



A BIBLIOMETRIC STUDY OF THE JOURNAL OF INTERDISCIPLINARY STUDY

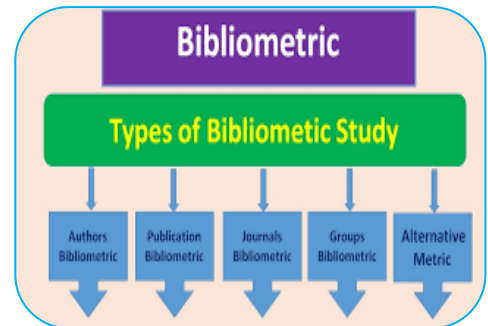
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ABSTRACT

The Journal of Interdisciplinary Study (JOIS) is a peer-reviewed journal published by Sreegopal Banerjee College. This study shows the bibliometric analysis of JOIS during the year 2015-2022. This study focused on various bibliometric parameters like year-wise distribution of articles, authorship pattern & degree of collaboration, author productivity, subject-wise distribution of articles, contributors designation, citation pattern, etc. This study analyzed 130 articles with 149 contributors and found that a total of 2190 citations have been cited. The study shows that the maximum number of papers published by a single author.



KEYWORDS : *The Journal of Interdisciplinary Study, Bibliometric Study, Authorship Pattern.*

1. INTRODUCTION:

Scholarly journals serve as the principal means of generating and disseminating knowledge for academics and researchers across diverse disciplines. The term “Bibliometrics” was first coined by Pritchard (Pritchard 1969) and he defined it as “the application of mathematics and statistical methods to books and other media of communication.” Bibliometrics comprises a range of techniques used to quantitatively evaluate scientific and technological literature.

The Journal of Interdisciplinary Study (JOIS) is a peer-reviewed multidisciplinary, bilingual [English & Bengali.] and biannual [June & Dec.] journal is aimed at publishing original and unpublished research in language & literature, History, Political Science, Philosophy, Mathematics, Economics, Commerce & Business Studies, Chemistry, Physical Science, Biological Science, Environmental Sciences & allied areas. It is published by Sreegopal Banerjee College, Bagati, Magra, Hooghly-712148, West Bengal. Contributed articles are to be selected through two-level scrutinies: one primary selection by the editorial board and the other by peer review.

2. OBJECTIVES OF THE STUDY:

The main objectives of this study are as follows:

1. To determine the volume and year-wise distribution of articles and citations.
2. To analyze the authorship pattern, degree of collaboration, and author productivity.
3. To study the Subject-wise distribution of Articles.
4. To find out the distribution of authors according to their designation / institutional affiliation.

3. IMPORTANCE OF THE STUDY:

This study helps the researchers to identify emerging trends of research and also helps the researcher to assess the quality and significance of this journal.

4. REVIEW OF LITERATURE:

Scholars have undertaken numerous bibliometric studies, both at the national and international levels. Previous research has delved into several popular Indian journals, employing various bibliometric indicators.

Subramanyan (1983) explored various bibliometric parameters to assess the research performance in "Bibliometric studies of research collaboration: a review".

Chattopadhyay (2003) studied a bibliometric analysis of the Calcutta University Journal of Information Studies during 1998 to 2003.

Bansal (2013) examines the publication trends in the "DESIDOC Journal of Library & Information Technology: A Bibliometric Analysis".

Diem and Wolter (2013) explored various bibliometric parameters to assess the research performance in the field of educational science in Switzerland.

Singh and Mishra (2013) examine the distribution of studies by year, the authorship patterns of contributions, the distribution of contributions across institutes, the geographical distribution of contributions by state, the article lengths, citation analysis, and the distribution of citations.

Singh and Bebi (2014) conducted a bibliometric analysis in "Library Herald: A Bibliometric Study (2003-2012)".

Chattopadhyay (2015) conducted a bibliometric analysis of the 'CUJIS' (Calcutta University Journal of Information Studies), a publication by the Department of Library and Information Science at the University of Calcutta.

Verma, Devi, and Brahma (2017) explored various bibliometric parameters to assess the research performance in the Bibliometric Study of DESIDOC Journal of Library and Information Technology during 2005 to 2016.

Barik, Rautaray, and Swain (2020) investigated the publication patterns within the initial five years of the 'KIIT Journal of Library and Information Management.'

Rani (2020) conducted a bibliometric analysis of papers published in the 'Journal of Librarianship and Information Science' from 2014 to 2018. The analysis covered various aspects, including the types of publications, geographical distribution, authorship patterns, document formats, and more.

Chatterjee and Bhattacharyya (2021) investigated the publication trends of the journal 'College Libraries' during the period 2015 to 2020. The study scrutinized various aspects, analyzing 126 articles published from volumes number 30 to 35.

5. METHODOLOGY:

At first all the relevant data were collected from hard copies of the source journal, "The Journal of Interdisciplinary Study (JOIS)" from the period 2015 to 2022. The study encompassed 130 articles authored by 149 contributors, generating a total of 2190 citations. These components were systematically organized into distinct sheets for efficient handling. Subsequently, the analysis aligned with the study's objectives by employing simple arithmetic techniques and statistical methods. MS Word and MS Excel were employed for data analysis and interpretation.

6. DATA ANALYSIS & FINDINGS:

Table 1: Volume and Year-wise Distribution of Articles

Volume	Year	No. of Articles	Cumulative	Percentage
1	2015	17	17	13.08
2	2015	14	31	10.76
3	2016	11	42	08.46
4	2016	11	53	08.46
5	2017	13	66	10.00
6	2017	17	83	13.08
7, 8 & 9	2018 & 2019	17	100	13.08
10 (1)	2022	18	118	13.85
10 (2)	2022	12	130	09.23
Total	----	130	----	100

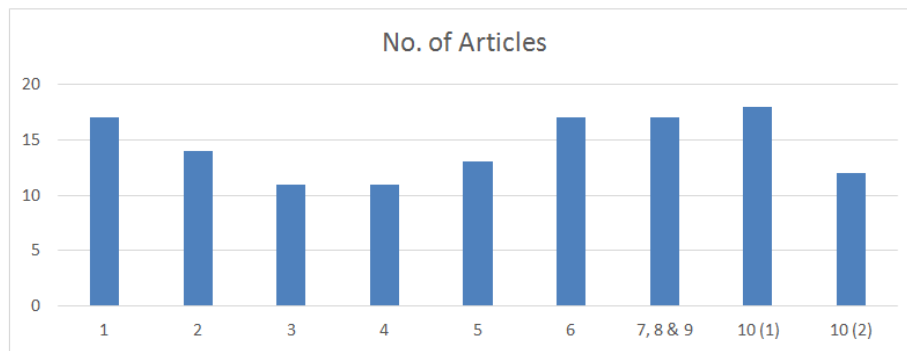


Fig 1: Volume-wise distribution of Articles

Table 1 outlines the distribution of articles on volume and yearly basis from 2015 to 2022. Over the eight-year study period, a total of 130 publications were issued. Examination of the table indicates that the highest number of articles was published in volume 10 (1) in the year 2022, while the lowest occurred jointly in volume 3 and volume 4 in the year 2016.

Table 2: Authorship Pattern & Degree of Collaboration

Volume	Year	No of Article	Authorship Pattern			Degree of Collaboration
			One	Two	Three or >Three	
1	2015	17	17	----	----	0
2	2015	14	12	2	----	0.14
3	2016	11	10	1	----	0.09
4	2016	11	11	----	----	0
5	2017	13	12	----	1	0.08
6	2017	17	14	2	1	0.18
7, 8 & 9	2018 & 2019	17	17	----	----	0
10 (1)	2022	18	17	1	----	0.06
10 (2)	2022	12	11	1	----	0.08
Total		130	121	7	2	0.07

Table 2 shows the authorship distribution pattern and the year-wise degree of collaboration. The data reveals that the highest number of papers are published by single authors, with joint authorship being the subsequent prevalent trend. The degree of collaboration (DC) offers insights into the collaborative authorship pattern among contributors. The calculated average DC is 0.07, indicating a predominance of single authors within this journal.

The Degree of Collaboration is computed using a simple formula: $(DC) = N_m / (N_m + N_s)$.

where (N_m) represents the number of multi-authored papers and (N_s) denotes the number of single-authored papers (Subramanyan, 1983).

Table 3: Author productivity

Volume	Year	No of Article	No. of Authors	Productivity per Author	Average Author per Article
1	2015	17	17	1	1
2	2015	14	16	0.87	1.14
3	2016	11	12	0.91	1.09
4	2016	11	11	1	1
5	2017	13	20	0.65	1.54
6	2017	17	24	0.71	1.41
7, 8 & 9	2018-2019	17	17	1	1
10 (1)	2022	18	19	0.95	1.06
10 (2)	2022	12	13	0.92	1.08
Total		130	149	0.87	1.15

Table 3 provides insights into author productivity, which is quantified as the number of papers authored by an individual within a specified timeframe. A total of 149 authors have contributed to the 130 research articles, resulting in an Average Author per Article of 1.15 and a Productivity per Author of 0.87. Below are the mathematical formulas for these metrics:

Average Author per Paper = Number of Papers/Number of Authors.

Productivity per Author = Number of Papers/Number of Authors.

Table:4 Subject wise distribution of Articles

Subject	No. of Articles	Percentage
Bengali	34	26.15
English	13	10.00
Sanskrit	4	03.07
Political Science	7	05.38
History	12	09.23
Philosophy	13	10.00
Economics	3	02.31
Geography	1	00.76
Commerce	10	07.69
Mathematics	1	00.76
Chemistry	7	05.38
Physics	8	06.15
Botany	1	00.76
Zoology	11	08.46
Music	1	00.76
Library Science	1	00.76

ICT	1	00.76
AI	1	00.76
NSS	1	00.76

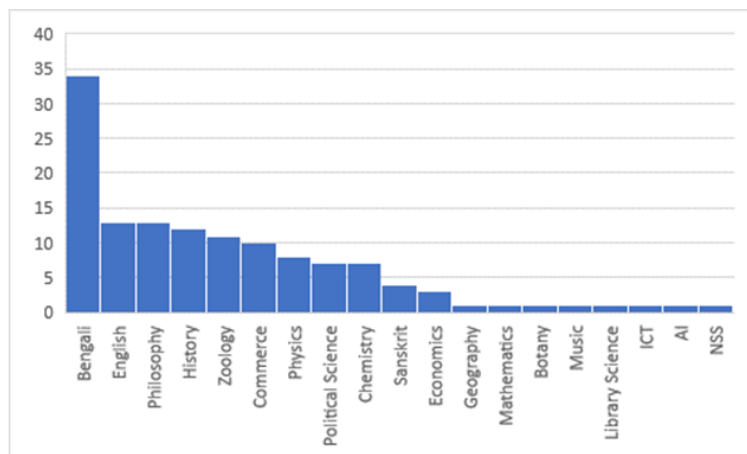


Figure II: Subject-wise Distribution of Articles

Table 4 delineates the most reliable subject areas covered in research articles published in JOIS from the year 2015 to 2022. The greatest number of articles pertained to the subject area of Bengali, followed by those on the subject areas of English and Philosophy. The diverse subject categories illustrate the dynamic trends in publications within this journal.

Table 5: Year-wise distribution of Citation

Volume	Year	No of Articles	Citations	Citation per Article
1	2015	17	309	18.18
2	2015	14	210	15.00
3	2016	11	148	13.45
4	2016	11	271	24.63
5	2017	13	184	14.15
6	2017	17	238	14.00
7, 8 & 9	2018-2019	17	247	14.53
10 (1)	2022	18	325	18.05
10 (2)	2022	12	258	21.50
Total	----	130	2190	16.85

Table 5 shows the distribution of citations for JOIS articles on a yearly basis. A total of 2,190 citations are recorded across 130 articles, resulting in a Citation per Article at a rate of 16.85. Among individual volumes and years, volume 4 in 2016 holds the record for the highest number of citations (24.63), while volume 6 in the year 2017 contributed the lowest.

Table 6: Distribution of authors according to their designation / institutional affiliation

Volume	Year	No. of Authors	Designation / Institutional Affiliation of Authors						
			Assistant Professor	Associate Professor	Librarian	SACT/ Part-Time/ Guest Teacher	Research Scholar/ Student	School Teacher	Not Available
1	2015	17	11	04	---	01	01	---	---
2	2015	16	06	03	---	01	---	01	05
3	2016	12	04	02	---	02	01	---	03
4	2016	11	04	04	---	---	---	---	03
5	2017	20	09	---	---	---	07	---	04
6	2017	24	13	---	---	01	05	01	04
7, 8 & 9	2018-2019	17	14	---	---	01	01	---	01
10 (1)	2022	19	11	01	01	02	01	01	02
10 (2)	2022	13	08	01	---	01	03	---	---
Total	----	149	80	15	01	09	19	03	22

Table 6 illustrates the distribution of contributors based on their institutional affiliation in terms of volume. The table reveals the diverse range of designations held by contributors, with analysis revealing 09 distinct designations across various volumes. The predominant contributors were Assistant Professors from different institutions, constituting 80 individuals out of the total 149 contributors. The second-largest group consisted of Research Scholars/ Students, accounting for 19 contributors from various Universities/Institutions.

CONCLUSIONS:

In total, 130 articles garnered 2190 citations, reflecting a commendable citation rate of 16.85 citations per article. This robust citation record attests to the high standard of publications offered by the journal. The authorship pattern revealed a prevalence of single-authored articles, while the degree of collaboration stood at 0.07. In achieving its goals and objectives, JOIS has successfully created and disseminated scholarly publications, contributing significantly to the professional development.

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