

# Exploring Research Dynamics: A Five-Year Analysis of Research Articles in the Annals of Library and Information Studies

Dr. Sandhya Pagare<sup>1</sup>; Dakshata Bhure<sup>2</sup>

Librarian, CCYM's Hashu Advani College of Special Education, Chembur, Mumbai<sup>1</sup>; Librarian, Bombay College of Pharmacy, Santacruz, Mumbai<sup>2</sup>

*p27sandhya@gmail.com; bhure.dakshata99@gmail.com*

## ABSTRACT

### Introduction:

*Annals of Library and Information Studies is a prominent journal in the field of Library and Information Science (LIS). A total of 138 research papers from 2018–2022, published in it, were undertaken for the present study. It analyzes this scholarly publication's authorship facets, article patterns, dealt-with subjects, and other related aspects. The content analysis was applied to the various aspects of the journal. The main research areas were research analysis and scholarly communication, followed by library services and management. Author collaboration has led to a global readership. The main aim of this paper is to identify research trends, authorship patterns, and the role of the journal in the years 2018–2022.*

**KEYWORDS:** Authorship Patterns, Content Analysis, Keyword Analysis Bibliometric, Scientometrics, Academic Journal, Research Trends in LIS.

## 1. INTRODUCTION

Annals of Library and Information Studies undertook its 70th volume in 2023. It remains an imperative resource in the LIS community. The researchers have undertaken an eclectic study of this journal. It dealt with keyword analysis, authorship, and research trends in ALIS from 2018 to 2022. This study elucidates the advancements in LIS research and its importance to all its stakeholders. ALIS is the English-language quarterly journal of the LIS field in India. Dr. S. R. Ranganathan was the first editor of it, and it was launched in 1954 by INSDOC.

As ALIS plays an important role in the LIS community, this study offers valuable insights into present research trends, emerging themes, and collaboration in LIS. The readership of ALIS has an international scope, and stakeholders can take advantage of it. Content analysis guides the researcher to pick research areas that are left untouched or need gap filing. The editorial board can call for papers from various geographical areas to increase their readership too. LIS research is quite familiar with content analysis as it is a flexible method that can be

## ***Exploring Research Dynamics: A Five-Year Analysis of Research Articles in the Annals of Library and Information Studies***

implemented in mixed research methods or separately too (White & Marsh, 2006). White & Marsh (2006) characterized content analysis as a meticulous methodology for analyzing LIS articles.

### **2. OBJECTIVES OF THE STUDY**

- ✓ To study the research trends of ALIS during 2018–2022.
- ✓ To explore different facets of the authorship contribution of ALIS during 2018–2022,
- ✓ To explore different facets of the assigned keywords of ALIS during 2018–2022.

### **3. RESEARCH DESIGN**

The researchers have examined the trends in LIS scholarly communication by undertaking a content analysis of five years (2018–2022) of articles in the Annals of Library and Information Studies. The researchers have undertaken this study, in which mixed methods of research will be followed. It will be beneficial to retrieve the deeper and more comprehensive version of ALIS. In 2021, Volume 68, Issue No. 3, the editorial board included one short communication in the section of main articles; which is excluded from the present data. The researchers have considered only articles for the present studies. Likewise, the opinion paper from 2020 volume number 67, issue number 4, has been excluded from the present data. Other formats of the contributions were not considered, such as short communications, book reviews, review papers, letters to the editor, and others.

A total of 138 articles in ALIS were taken, and the data was coded and tabulated. Descriptive statistics are employed on the article length, number of references, volume-wise distribution of articles, etc. Further, the authorship pattern and keyword analysis were carried out, which included term frequency (TF), text mining, and keyword mapping. The authorship pattern determined the author's collaboration at national and international connections.

### **4. REVIEW OF LITERATURE**

Authorship is a bibliometric study that finds out various components of the authorship. It includes types of authors, their nature and degree of collaboration, and trends. Authorship may have multiple authors (**Kirtania, 2021**). **Ahmed & Muhammad (2020)** found out that Nigerian authors contributed the most articles to the Journal of Library Philosophy and Practice. Single authors were the majority in the authors' collaboration. **Kirtania (2023)** studied the authorship pattern of 1723 papers. The researchers are working globally on various topics. Content analysis helps determine facets of authorship (**Stemler, 2001**). Content analysis is used for extracting content from images, texts, and all that has meaning. It is a research methodology that assures to resolution textual meaning (**Niels & Jacobs, 2017**). Yadav (2021) carried out a content analysis of job advertisements to identify skills and competencies for LIS positions. He found out that for top-level posts, managing and supervising the library and procuring books and journals are the primary responsibilities for the jobs in LIS. A content analysis was carried out on 3422 publications in LIS journals, and it was found that there is an emphasis on scholarly communication and information behaviour areas. Overall, it indicates that LIS is a vigorous discipline (Ma & Lund, 2020).

Research published in ALIS between 2002 and 2012 tended to shared authorship (Pandita, 2013). Garg and Bebi (2014) conducted a comparative analysis of two notable LIS journals. The 2013 impact factor of both the DESIDOC Journal of Library and Information Technology (DJLIT) and the Annals of Library and Information Studies (ALIS)

increased, according to the study, which looked at citation data from 2010 to 2013. Additional research was conducted on the bibliometric evaluation of ALIS. Kashyap & Singha (2021) conducted a study of ALIS from 2015 to 2020. About 190 articles have been examined.

The trend in the authorship pattern was joint authorship. They also explored the trends in article length and various elements of the contribution of the articles. Prieto-Gutierrez & Segado-Boj (2019) carried out a bibliometric analysis on the Annals of Library and Information Studies (ALIS), and they examined the data from 2011 to 2017. They focused on article performance, authorship patterns, and investigation themes. The study sheds light on the LIS field’s research development.

## 5. DATA ANALYSIS AND INTERPRETATION

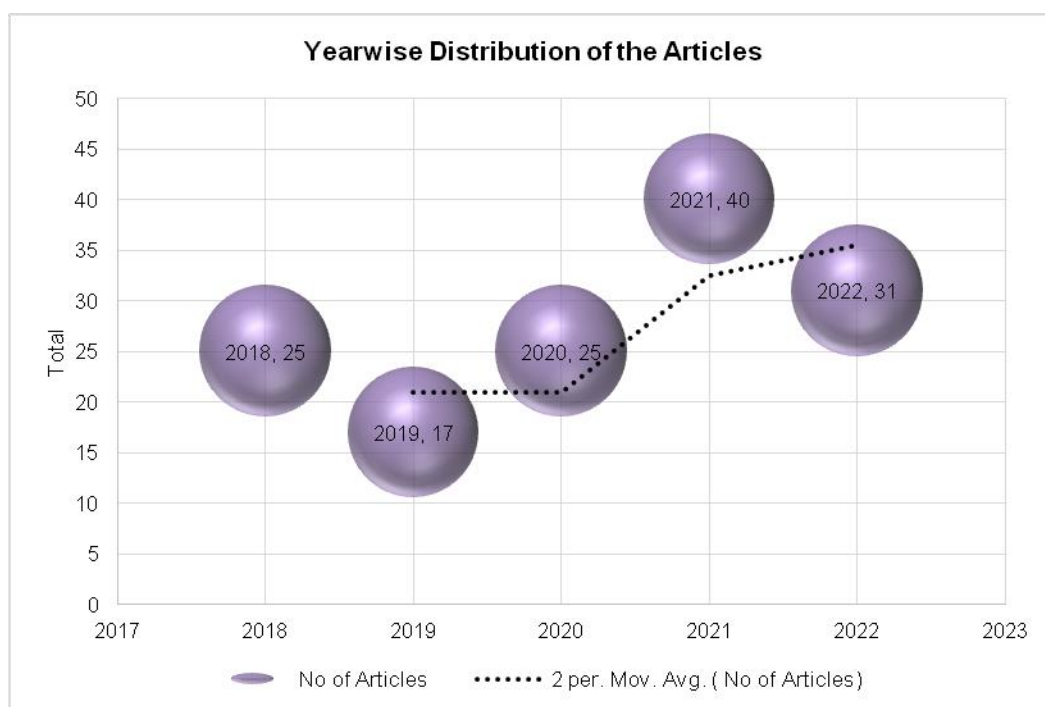
### 5.1 Distribution of the articles

In 2019, the productivity of the articles was the lowest in five years. In 2021, a total 40 articles were published, which is the highest in the period from 2018 to 2022, which dropped again in 2022.

Years covered	Moving Average Calculation	Period 2 Moving Average
2018-2019	$(25+17)/2$	21
2019-2020	$(17+25)/2$	21
2020-2021	$(25+40)/2$	32.5
2021-2022	$(40+31)/2$	35.5

**Table No. 5.1.1** Year wise Average of the productivity of the articles

Table no. 5.1.1 shows a drastic increase in averages from 32.5 to 35.5, which indicates positive growth in the productivity of the articles.



**Figure No. 5.1.1** Year wise Distribution of the articles

### 5.1.2 Details of published content

Table No. 5.1.2 presents data on the number of articles published in a journal across the years 2018 to 2022, organised by volume number and issue number, with a breakdown of different types of articles, including short communication, review papers, book reviews, others, and letters to editors. The table provides insights into the journal's publication trends and potential influences on its editorial direction.

Year	Vol. No.	Issue No.	Total Articles	Short Communication	Review Paper	Book Review	Others	Letter to Editor	Opinion Paper
2018	65	1	7	1			1		
	65	2	7	1				1	
	65	3	6		1				
	65	4	5	1		1			
2019	66	1	5	1		2			
	66	2	3	1		1	2		
	66	3	5						
	66	4	4	1					
2020	67	1	5	1			1		
	67	2	5			1			
	67	3	8				1		
	67	4	7						1
2021	68	1	7		1	1			
	68	2	12	1					
	68	3	11	1					
	68	4	10						
2022	69	1	8						
	69	2	9				1		
	69	3	7						
	69	4	7			1	2		
	Total	<b>20</b>	<b>138</b>	<b>8</b>	<b>2</b>	<b>7</b>	<b>8</b>	<b>1</b>	<b>1</b>

**Table No. 5.1.2** Details of Content Productivity

### 5.1.3 Article Length

The most of the articles (64.49%) are having 6-10 pages length which comes under short length content. Very less articles (2.90%) spanning page range 16-20 and only 0.72% articles having more than 21 pages. The distribution of articles skewed towards shorter articles. The authors of the ALIS have preference for short articles.

No. of pages of the articles	Counts	Percentage
Range between 1-5	16	11.59%
<b>Range between 6-10</b>	<b>89</b>	<b>64.49%</b>

Range between 11-15	28	20.29%
Range between 16-20	4	2.90%
More than 21	1	0.72%
<b>Total</b>	<b>138</b>	<b>100%</b>

Table No. 5.1.3 Lengthwise Distribution of the Articles

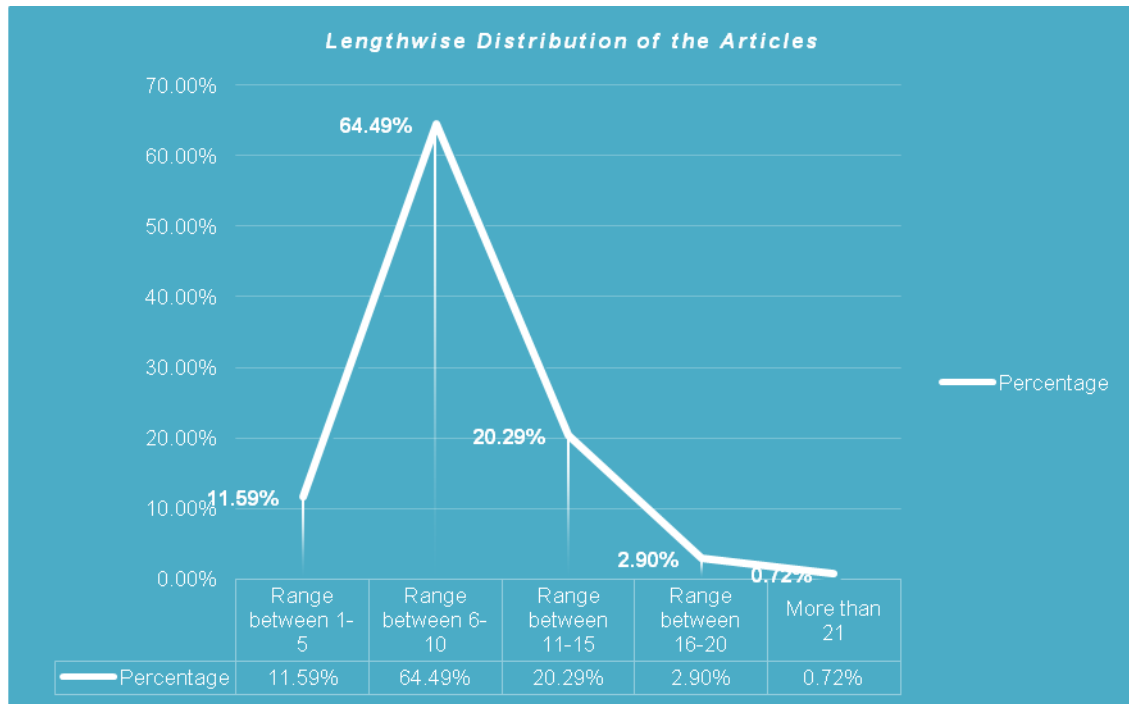


Figure No. 5.1.3 Length wise Distribution of the Articles

## 5.2 AUTHORSHIP PATTERN:

Figure 5.2.1 demonstrates the collaboration of the authors. The majority of the articles (55.8%) were contributed by two authors. Single authors (27.5%) ranked second here, and the third position (12.3%) is for three authors’s collaboration. Very few articles were authored by more than three authors (4.3%). The authors preferred dual authorship. Similar results were received by Prieto-Gutiérrez and Segado-Boj (2019) and Mondal and Jana (2018) in the study of ALIS. They have studied the trends of ALIS 2011–2017 and 2012–2017, respectively.

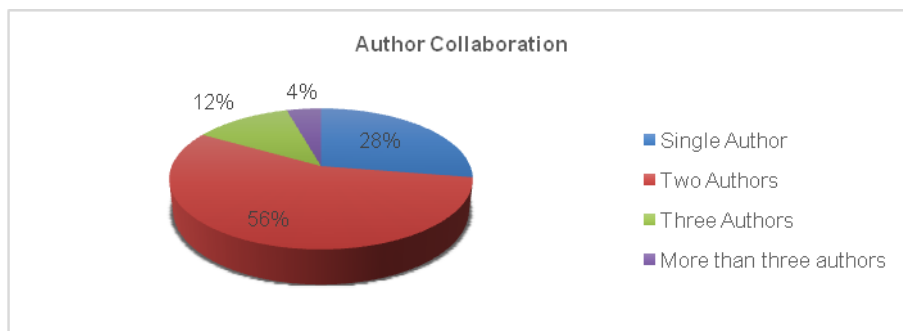


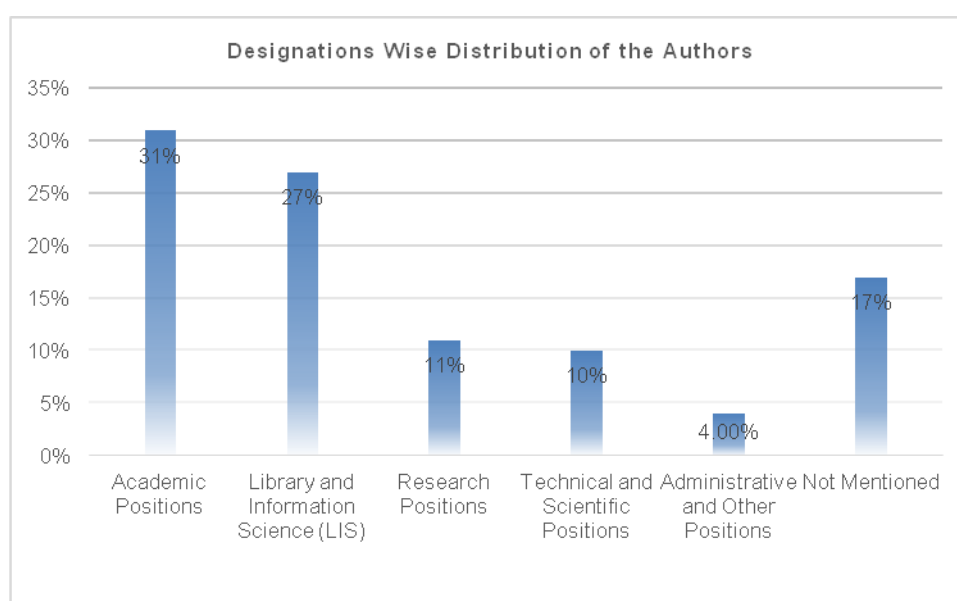
Figure No. 5.2 Authorship wise distribution of the articles

**5.2.1 Designation wise Distribution of Authors:**

The researcher has divided the authors as per their workload and profile. The data is represented in table no. 5.2.1.

Broad Categories	Counts	Percentage	Designations
Academic Positions	68	31%	Assistant Professor, Associate Professor, Professor, Lecturer, Honorary Professor, UGC Emeritus Fellow, Senior Professor
Library and Information Science (LIS)	59	27%	Librarian, Assistant Librarian, Senior Assistant Librarian, Deputy Librarian, University Librarian, Principal Librarian, Senior Librarian, Junior Library and Information Assistant, Semi-Professional Assistant, Library Assistant, Senior Documentation Officer, Senior Library Officer, Sr. Library Information Assistant
Research Positions	23	11%	Research Assistant, Research Scholar, Research Fellow, Junior Research Fellow, University Research Scholar, M. Phil Scholar, MSc. Students, Project Linked Personnel, Project Officer, Project Scientist, Bibliometrician
Technical and Scientific Positions	22	10%	Scientist, Senior Scientist, Principal Scientist, Chief Scientist, Outstanding Scientist, Scientific Officer, Senior Technical Officer, Technical Officer, Principal Technical Officer, Senior Engineer,
Administrative and Other Positions	9	4.0%	Director, Assistant Director, Chairman, Member of the Executive Board, Deputy University Librarian, Chair Professor, Area Coordinator
Not Mentioned	37	17%	Not Mentioned
<b>Total</b>	<b>218</b>	<b>100%</b>	

**Table No. 5.2.1** Designation wise Distribution of Authors



**Figure No. 5.2.2** Designations Wise Distribution of the Authors

The majority of the designations (31%) are classified as academic positions here. Academic roles, such as professor, assistant professor, and lecturer, are typically linked with teaching and academic activities at academic institutions. The second position is for library and information science professionals (27%). Its participants comprise assistant librarians, deputy librarians, librarians, senior assistant librarians, senior library information assistants, university librarians, deputy university librarians, national librarians, and so forth. Research positions (11%), administrative and other positions (4%), and technical and scientific positions (10%) are all included here. Most of the authors (17%) did not include their designation in their published author introduction.

Each designation contributes key skills, special abilities, and knowledge to the research ecosystem, which directly or indirectly affects library operations and addresses societal information challenges.

**5.2.2 States wise Distribution of Authors:**

<b>State</b>	<b>Percentage</b>
<b>West Bengal</b>	<b>18.5%</b>
Delhi	16.7%
Karnataka	14.9%
Uttar Pradesh	7.7%
Tamil Nadu	6.0%
Puducherry	4.8%
Kerala	4.2%
Gujarat	3.6%
Maharashtra	3.6%
Jammu & Kashmir	3.0%
Odisha	3.0%
Punjab	2.4%
Telangana	2.4%
Rajasthan	1.8%
Haryana	1.2%
Lucknow	1.2%
Mizoram	1.2%
Assam	0.6%
Bihar	0.6%
Himachal Pradesh	0.6%
Hyderabad	0.6%
Madhya Pradesh	0.6%
Telangana	0.6%
Uttarakhand	0.6%
<b>Total</b>	<b>100%</b>

*Table No. 5.2.2 State wise Distribution of the Authors*

## ***Exploring Research Dynamics: A Five-Year Analysis of Research Articles in the Annals of Library and Information Studies***

The majority of the authors belonged to West Bengal (18.5%), Delhi (16.7%), and Karnataka (14.9%). Whereas, Assam, Bihar, Chandigarh, Himachal Pradesh, and Madhya Pradesh have only one author per state. It reflects the low authorship.

### **5.2.3 Country wise Distribution of Authors:**

The researchers have highlighted the scope and readership engagement of ALIS in table no. 5.2.3, as the authors are distributed as per their countries.

<b>Country</b>	<b>Percentage</b>
India	74.3%
Sri Lanka	4.0%
Iran	3.1%
Indonesia	2.7%
Nigeria	2.7%
Portugal	1.8%
Kazakhstan	1.3%
Poland	1.3%
South Africa	1.3%
Spain	1.3%
China	0.9%
Russia	0.9%
Turkey	0.9%
Azerbaijan	0.4%
Bangladesh	0.4%
Brazil	0.4%
Iraq	0.4%
Japan	0.4%
Serbia	0.4%
United States of America	0.4%
Netherlands,	0.4%
<b>Total</b>	<b>100%</b>

**Table No. 5.2.3** Country wise Distribution of the Authors

India had the majority of authors (74.3%) in ALIS during 2018–2022. Authors from other countries like Indonesia, Sri Lanka, Iran, and Kazakhstan provide an international scope to this journal. The journal has reached China, Nigeria, Poland, Portugal, Russia, South Africa, Turkey, Azerbaijan, Bangladesh, Brazil, Iraq, Japan, Serbia, Spain, and the United States of America. It is a great success for ALIS in scholarly communication. Wide authorship encourages wide readership. Issue 2 of Volume 67 (2020) had all contributors from outside India.



### 5.2.4 Distribution of Authors' Recurrence in ALIS

Authors prefer to publish their articles or papers in the same journal because of the various features of that journal and its academic significance in scholarly communication. In ALIS, during 2018–2022, the majority of the authors (85.3%) published their articles as first-time authors, and about 19 authors published their two papers. About 2.8% of the authors published their three papers, and about 2.8% of the authors published their research work four times. Bidyarthi Dutta is the only researcher who contributed five articles during the five years of ALIS 2018–2022.

One article published	Two articles published	Three articles published	Four articles published	Five articles published	Total
186	19	6	6	1	218
85.3%	8.7%	2.8%	2.8%	0.5%	100%

Table No. 5.2.4 Distribution of Authors' Recurrence in ALIS: 2018-2022

### 5.3 Keywords Analysis

#### 5.3.1 Keyword Range Distribution

No. of Keywords	Percentage
1-2	4.35%
3-4	42.75 %
5-6	40.58%
7-8	5.80%
9-10	6.52%
<b>Total</b>	<b>100%</b>

Table No 5.3.1 Range wise Distribution of Keywords

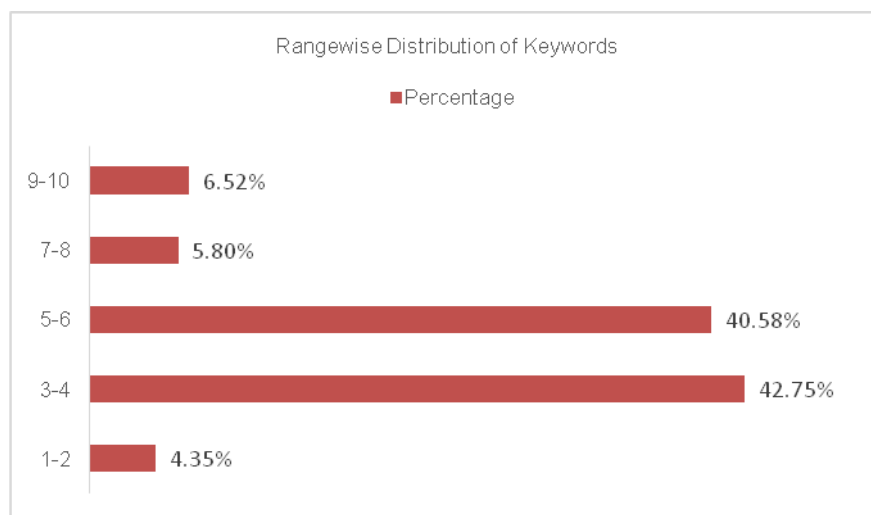
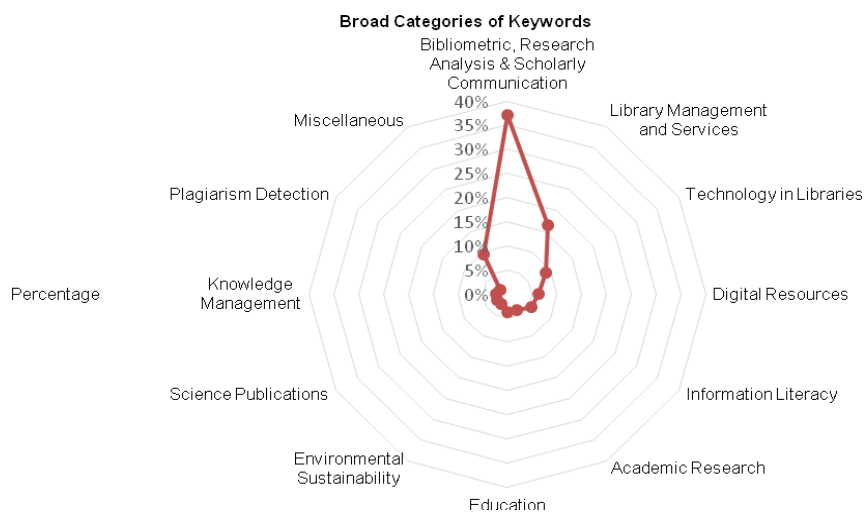


Figure No.5.3.1 Keyword Range Distribution

The majority of the keywords (42.75%) fall in the range of 3–4 keywords; the second position (40.58%) is in the range of 5–6 keywords. The authors preferred to give keywords in this range. Whereas the lowest (4.35%) response was in the 1-2 keyword range. About 6.52% of the keywords categorised here fall under the range of 9–10. It provides more accessibility to the articles.

**5.3.2 Keywords categories and analysis:**



**Figure No. 5.3.2** Keywords categories and analysis

Following analysis, the researchers categorised the keywords. The majority of the keywords (37%) in the bibliometric, research analysis, and scholarly communication categories. The keywords related to library management and services are about 16.40%. The next category, which includes about 8.90% of the keywords, is technology used in libraries. The majority of the articles discuss scholarly communication and library services. The keywords related to knowledge management and environmental sustainability, COVID 19, also showed other important research from the ALIS.

Subject Categories	Percentage
<b>Bibliometric, Research Analysis &amp; Scholarly Communication</b>	<b>37%</b>
<b>Library Management and Services</b>	<b>16.40%</b>
Technology in Libraries	8.90%
Digital Resources	6.20%
Information Literacy	5.50%
Academic Research	3.90%
Education	3.80%
Environmental Sustainability	2.40%
Science Publications	2.30%
Knowledge Management	2.30%
Plagiarism Detection	1.80%
Miscellaneous	9.50%
<b>Total</b>	<b>100.00%</b>

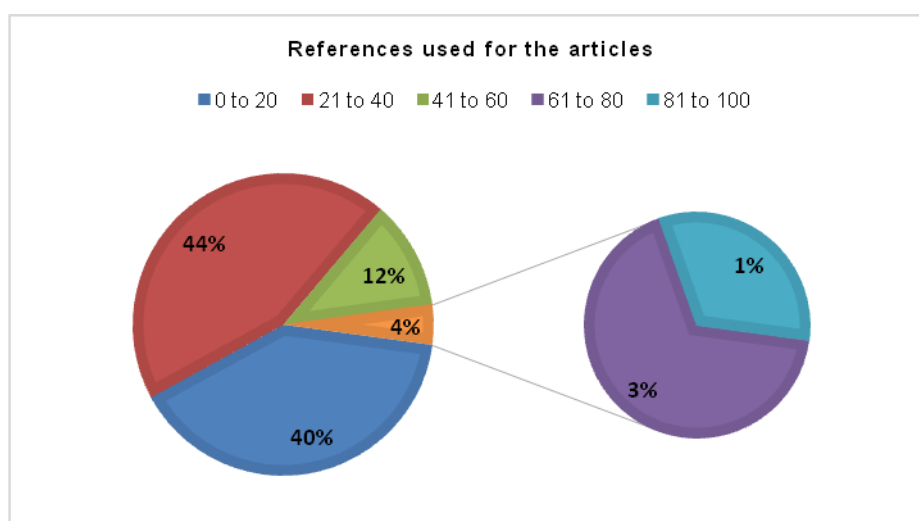
**TableNo.5.3.2.** Distribution of the Keywords

#### 5.4. References used for writing articles

Six articles had references greater than 60. It indicated the depth of the study, and may increase readership due to the quality of the work. A wide literature review helps to understand the significance of the subject area. About 39.9% of the articles had references between 0–20, and about 11.6% of the articles had 41–60 references. Most of the articles (44.2%) had references between the ranges of 21 to 40.

No. of Reference Used	Counts	Percentage
0-20	55	39.9%
<b>21-40</b>	<b>61</b>	<b>44.2%</b>
41-60	16	11.6%
61-80	4	2.9%
81-10	2	1.4%
Total	138	100%

**Table no. 5.4.** References used for writing articles



**Figure no. 5.4.** References used for writing articles

#### FINDINGS AND CONCLUSION:

Annals of Library and Information Studies had a drastic increase in average from 32.5 to 35.5 (2020–2022). The majority of the articles (64.49%) were 6–10 pages in length. The dual authorship pattern was prominent during 2018–2022. Most of the authors (31%) belonged to the academic category. West Bengal, Delhi, and Karnataka produced a larger number of authors, and India ranked first in producing more authors globally over the past five years. In these five years, very few authors have published their research work more than three times. To facilitate more accessibility, a greater number of keywords can be encouraged among the researchers. The main target areas of research for ALIS (2018–2022) were research analysis, bibliometrics, scholarly communication, and library management and services. The authors had a variety of skills and experience that led to innovative research trends in LIS.

**REFERENCE**

- [1] D. K. Kirtania, “Library Philosophy and Practice (e-journal)<https://digitalcommons.unl.edu/libphilprac/6021>
- [2] R. Ahmed and A. MUHAMMAD, “Library Philosophy and Practice (e-journal)–<https://digitalcommons.unl.edu/libphilprac/4611>
- [3] D. K. Kirtania, “<https://doi.org/10.20944/preprints202304.0109.v1>
- [4] S. Stemler, “Practical Assessment, Research, and Evaluation<https://doi.org/10.7275/z6fm-2e34>
- [5] G. Niels and T. Jacobs, “<https://doi.org/10.13140/RG.2.2.33689.31841>
- [6] M. D. White and E. E. Marsh, “Library Trends–<https://doi.org/10.1353/lib.2006.0053>
- [7] J. Ma and B. Lund, “Proceedings of the Association for Information Science and Technology <https://doi.org/10.1002/pr2.241>
- [8] J. J. Prieto-Gutiérrez, “The Serials Librarian— <https://doi.org/10.1080/0361526x.2019.1637387>
- [9] D. Mondal and S. Jana, “DESIDOC Journal of Library & Information Technology <https://doi.org/10.14429/djlit.38.5.12917>
- [10] R. Pandita, “DESIDOC Journal of Library & Information Technology–<https://doi.org/10.14429/djlit.33.6.5481>
- [11] R. Kashyap and H. S. B. Singha, “Library Philosophy and Practice (e-journal) <https://digitalcommons.unl.edu/libphilprac/6212>
-