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Journal of Education for Library and Information Science (JELIS) Through Bibliometric Lenses

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Abstract

Purpose: This study aims to examine the published data from the journal of Education for Library and Information Science (JELIS). A quarterly journal of the Association for Library and Information Science Education (ALISE). The study's goal is to provide a venue for exchanging ideas and research in the library field.

Designed/methodology/approach: The Journal of Education for Library and Information Science (JELIS) published work between 2015 and 2021 is analyzed using a bibliometric technique. The Authorship Pattern is part of the analysis. Contributions from various organizations and the most dynamic authorship and geographic distribution of the published work.

Research limitation(s): The research was limited to five years of performance from 2015 to 2021, and no other factors were considered for this paper.

Key finding(s): During 2015-21, a total of 445 Authors contributed 230 papers, averaging 5.2 articles per issue. According to the study, single authors authored 131 (57 percent) of the 230 publications, and the most prolific authors were from the United States of America.

Practical implication(s): According to this study, the current style and publication procedures have gaps and loopholes. The analysis will surely raise awareness among potential authors, readers, and library information professionals in general and Journal of Education for Library and Information Science (JELIS) stakeholders and scholars. This research will aid in determining the journal's scope and coverage.

Contribution to knowledge: The present research will further highlight the scope of JELIS and contribute a handsome knowledge for the scholars in Canada and abroad. Stakeholders **of** the Association for Library and Information Science Education (ALISE) and editors of this journal will boost their quality by reading this article. This contribution is the first attempt on JELIS and no other paper relevant to bibliometric on this journal has been contributed by others. This will also help novice researchers who want to research bibliometric examination of various journals and scholarly databases. It will add a scholarly realm by assisting and expanding knowledge's boundaries.

Paper type: Research.

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I.   Introduction and Background

The Association of Library and Information Science Education was established in 1960. The Association has started a scholarly journal named Journal of Education for Library and Information Science (JELIS), a refereed scholarly journal publishing scholarly, innovative and latest articles pertaining to the library and information science, archives and data science, etc. The vital objective of JELIS is to support Librarians, scholars and educationists in library fields. It publishes research papers, reviews, and short communications that reflect the education and pedagogy of the library platform. The journal's primary target readership is educators and prospective educators. The JELIS (Q1) is a publication that covers the technologies, fields, and categories associated with library and information science (Q2). University of Toronto Press is the publisher. The Journal of Education for Library and Information Science (JELIS) has a global rating of 6946. This journal is ranked 0.716 on the SCImago Journal Rank (SJR) system.

Bibliometrics is the study of quantifying written communication. It's a helpful tool for emphasising the evolution of literature and drawing the dots between various fields of study. Author productivity, teamwork, and authoring tendencies are also examined. Alan Pritchard created the term "bibliometric" in 1969. (Hussain, Abid 2020). The phrases 'bibliometric' and metrics,' respectively, are derived from the Latin and Greek words 'Biblio' and metrics,' and refer to the application of mathematics to the study of bibliography." According to the definition, "the use of mathematical and statistical methods to literature and other kinds of communication." Library Information Science researchers constantly employ bibliometric studies to appraise and evaluate the scientific output of the published literature on any given problem, domain, and period. In addition, bibliometric studies have benefited librarians in material selection and weeding.

Bibliometric approaches can be used to assess and determine the relationship between one or more writers and the works they produce. Library and information science research patterns and collaboration amongst researchers in printed works can be utilized. Bibliometrics has been one of the most investigated libraries and information science disciplines in recent years. Manivannan and Sanjeevi (Manivannan & Sanjeevi, 2012). To find out the influence of authors and related works, bibliometric analysis is a valuable tool that helps define the relationship between two or more authors. It is a quantitative description of literature that aids in measuring all recorded data; therefore, the researcher selects the current study.

Study's Objectives

The following are the goals of this research on published work in the Library and Information Science:

1. Assess the year-by-year distribution of articles
2. To investigate the various forms of documentation
3. To draw attention to the most productive nations and institutions
4. To keep track of the most effective authors, their affiliations, and the number of documents they've written

II.   Literature Review

Pritchard developed the word "bibliometrics" to describe "the application of mathematical and statistical methodologies to books and other media" (Prichard, 1969, p. 348). In 1923, E. W. Hulme coined "Statistical Bibliography" (Hulme, 1923). Bibliometrics plays a significant function in measuring academic publishing creation and accurately defining characteristics using statistics (Van Eck & Waltman, 2014). "The quantitative study of published physical units, bibliographic units, or both" is how bibliometrics is defined (Broadus, 1987, p. 373).

To find out authorship patterns, publications, and literature usage, bibliometric studies are among the best sources for statistical analysis. (Glanzel, 2003). Bibliometrics is a branch of science that uses quantitative methods to investigate many features of written publications such as the subject, author, citations, title, etc. (Hussain, Fatima, & Kumar, 2011). This form of analysis is beneficial for tracking the expansion of the literature and research tendencies (Jacobs & Pichappan, 2001). Bibliometric methodologies are strongly related to informatics, webometrics and scientometrics (Hood & Wilson, 2001). These methods can be employed in research by extending the number of topics covered, such as distribution, frequency, and word usage in various databases, which help link to researchers' websites or citations in literature (Bar-Ilan, 2008). Bibliometrics has been proven to be the most prevalent technique for assisting scientific operations (López-Muoz et al., 2003). The role of bibliometrics is critical in the most often used quantitative method in Library and Information Science (Laengle et al., 2017).

Bibliometric is a commendable method that can measure texts and information of published data (Hung, 2012). Bibliometric studies often encompass journal papers and authorship trends in geographic, subject organization, and other associated criteria (Hazarika, Goswami, & Das, 2003). According to a historical assessment of bibliometrics, the first bibliometric investigation was carried out (Cole & Eales, 1917). The authors conducted a statistical analysis of the articles published in Science Progresses from 1543 to 1860 for this study. They also looked at the comparative anatomy of publications by calculating the number of book and journal article titles. Hulme conducted a second investigation in 1923. The entries and authors of the "English International Catalog of Scientific Literature" were investigated in this study. The third bibliometrics research was completed in 1927. That was the first study on citation analysis (P.L. Gross & E. M. Gross, 1927).

III.   Research Methodology and Limitations

A bibliometric analysis was brought in use for a quarterly journal named the Journal of Education for Library and Information Science (JELIS) from the years 2015 to 2021. Articles from the JELIS were retrieved and examined using visualization tools and excel sheets. The Excel sheets were used for the most productive and influential authors. The articles in JELIS were examined through various parameters like Authorship pattern, Degree of Collaboration and year by year collections of articles. The study reveals that a total of 230 articles were published in JELIS during 2015-2020. The study was limited to the stipulated period and no other issues published before 2015 and after 2021 were brought into use.

Data Analysis

Table one shows the quantitative progress of articles published in JELIS during 2015 to 2021. The result reveals that in total seven volumes a total 230 articles were published with average 57.5 article per issue on quarterly basis. In 2020, the most significant number of articles recorded was 46 (20%). The year 2018 was estimated to be the least prolific, with only 21 articles published in research. Every year, the JELIS publishes an average of 32 articles. It's also been determined that the most incredible research output per issue is 20 articles on average.

Table 1. Quantitative Progress of Articles

Volume Number	Years	No. of issues	No. of Articles	Percentage	Avg articles per issue quarterly
56	2015	5	45	20	11.25
57	2016	4	33	14.34	8.25
58	2017	4	24	10.43	6
59	2018	4	21	9.13	5.25
60	2019	4	26	11.3	6.5
61	2020	4	46	20	11.5
62	2021	4	35	15.21	8.75
Total	**7**	**29**	**230**	**100**	**57.5**

Table 2 reveals the author's productivity and output during 2015-2021. According to the data, 131 articles were published by single authors. Two authors have produced 49 articles. However, during the seven volumes and 29 issues of the Library and Information Science, 27 (11.73 percent) papers with three authors were noted.

Table 2. Authors' Productivity

No.of authors	No. of articles	Percentage
1	131(each article by a single author)	57
2	49	21.3
3	27	11.73
4	6	2.6
5	7	3.04
6	6	2.6
7	1	0.43
10	1	0.43
17	1	0.43
21	1	0.43
Total	**230**	**100**

Since 2017, Table 3 displays the level of collaboration. During the year 2017, 31 unique authors contributed 31 scientific papers. In 2018, 38 single-author papers were submitted, with a

percentage rate of 6.05 percent. In the year 2019, a total of fifteen single authors collaborated on four papers.

Table 3.Degree of Collaboration

Years	No of single-author articles	No of multiple author articles
2017	31	28
2018	38	26
2019	15	11
2020	31	15
2021	16	19
Total	**131/230**	**99/230**

According to Table 4, Peta Wellstead has remained in the first ranking who contributed sixteen research paper, followed by Jenna Hartel with six articles and Denice Adkins, a researcher with five publications. Renate L. Chancellor has written four articles out of seven volumes.

Table 4. Most Frequent Authors

Rank	Author's name	No. of papers
1	Peta Wellstead	16
2	Jenna Hartel	6
3	Denice Adkins	5
4	Kiersten F. Latham	4
4	Rajesh Singh	4
4	Renate L. Chancellor	4
5	John M. Budd	3
5	Sandra Hirsh	3
5	Suzanne M. Stauffer	3
5	Michael Stephens	3
5	Laura Saunders	3
5	Ursula Gorham	3
5	Sue C. Kimmel	3
5	Clara M. Chu	3
5	Rachel Ivy Clarke	3
5	Bharat Mehra	3
6	39 Others	2
Total	**55 authors**	**147/230 (63.91%)**

The data for the most productive institution may be found in Table 5. San Jose State University in California is first, with 25 (5.6 percent) publications published between 2015 and 2021. The Western University of Ontario is ranked second with 22 (5 percent) research papers.

Figure 1: Most Frequent Institutions' Rank List

Most Frequent Institutions rank list

■ Drexel University ■ Emporia State University ■ Kent State University ■ Old Dominion University ■ Others ■ San Jose State University ■ School of Information and Social Science ■ Simmons University ■ University of Illinois ■ University of Missouri University of Tennessee University of Toronto University of Wisconsin Western University

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Table 5 : Most Frequent Institutions' Rank List

Rank	Institution	Frequency of occurrence	% of 445
1	San Jose State University	25	5.6
2	Western University	22	5
3	University of Illinois	16	4
3	School of Information and Social Science	16	4
4	University of Missouri	15	3.37
4	University of Tennessee	15	3.37
4	Drexel University	15	3.37
5	University of Toronto	14	3.14
6	Simmons University	13	3
7	Emporia State University	12	2.7

8	Old Dominion University	11	2.5
9	University of Wisconsin	9	2
10	Kent State University	8	1.8
14	Others	254	57.07
Total		**445**	**100**

The geographical distribution is shown in Table 6. The United States of America is the top-ranking country, with a research production of 303 articles (68.08 percent). Canada has 55 (12.35%) research papers in second place. During 2015-2021, Russia, Iran, Israel, Ireland, Spain, and Norway submitted one piece.

Figure 2: Geographical Distribution of Institutions
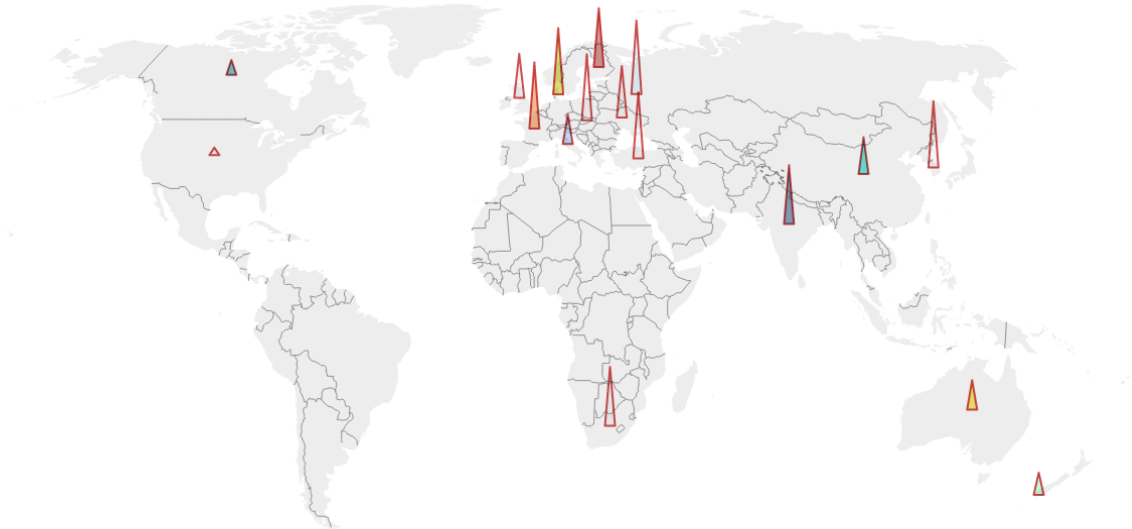
Table 5.Geographical Distribution of Institutions

Rank	Country	Frequency	Percentage
1	USA	303	68.08
2	Canada	55	12.35
3	Newzealand	19	4.26
4	Italy	8	1.8
4	Australia	8	1.8
5	China	7	1.6
6	UK	6	1.34
7	UAE	4	0.9

8	South Africa	3	0.67
8	India	3	0.67
8	Finland	3	0.67
9	Denmark	2	0.44
9	Turkey	2	0.44
9	Slovakia	2	0.44
9	France	2	0.44
9	South Korea	2	0.44
10	Others	16 (one each)	4
Total		**445**	**100**

Table 7 shows the data of different Institutions based in the U.S.A. It shows that Institutions in the United States have contributed a handsome amount of articles compared to other nations; California authors contributed 31 (10.23%) publications. Tennessee came in second with 23 (8%) articles published, followed by Illinois with 22 (7.26%) articles.

Table 6. Contribution of Institutions from the United States

Rank	Region	Frequency	Percentage
1	California	31	10.23
2	Tennessee	23	8
3	Illinois	22	7.26
3	New York	22	7.26
4	Pennsylvania	19	6.27
5	North Carolina	18	6
6	Massachusetts	17	5.61
7	Missouri	16	5.28
8	Georgia	14	4.62
9	Washington	13	4.29
9	Kansas	13	4.29
9	Texas	13	4.29
10	Virginia	11	3.63
11	Ohio	9	3
11	Others	62	20
Total		**303**	**100**

Figure 3: Shows the contributions of Institutions from the United States

Contribution of Institutions from the United States

■ California ■ Georgia ■ Illinois ■ Kansas ■ Massachusetts ■ Missouri ■ New York ■ North Carolina ■ Ohio
■ Others ■ Pennsylvania ■ Tennessee ■ Texas ■ Virginia ■ Washington

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Table 8 reveals the number of documents published in JELIS during 2015-2021. It shows that 154 articles with a 67% percent ratio were published in JELIS. Total 27 book reviews were published in all volumes. Editorial and curriculum innovation were also contributed with a balance of 10.43 and 3.91 percent. There was a good amount of short communication and juried paper published in JELIS out of seven- volumes.

Table 7.Document Form

Document Form	Frequency	Percentage
Articles	154	67
Book Reviews	27	11.73
Editorial	24	10.43
Curriculum Innovation	9	3.91

Short Communication	8	3.41
Juried Papers AISE 17	5	2.17
News & Views	2	0.86
Conference	1	0.43
Total	**230**	**100**

IV.   Conclusion and Recommendations

The Association of Library and Information Science Education was established in 1960. The Association has started a journal named Journal of Education for Library and Information Science (JELIS), a refereed scholarly journal publishing scholarly, innovative and latest articles pertaining to library and information science, archives and data science, etc. The vital objective of JELIS is to support Librarians, scholars and educationists in library fields.   It publishes research papers, reviews, and short communications that reflect the education and pedagogy of the library platform.

The study reveals that a total of 230 articles was published in the Journal of Education for Library and Information Science (JELIS) between 2015 and 2021. The majority of the articles (131) with a 57% ratio were published by single authors. An American scholar Peta Wellstead was one of the prolific contributors among all authors, who published total of 16 articles in JELIS during 2015-2021. Among the most dynamic institutions in terms of researchers, San Jose State University contributed total 25 pieces. The study reveals that authors from the United States of America produced 303 (68.08 percent) papers. Among Canadian authors, there were only 55 articles with 12.35 percent. Among the states the contributions of California was ranked first. Based on the study result, following recommendations have been made for the stakeholders, editorial team, and researchers of the Journal of Education for Library and Information Science.

1. Researchers from developing countries should be allowed to publish in this journal.

2. The journal should be indexed in the Web of sciences and DOAJ for projections and outreach.

3. To avoid a backlog, the number of articles may be raised.

4. Global topics should be addressed to grab foreign researchers' attention.

5. Complete information on the online journal system (website) should be provided to the writers.

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