

RESEARCH PUBLICATIONS IN OPEN ACCESS WITH SPECIAL REFERENCE TO DIRECTORY OF OPEN ACCESS JOURNALS (DOAJ): AN ANALYSIS

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Introduction

1. Open Access

"Open Access" is a term commonly used for a movement that promotes free availability and unrestricted use of research and scholarship. Open-access (OA) literature is digital, online, free of charge to the reader, and free of most copyright and licensing restrictions, so there are no price barriers and no permission barriers.

Open access (OA) refers to online research outputs that are free of all restrictions on access (e.g., access tolls) and free of many restrictions on use (e.g. certain copyright and license restrictions). Open access can be applied to all forms of published research output, including peer-reviewed and non peer-reviewed academic journal articles, conference papers, theses, book chapters, and monographs.

1.1 Directory of Open Access Journals (DOAJ)

DOAJ is an online directory that indexes and provides access to high quality, open access, peer-reviewed journals. The Directory of Open Access Journals was launched in 2003 at Lund University, Sweden, with 300 open access journals and today contains more than 10000 open access journals covering all areas of science, technology, medicine, social science and humanities. DOAJ is a membership organisation and membership is available in 3 main

categories: Publisher, Ordinary Member and Sponsor. DOAJ is a white list of open access journals and aims to be the starting point for all information searches for quality, peer reviewed open access materials. The aims of Directory of Open Access Journals are

- To increase the visibility and ease of use of open access scientific and scholarly journals, thereby promoting their increased usage and impact.
- To be comprehensive and cover all open access scientific and scholarly journals that use a quality control system to guarantee the content.

2. REVIEW OF LITERATURE

According to **Crawford (2011)**¹ explained the key issues relating to unrestricted online open access to scholarly publications and it also discusses the creation of the open access scholarly publishers association. **Mukherjee (2008)**² found that most of open access journals are published in English languages and further suggested that the authors should deposit their research publications in Institutional Repositories and to make them for free access. He also expects that LIS journals in open access domain would be published in large number by other countries. **Sivakumaran, S and Jeyapragash, B (2012)**³ examined the open access journals which are listed in DOAJ (Directory of Open Access Journals) under the Library and Information Science.

Abstract

This paper describes the Open Access journals which are listed in DOAJ (Directory of Open Access Journals) under the all disciplines. The objectives of this study are to analyse the open access journals published in last five years by subject wise and language wise, year wise and also to know the multidisciplinary approach of publications. Data were analysed based on the details available the DOAJ.org website, the study found that the large numbers of journals are published in English language. The large numbers of open access journals have been published in Medicine and less number of journals published in Navel science. It is recommended that developing countries like India should create an awareness to publish an open access journals and also very required the social sciences research should concentrate to publications more articles in open access.

Keywords : Open Access journals, Directory of Open Access Journals, OA, Open Access: DOAJ

The objectives of this study are to analyse the open access journals published in various years, languages, countries and multidisciplinary subjects. The majority of journals are published by USA: the large number of journals is published in English language. It is further found that during 1996-2005, more number of open access journals has been published and less numbers of journals were published in multilingual languages. It is recommended that developing countries like India should create an awareness to publish open access journals. **Kaushal Chauhan (2012)**⁴ evaluated open access e-journals in LIS available on Directory of Open Access Journals (DOAJ). The DOAJ provides access to quality controlled Open access journals. DOAJ is an effective source of information for the present day. There is no alternative and substitute to its abundance, utility, and value. This paper is an effort to guide students, researchers, scholars about free, full-text, and quality-controlled scientific and scholarly journals in Library and information science available on DOAJ. **Reyaz Rufai, Sumeer Gul and Tariq Ahmad Shah (2011)**⁵ explored the status of open access titles in the field of Library and Information Science (LIS). A systematic method for characterizing the open access titles in the field of Library and Information Science was carried out by extracting the data from Directory of Open Access Journals (DOAJ), Open J-Gate, and Ulrichsweb.com. The results clearly reveal an expounding growth of open access titles in the field of Library and Information Science. Commercial publishers have also joined hands as open access market players. Indexing policies of OA titles in LIS need to be restructured and low income nations have to evolve in the field of OA bazaar. **Mohammad Karim Saberi (2009)**⁶ described that discussed the open access movement and modes of open access as well as the characteristics and definitions associated with OAJ. The study also highlighted on classification of OAJ along with their advantages, Means for financing such journals as well as directory of open access journals. Finally, the OAJ covered by ISI also covered. **Mikael Laakso, Helena Bukvova, and Patrik Welling, (2011)**⁷ Open Access (OA) is a model for publishing scholarly peer reviewed journals, made possible by the Internet. The full text of OA journals and articles can be freely read, as the publishing is funded through means other than subscriptions. Empirical research concerning the quantitative development of OA publishing has so far consisted of scattered individual studies providing brief snapshots, using varying methods and data sources. This study adopts a systematic method for studying the development of OA journals from their beginnings in the early 1990s until 2009. by DOAJ. Due to the high number of journals registered in the DOAJ, almost 5000 at the time of the study, stratified random sampling were used.

A separate sample of verified early pioneer OA journals was also studied. The result shows a very rapid growth of OA publishing during the period 1993–2009. During the last year an estimated 191 000 articles were published in 4769 journals. The study systematic that based on qualitative data a division into three distinct periods as: The Pioneering years (1993–1999), the Innovation years (2000–2004), and the Consolidation years (2005–2009).

3. Objectives of the Study

- To find out the language wise publication of open access journals
- To find out the subject wise journals and articles productivity of open access journals
- To study the year wise productivity of open access journals
- To study the journal publication for the year 2015
- To know the articles published in DOAJ for the year 2015

4. Methodology

The study carried out to analyze the journals listed in DOAJ (Directory of Open Access Journal) under all disciplines. It is found that 10,856 journals (at the time of data as on 13th December 2015) have been listed under DOAJ. The study is also aimed to analyse year, language, and multidiscipline wise publications of journals. The data/ information were extracted from the DOAJ website (www.DOAJ.org) for this study. The Data were analysed using Excel. Figure 1 shows the number of Journals and Articles in DOAJ Database. The Number of open access journals considered in our study of large number of journals in Medicine.

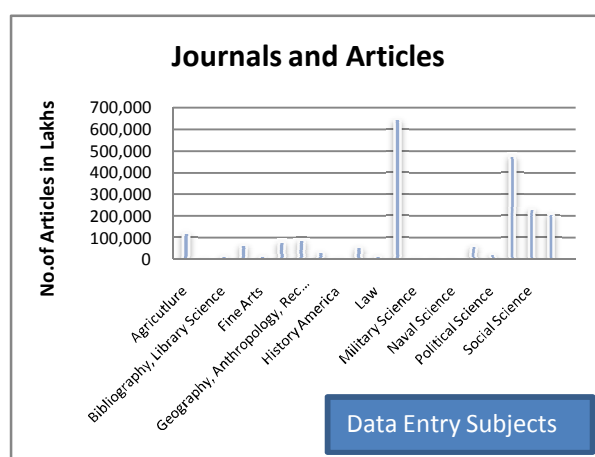


Figure 1. Directory of Open Access Journals Database (Data as on 13th December 2015)

5. Data Analysis and Interpretation

5.1. Language wise in Articles

DOAJ encourages the journal publications in different languages and this study ascertained to find out the articles published in top ten languages and the same given Table.1

Table.5.1

LANGUAGES WISE IN ARTICLES

S. No	Languages	No. of Articles	%
1	English	16,08,528	56%
2	Spanish	4,83,790	17%
3	Portuguese	4,15,796	14%
4	French	1,10,515	3%
5	Russian	51,304	1.8%
6	Italian	47,857	1.6%
7	German	46,100	1.6%
8	Turkish	33,214	1.1%
9	Castilian	25,571	0.9%
10	Chinese	17,436	0.6%

It is found from Table 1 that majority of 56% articles are published in English Language in DOAJ. It is followed by Spanish 17%. It is also found that 14% articles are published in Portuguese. Next, a good number of articles are published in Italian 1.6% and German 1.6%. It is further found that less number of 0.9% articles are published in Castilian and Chinese 0.6%.

5.2. Distribution of Journal and Article Publications by Subject Wise

DOAJ supports the Journal Publication in multidisciplinary subjects and their study focused to find out the journals and articles which covers the top 20 multidisciplinary subjects and also the same is given in Table.2

Table.5.2

DISTRIBUTION OF JOURNAL AND ARTICLE PUBLICATIONS BY SUBJECT WISE

S. No	Subjects	Total No. of Journals	Total No. of Articles	Total No. of Records	%	Rank
1	Medicine	1,999	6,46,716	6,48,715	29.40%	1
2	Science	1,565	4,79,135	4,80,700	21.78%	2
3	Social Science	1,083	2,35,999	2,37,082	10.74%	3
4	Technology	728	2,11,770	2,12,498	9.63%	4
5	Agriculture	418	1,24,998	1,25,416	5.68%	5
6	Geography, Anthropology, Recreation	452	91,134	91,596	4.15%	6
7	General Works	532	83,587	84,119	3.81%	7
8	Education	640	67,410	68,050	3.08%	8
9	Philosophy, Psychology, Religion	452	62,282	62,734	2.84%	9
10	Language and Literature	638	58,164	58,802	2.66%	10
11	History (General) and History of Europe	181	34,709	34,890	1.58%	11
12	Political Science	215	25,851	26,066	1.18%	12
13	Law	199	19,091	19,290	0.87%	13
14	Fine Arts	149	18,114	18,263	0.82%	14
15	Library and Information Science Resources	152	17,675	17,827	0.80%	15
16	History America	38	6,822	6,860	0.31%	16
17	Military Science	19	5,412	5,431	0.24%	17
18	Auxiliaries Sciences of History	51	5,131	5,182	0.23%	18
19	Music and Books on Music	42	2,739	2,781	0.12%	19
20	Naval Science	5	504	509	0.02%	20

It is found from table 2 that majority of 29.40% Journals and Articles published in Medicine have placed in first rank. It is followed by Science 21.78% and social science 10.74% journals and articles have placed in second and third rank. A good number of journals and articles published in general works 3.81% has placed in seventh rank and 3.08% of journals and articles are published in Education has placed in eighth rank. It is further found that 0.02% of journals and articles are published in naval science got placed in twentieth rank.

5.3. Year Wise Distribution Articles

Every year the Open Access Journal contributions are gradually increasing and to find out the same for best 5 years with various subjects this study has initiated and the same has given in Table3.

Table.5. 3

YEAR WISE DISTRIBUTION ARTICLES

S. No	Name of the Subject	Years				
		2011	2012	2013	2014	2015
1	Agriculture	11,742	12,219	10,680	8,715	6,012
2	Auxiliaries Sciences of History	276	324	330	302	163
3	Library and Information Science Resources	1,303	1,443	1,322	1,064	708
4	Education	7,808	8,670	8,776	5,718	4,478
5	Fine Arts	2,030	2,266	1,714	1,807	606
6	General Works	8,190	10,112	12,749	13,457	7,089
7	Geography, Anthropology, Recreation	10,096	11,014	9,700	9,467	5,933
8	History (General) and History of Europe	2,930	2,991	2,053	1,725	832
9	History America	711	588	440	545	173
10	Language and Literature	7,183	7,612	5,462	4,587	2,614
11	Law	2,149	2,267	1,755	1,474	817
12	Medicine	70,560	82,150	62,971	53,973	40,954
13	Military Science	380	1,080	446	301	155
14	Music and Books on Music	301	319	229	193	56
15	Naval Science	79	128	97	35	21
16	Philosophy, Psychology, Religion	6,001	6,426	6,264	5,641	2,837
17	Political Science	2,725	2,722	2,146	1,971	1,317
18	Science	50,577	61,223	55,982	52,443	30,467
19	Social Science	26,752	29,901	24,330	15,103	8,740
20	Technology	17,318	23,968	31,637	32,132	22,479

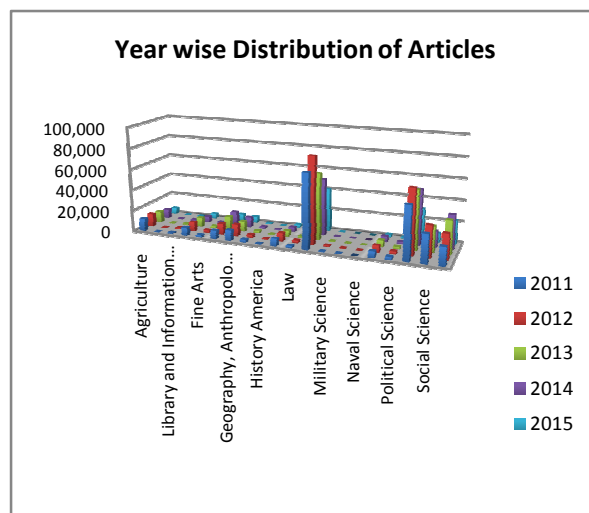


Figure. 2 Year Wise Distribution Articles (2011 – 2015)

It is found from Table 3 and Figure 2 that majority of articles in were published in 2011(70,560) which is followed by 2012 (80,150) articles in the year 2012 with 82,150 articles inferred Medicine. It is Followed by 2013 (62,971) articles and 2014(53,973) articles published in medicine. It is inferred that the publications of articles reduced year by year.

5.4. Journal publication in the year 2015

Some of the journals available in DOAJ are being published in new journals. The study is also focused to find out the journals published in year of 2015 in given table 4.

Table.5.4

JOURNAL PUBLICATION IN THE YEAR 2015

S. No	Subjects	Available of Journals	New Journals (2015)	%	Total No. of Journals	Rank
1	Medicine	1,887	112	1.17%	1,999	1
2	Social Science	1,029	54	0.56%	1,083	2
3	Science	1,513	52	0.54%	1,565	3
4	Education	589	51	0.53%	640	4
5	Technology	686	42	0.43%	728	5
6	General Works	500	32	0.33%	532	6
7	Language and Literature	607	31	0.32%	638	7
8	Agriculture	391	27	0.29%	418	8
9	Law	177	22	0.23%	199	9
10	Philosophy, Psychology, Religion	431	21	0.21%	452	10

S. No	Subjects	Available of Journals	New Journals (2015)	%	Total No. of Journals	Rank
11	Political Science	197	18	0.18%	215	11
12	Bibliography, Library and Information Science Resources	138	14	0.14%	152	12
13	Geography, Anthropology, Recreation	441	11	0.11%	452	13
14	History (General) and History of Europe	175	6	0.06%	181	14
15	Fine Arts	144	5	0.05%	149	15
16	Military Science	15	4	0.04%	19	16
17	Music and Books on Music	39	3	0.03%	42	17
18	History America	37	1	0.01%	38	18
19	Naval Science	4	1	0.01%	5	19
20	Auxiliaries Sciences of History	51	0	0%	51	20

It is found from Table 4 that majority of 1.17 % journals is published in Medicine have placed in first rank. It is followed by social science 0.56% and 0.54% of journals published in Science have placed in second and third rank. A good number of journals published Language and Literature 0.32% got placed in seventh rank. It is further found that 0.01% of Journals published in history of America and naval science have placed in eighteenth rank and least number of 0 % journals are published Auxiliaries Sciences of History got paced in twentieth rank.

5.5. Article Publication in the year 2015

Large number of articles is available in DOAJ are being published in new articles. The study is also focused to find out the articles publishing in year of 2015 in given table 5.

Table.5.5
ARTICLES PUBLISHED IN YEAR 2015

S. No	Subjects	Available of Articles	New Articles (2015)	%	Total No. of Articles	Rank
1	Medicine	6,05,762	40,954	1.86%	6,46,716	1
2	Science	4,48,668	30,467	1.38%	4,79,135	2
3	Technology	1,89,291	22,479	1.02%	2,11,770	3
4	Social Science	2,27,259	8,740	0.39%	2,35,999	4
5	General Works	76,498	7,089	0.32%	83,587	5
6	Agriculture	1,18,986	6,012	0.27%	1,24,998	6
7	Geography, Anthropology, Recreation	85,201	5,933	0.26%	91,134	7

S. No	Subjects	Available of Articles	New Articles (2015)	%	Total No. of Articles	Rank
8	Education	62,932	4,478	0.20%	67,410	8
9	Philosophy, Psychology, Religion	59,445	2,837	0.12%	62,282	9
10	Language and Literature	55,550	2,614	0.11%	58,164	10
11	Political Science	24,534	1,317	0.05%	25,851	11
12	Law	18,274	817	0.03%	19,091	12
13	Library and Information Science Resources	16,967	708	0.03%	17,675	12
14	History (General) and History of Europe	33,877	832	0.03%	34,709	12
15	Fine Arts	17,508	606	0.02%	18,114	15
16	History America	6,649	173	0.00%	6,822	16
17	Military Science	5,257	155	0.00%	5,412	16
18	Auxiliaries Sciences of History	4,968	163	0.00%	5,131	16
19	Music and Books on Music	2,683	56	0.00%	2,739	16
20	Naval Science	483	21	0.00%	504	16

It is found from Table 5 that majority of 1.86 % articles is published in Medicine have placed in first rank. It is followed by Science 1.38% and 1.02% of articles published in technology got placed in second and third rank. It is further found that auxiliaries science of history, history America, music and books on music and 0.00 % of articles are published in Naval Science has placed in sixteenth rank.

6. Conclusion and Recommendations

Directory of Open Access Journals (DOAJ) are growing in all the disciplines. It is very useful service initiated by DOAJ for academic and research communities in world level. It provides access to the scholarly publishing in full text articles. DOAJ also create awareness among the researchers and professionals to publish their articles in open access journals. Directory of Open Access Journals The Findings recommends the following

- It is found that 56% of journals and articles are published in English language only, but the growth of publishing in multilingual should be increased.
- It is found that 29.40% of Journals and articles published in medicine subject. Naval science and Music and books on music subjects are no productivity of journals and articles. Researchers

and faculty members these subjects are increasing articles to publish your research works.

- It is found that year of 2011 to 2015 dominating in medicine, science, social science and technology subjects only. In developing fields of military science, music and naval science subjects should be increased.
- It is found that year of 2015 journals and articles dominating the medicine subject. 0.56% of Social science journals and 1.38% articles published in Science subject. In Auxiliaries Science of History, History of America, Military Science, Music Books and Naval Science subjects should be increased.

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