

CONTRIBUTION OF INDIA TOWARDS EDUCATION: A STUDY BASED ON DIRECTORIES OF OPEN ACCESS JOURNALS

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Abstracts The study is based on Contribution of India towards education in Directories of Open Access Journals from 2003 to 2020. The data are gathered from Directories of Open Access Journals (DOAJ) database. A total number of 301 journals are published from India during this period. This study analysed the year, country, research area, language, licensing aspects, most productive publishers and peer review status of journals. DOAJ contains a total of 15824 journals published from 124 countries. Out of 124 countries, India placed 16th position with 301 publications.

Keywords: Research Output, Open Access; Directories of Open Access Journals, DOAJ.

1.0 Introduction

Education is an important part in our world. Since the early days of independence, India has always focused on improving the educational system. Now from traditional the education era changed into digital format. Everyone has an urgency to get information and like to get it free of cost. Here the need of open access is emerged. Open access provide free full text articles to any user. There are so many types of open access resources are available around us.

2.0 Open Access

Open access is the 'free, permanent, immediate, full text, online access, for any user, web-wide, to digital scientific and scholarly material, primarily research articles published in peer-reviewed journals'. Open access resources are those that can be accessed by anyone at any time without any restriction (Velmurugan, 2011)

The Open access movement was started by Budapest Open Access Initiative and followed many initiative are flourished one among them is Directory of Open Access Journal (DOAJ). Further, open access articles are also considered for citation impact factors. The first citation impact of Open Access journals are published in the year 2002 by Journal Citation Reports (JCR). So the publishing in the open access mode journals are recognized by the citation reports. Now every year JCR are publishing the citation reports with the open access journals. This paper attempted to study the open access journals in India in the DOAJ (Tamizhchelvan & Dhanavandan, 2014).

2.1 Benefits of Open Access

- Open access provide easy access to institutional repositories.
- Provide excellent search facility
- It strengths literature in the field of research.
- Immediate access to literature with no expenditure
- Acts as boost to the developing countries

3.0 DOAJ

The DOAJ (Directory of Open Access Journals) was started in 2003 with 300 open access journals. Now a days, this database contains over 15000 peer-reviewed open access journals covering all areas of science, technology, medicine, social sciences, arts and humanities. Open access journals from all countries and in all languages are published articles in this open access resources (Directory of Open Access Journals, 2020)

DOAJ is a whitelist 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 uses a quality control system to guarantee the content (Jeyapragash, Muthuraj & Rajku mar, 2016).

4.0 Literature Review

Abdulla & Mini Devi (2020) studied about open access journals in Germany in DOAJ. This study throws light to the facts that are kept in the dark by most of the producers for their own personal benefits. The study examined the 262 journals that are published through DOAJ from Germany from 2002 onwards. Out of 262 Journals, 12.98% journals are added in the year 2015.

Sahoo et al. (2017) analysed the contribution of India to the scholarly publishing in DOAJ. The study suggest that India's standing in the domain of open access scholarly publishing and establishes that India is one among the most productive countries those support universal access to knowledge. This study acts as a reference tool for the scholarly community in the disciplines of Medical Sciences, Basic Sciences, Technology, Social Sciences to have access to the published research works crossing the geographical barrier.

Khanchandani & Kumar (2017) studied e-books in Science and Technology indexed in Directory of Open Access Books (DOAB) until May 15, 2016. They examined open access publishers, licenses and language-wise distribution of e-books indexed in DOAJ. The results of the study depicts that there are 1052 e-books indexed in Science and Technology in DOAB.

5.0 Objectives of the Study

The major objectives of the study are:

1. To assess the number of journals from India registered in DOAJ.
2. To analyses, the subject wise Open Access journals indexed with DOAJ.
3. To explore the language of publishing the open access journals from India.
4. To find out the starting year of Open Access journals in DOAJ from India.
5. To analyze the various license category for Open Access journals.
6. To examine most productive publishers in India.
7. To identify the peer-review status of journals in India.

6.0 Methodology

The main aim of the study is to identify open access journals registered with DOAJ from India. The required data has collected from the open access directory named www.doaj.org on 30 January 2021. After collecting the data, it was analysed manually.

7.0 Limitation of The Study

The present study is only limited to open access journals, which are listed in DOAJ directory from the country India.

8.0 Data Analysis And Interpretation

DOAJ contains 15824 journals. Out of these 301 journals are published from India. The study is mainly focused on India's contribution in DOAJ. India is situated in continent Asia. 124 countries have a contribution to Directories of Open Access Journals. The table 1 depicts the top most 25 country-wise contribution of repositories in DOAJ.

Table 1
Country-wise contribution in DOAJ

| No. | Country | Journals | Percentage |
|-----------|--------------------|------------|-------------|
| 1 | Indonesia | 1777 | 11.23 |
| 2 | United Kingdom | 1727 | 10.91 |
| 3 | Brazil | 1601 | 10.12 |
| 4 | United States | 870 | 5.50 |
| 5 | Spain | 816 | 5.16 |
| 6 | Poland | 677 | 4.28 |
| 7 | Iran | 598 | 3.78 |
| 8 | Russian Federation | 452 | 2.86 |
| 9 | Turkey | 434 | 2.74 |
| 10 | Italy | 412 | 2.60 |
| 11 | Colombia | 401 | 2.53 |
| 12 | Ukraine | 370 | 2.34 |
| 13 | Switzerland | 369 | 2.33 |
| 14 | Romania | 344 | 2.17 |
| 15 | Argentina | 305 | 1.93 |
| 16 | India | 301 | 1.90 |
| 17 | Germany | 291 | 1.84 |
| 18 | Netherlands | 267 | 1.69 |
| 19 | France | 243 | 1.54 |
| 20 | Serbia | 204 | 1.29 |
| 21 | Canada | 177 | 1.12 |
| 22 | Mexico | 153 | 0.97 |
| 23 | Chile | 139 | 0.88 |
| 24 | Korea | 137 | 0.87 |
| 25 | China | 134 | 0.85 |

Table 1 shows that the top 25 publishing countries in DOAJ. Out of 15827 Journals published in DOAJ, 1777 (11.23%) were contributed by Indonesia, 1727 (10.91%) by United Kingdom and 1601 (10.12%) by the Brazil. India placed 16th position with 301(1.90%).

8.1 Subject Wise Analysis of Journals

Subject wise distribution of journals is listed in the Table 2.

Table 2
Journals by Subject

| No. | Subject | Number of Journals | Percentage |
|-----|-------------------------|--------------------|------------|
| 1 | Medicine | 240 | 79.73 |
| 2 | Science | 30 | 9.97 |
| 3 | Technology | 16 | 5.32 |
| 4 | Social Sciences | 11 | 3.65 |
| 5 | Agriculture | 7 | 2.33 |
| 6 | Language and Literature | 7 | 2.33 |

| | | | |
|----|--|---|------|
| 7 | Education | 3 | 1.00 |
| 8 | General Works | 3 | 1.00 |
| 9 | Geography. Anthropology. Recreation | 3 | 1.00 |
| 10 | Philosophy. Psychology. Religion | 2 | 0.66 |
| 11 | Naval Science | 1 | 0.33 |
| 12 | Law | 1 | 0.33 |
| 13 | Bibliography. Library science. Information resources | 1 | 0.33 |

Note: Journals being multidisciplinary as well

The major subjects in the 301 journals from India have been listed in Table 2. The table shows that, the subject Medicine covers 240 (79.73%) and the subject of Science covers 30 (9.97%) journals. The subject Library and Information Science, Naval Science and Law covers 1 (0.33%) of Journals published in DOAJ. Some of the journals are multidisciplinary in nature.

8.2 Language-wise analysis of India's contribution

Several languages are spoken in India. The major one is Indo Aryan languages, that have spoken by 78.05% of the Indians and the Dravidian languages spoken by 19.64% of the Indians. According to the Census of India of 2001, India has 122 major languages and 1599 other languages. Table 3 depicts language wise analysis of India's contribution in DOAJ.

Table 3
Language-wise analysis of India's contribution

| No. | Language | Journals | Percentage of 301 Journals |
|-----|----------|----------|----------------------------|
| 1 | English | 301 | 100 |
| 2 | Hindi | 4 | 1.33 |
| 3 | Turkish | 2 | 0.66 |
| 4 | Arabic | 1 | 0.33 |
| 5 | Sanskrit | 1 | 0.33 |
| 6 | Tamil | 1 | 0.33 |

Note: Some being multilingual as well.

301 journals are published in DOAJ by India and 100% of them are published in English language. In addition to that, some of them are also published in other languages like Hindi (1.33%), Turkish (0.66%), Arabic, Sanskrit and Tamil (0.33%) respectively.

8.3 Year of Establishment of Journals

Table 4 illustrate the year of establishment of journals by India in DOAJ. This helps to identify the year wise contribution by India in Directory of Open Access Journals.

Table 4
Year of Establishment of Journals in DOAJ

| Year Added to DOAJ | Frequency | Percentage |
|--------------------|-----------|------------|
| 2020 | 35 | 11.63 |
| 2019 | 37 | 12.29 |
| 2018 | 49 | 16.28 |
| 2017 | 55 | 18.27 |
| 2016 | 29 | 9.63 |
| 2015 | 13 | 4.32 |
| 2014 | 7 | 2.33 |
| 2013 | 8 | 2.66 |
| 2012 | 6 | 1.99 |
| 2011 | 5 | 1.66 |

| | | |
|--------------|------------|------------|
| 2010 | 13 | 4.32 |
| 2009 | 11 | 3.65 |
| 2008 | 9 | 2.99 |
| 2007 | 3 | 1.00 |
| 2006 | 6 | 1.99 |
| 2005 | 7 | 2.33 |
| 2004 | 5 | 1.66 |
| 2003 | 3 | 1.00 |
| Total | 301 | 100 |

It is clear from the Table 4. India has start publication in 2003 in DOAJ. A total number of 301 journals have been added up to 2020. In 2017, India has published 55 (18.27%) journals.

8.4 Licensing Aspect of Journals

Table 5 describes the licensing aspects of journals published ion DOAJ from India.

Table 5
Licensing aspect of Journals

| Journal License | Journal Number | Percentage |
|-------------------------|----------------|------------|
| CC BY | 37 | 12.29 |
| CC BY-NC | 17 | 5.65 |
| CC BY-NC-ND | 26 | 8.64 |
| CC BY-NC-SA | 224 | 74.42 |
| CC BY-ND | 2 | 0.66 |
| CC BY-SA | 3 | 1.00 |
| Publisher's own license | 8 | 2.66 |

Note: Some being multiple licenses as well.

Table 5 shows the licensing aspects of journals published from India. All the license are categorized under seven headings such as CC BY, CC BY-NC-ND, CC BY-NC, CC BY-SA, CC BY-ND, CC BY-NC-SA, and Publisher's own license. Some of the journals are published under multiple licensing categories. Majority (74.42%) of the journals are published their resources under CC BY-NC-SA followed by the CC BY (12.29%). It is clear from the table, more than 70% of the journals having CC BY-NC-SA license.

8.5 Most Productive Publishers

The top most publishers of open access journals in DOAJ is listed in the Table 6. A total number of 77 publishers publish journals in DOAJ from India.

Table 6
Most productive Publishers

| SI No. | Publishers | Journal | Percentage |
|--------|--|---------|------------|
| 1 | Wolters Kluwer Medknow Publications | 204 | 67.77 |
| 2 | Thieme Medical and Scientific Publishers Pvt. Ltd. | 9 | 2.99 |
| 3 | NISCAIR | 5 | 1.66 |
| 4 | ICT Academy of Tamil Nadu | 4 | 1.33 |
| 5 | Elsevier | 3 | 1.00 |
| 6 | JCDR Research and Publications Pvt. Ltd. | 3 | 1.00 |
| 7 | CSIR-NISCAIR | 2 | 0.66 |
| 8 | SAGE Publishing | 2 | 0.66 |

The table 6 depicts that Wolters Kluwer Med know Publications publish 204 (67.77%) and Thyme Medical and Scientific Publishers Pvt. Ltd. has 9 (2.99%) journals in DOAJ. Out of 77 publishers, 69 are published only one journal in DOAJ.

8.6 Peer-Review Status of Journals

Table 7 depicts peer-review status of journals published from India. The most common types of peer reviews are blind, double blind, and open peer review. The frequency of peer review status is listed in Table 7.

Table 7

Peer-Review Status

| Sl. No. | Peer-Review Status | Frequency | Percentage |
|--------------|--------------------------|-----------|------------|
| 1 | Double blind peer review | 239 | 79.40 |
| 2 | Blind peer review | 40 | 13.29 |
| 3 | Peer review | 22 | 7.31 |
| Total | | 301 | 100.00 |

From the table 7, it is easy to understand the peer review status of journals. 239 journals (79.40%) had Double blind peer review status. 40 (13.29%) of them are Blind peer review and (22 7.31%) Peer reviewed.

9.0 Conclusion

Open Access helps to publish and getting information without any cost. Open access journals are those journals, which are accessing through internet freely. In this study, India's contribution towards open access was discussed. From 2003 to 2020, 301 journals were published in India.

10.0 References

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