2007-2016	11793	27770	42.46	100
Total	27770		99.98	

VI. CONCLUSION

The quality and quantity of research are made available through indexing journals of various articles.. the subject terms or keywords associated with the article. 28056 records were identified during the period 1989-2017. During the study period, totally 28056 articles were published and maximum of 11010 (48.14%) articles by USA and India with 323 (14.17%) publications. Library and Information Science research literature is available in 14 languages. The second major contribution of language is in German. Journal articles take the major share of 15653 records with 55.8 per cent of the total output followed by Book Review (23.1%). This study will benefit students, faculty, and staff with research requirements as well as librarians who guide patrons through a search for research literature.

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