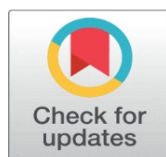
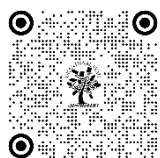


LIBRARY AND INFORMATION SCIENCE RESEARCH IN INDIA: A BIBLIOMETRIC OVERVIEW OF THESES FROM SHODHGANGA (2010–2020)

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ABSTRACT

This study provides a comprehensive bibliometric analysis of Library and Information Science (LIS) theses submitted to the Shodhganga repository between 2010 and 2020. The analysis aims to uncover key trends, patterns, and regional distributions of LIS research across Indian academic institutions. A total of 830 English-language theses were examined using metadata such as title, year of submission, keywords, and institutional affiliation.

The study investigates temporal trends in research output, highlights the most productive institutions, maps regional disparities, and explores dominant and emerging research themes within LIS. Tools like Biblioshiny and VOSviewer were employed to analyze keyword frequency and co-occurrence patterns. The findings reveal a significant rise in ICT-related research, with southern India contributing the highest volume of theses. Despite these developments, the data points to regional imbalances and concentration of research in a few key institutions.

This analysis offers valuable insights into the evolving landscape of LIS research in India and provides recommendations to enhance inclusivity, diversify research themes, and support institutions in underrepresented regions. The study serves as a guiding framework for researchers, academic leaders, and policymakers to shape future directions in LIS education and scholarly inquiry.

Keywords: Library and Information Science (LIS), Bibliometric Analysis, Shodhganga, Research Trends

1. INTRODUCTION

Library and Information Science (LIS) has undergone a significant transformation over the past two decades, driven by the proliferation of digital technologies, the increasing complexity of information environments, and the evolving needs of users. As a result, research in LIS has expanded to cover a wide range of interdisciplinary themes, encompassing information retrieval, digital libraries, scientometrics, user behavior, and emerging technologies such as artificial intelligence and big data (Chakraborty, 2019; Singh & Arora, 2020). In India, the expansion of LIS research has been facilitated by initiatives like **Shodhganga**, a digital repository established by the University Grants Commission (UGC) to host theses and dissertations from Indian universities (INFLIBNET, 2020).

Bibliometric analysis has emerged as a powerful tool for evaluating research trends, productivity, and thematic evolution within academic disciplines. It enables scholars to quantify scholarly output, identify prolific institutions, track keyword dynamics, and map regional research distribution (**Donthu et al., 2021**). Within the LIS domain, bibliometric studies help reveal not only the trajectory of the field but also the research focus of academic institutions and the changing priorities of the scholarly community (**Kumar & Dora, 2012**).

Although several studies have explored LIS literature using bibliometric techniques, there is a limited body of work focused specifically on Indian LIS theses. Given the unique structure and diversity of higher education in India, it is essential to assess how different regions and institutions contribute to LIS research. Furthermore, by analyzing a decade's worth of theses, this study captures longitudinal trends that can inform strategic planning, curriculum development, and policy formulation.

This study aims to fill that gap by conducting a detailed bibliometric analysis of LIS theses submitted to Shodhganga between **2010 and 2020**. The research examines temporal trends, institutional productivity, regional disparities, dominant research themes, and keyword co-occurrences. It also explores how institutional characteristics may influence research focus and output. By doing so, the study contributes to a deeper understanding of the evolving landscape of LIS research in India and offers actionable insights for researchers, educators, and policymakers.

2. LITERATURE REVIEW

Bibliometric analysis has become a crucial method in understanding scholarly communication and research productivity in various disciplines, including Library and Information Science (LIS). It helps identify publishing patterns, thematic evolution, and regional disparities, thereby contributing to evidence-based academic policy and planning (Pritchard, 1969; Hood & Wilson, 2001). In the Indian context, the growing importance of LIS research has been mirrored in an increase in postgraduate and doctoral level research output, much of which is now archived on open-access platforms like Shodhganga.

Several studies have undertaken bibliometric analyses to map LIS research trends. For example, **Kumar and Dora (2012)** analyzed the *Indian Journal of Information Sources and Services* and highlighted the prevalence of user studies and information retrieval as dominant themes. **Singh and Arora (2020)** conducted a scientometric analysis of Indian LIS journals and found that ICT, user behavior, and digital libraries were the most frequently addressed topics. Their findings suggest a significant shift in LIS research towards technology-integrated service delivery.

Chakraborty (2019) examined LIS research output in India over a decade and noted that although the number of publications was growing, research remained concentrated in a few regions and institutions. This aligns with findings from **Tripathi and Jeevan (2010)**, who also reported institutional concentration and uneven geographical distribution in LIS doctoral research. These studies underscore the need for a more equitable and inclusive research landscape in LIS education and scholarship.

Furthermore, studies such as that of **Thanuskodi (2011)** focused on the thematic structure of LIS doctoral theses in southern Indian universities and found a strong preference for areas like library automation, digital resources, and information-seeking behavior. These trends reflect the broader transformation of libraries into hybrid or fully digital spaces, driven by technological advancements and user demands.

The application of keyword co-occurrence and network analysis tools has also gained prominence in bibliometric studies. VOSviewer, for instance, has been widely adopted for mapping conceptual structures and visualizing clusters of related research areas (**van Eck & Waltman, 2010**). In the context of LIS, such tools enable researchers to identify emerging research themes and methodological shifts.

Despite the growing number of studies, a gap remains in bibliometric assessments specifically focused on LIS theses submitted to Indian repositories like Shodhganga. This study aims to address that gap by offering a detailed, decade-long

analysis (2010–2020) of LIS theses, focusing on trends, regional distribution, institutional productivity, and thematic developments.

3. OBJECTIVES

1. To examine the temporal distribution of LIS theses to understand yearly trends in research productivity.
2. To identify the most productive institutions contributing to LIS research during the decade.
3. To analyze the regional distribution of research output across different parts of India.
4. To categorize the theses into broader research areas to determine the dominant and emerging themes in LIS research.
5. To study keyword frequency and co-occurrence patterns to trace the evolution of research topics and methodologies.
6. To explore the relationship between institutional characteristics (e.g., region, type) and their LIS research output.

4. METHODOLOGY

This study adopts a bibliometric approach to analyze LIS theses submitted to the Shodhganga repository over a ten-year period (2010–2020). The methodology involves the following steps:

1. DATA COLLECTION

- **SOURCE:** The data was retrieved from the Shodhganga repository (<https://shodhganga.inflibnet.ac.in/>) using the advanced search option.
- **SEARCH TERM:** “Library and Information Science” was used as the subject filter.
- **TIMEFRAME:** The search was limited to the period from January 2010 to December 2020.
- **TOTAL RECORDS:** An initial total of 880 theses were retrieved. After filtering out non-English theses and duplicates, a final dataset of **830** theses was compiled.

2. METADATA EXTRACTION

For each thesis, the following metadata were manually collected:

- Title
- Year of completion
- Institution name
- Region (based on institution location)
- Date of upload
- Keywords (manually deduced where not explicitly provided)

3. REGIONAL CLASSIFICATION

Each institution was assigned to one of the six major regions of India:

- North
- South
- East
- West
- Central
- North-East

Geographical classification was done using publicly available institutional data via Google Search.

4. THEMATIC CLASSIFICATION

- Theses were grouped into **15 broader LIS research areas** based on title and content. Topics that did not fit into the core categories were classified under “Miscellaneous.”

5. DATA ORGANIZATION

- All metadata was compiled and structured in Microsoft Excel for consistency and ease of analysis.

6. DATA ANALYSIS

- **Biblioshiny (R package)** and **VOSviewer** were used to analyze:
 - Year-wise trends
 - Institutional productivity
 - Keyword frequency and co-occurrence
 - Regional contributions

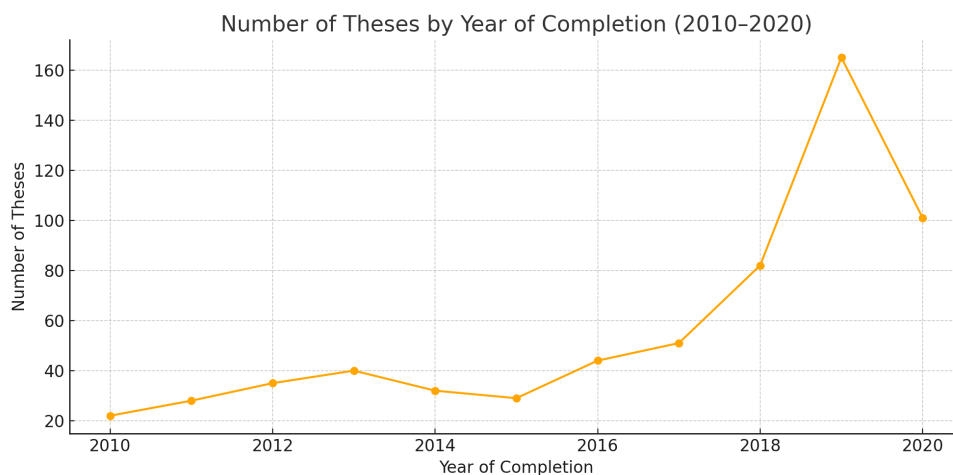
- Broader thematic areas

5. DATA ANALYSIS AND INTERPRETATION

This section presents a bibliometric evaluation of 830 Library and Information Science (LIS) theses submitted to the Shodhganga repository from **2010 to 2020**. The analysis spans temporal trends, institutional contributions, regional disparities, thematic orientations, and keyword dynamics, offering a comprehensive view of LIS research patterns in India.

5.1 TEMPORAL TRENDS IN THESIS SUBMISSIONS

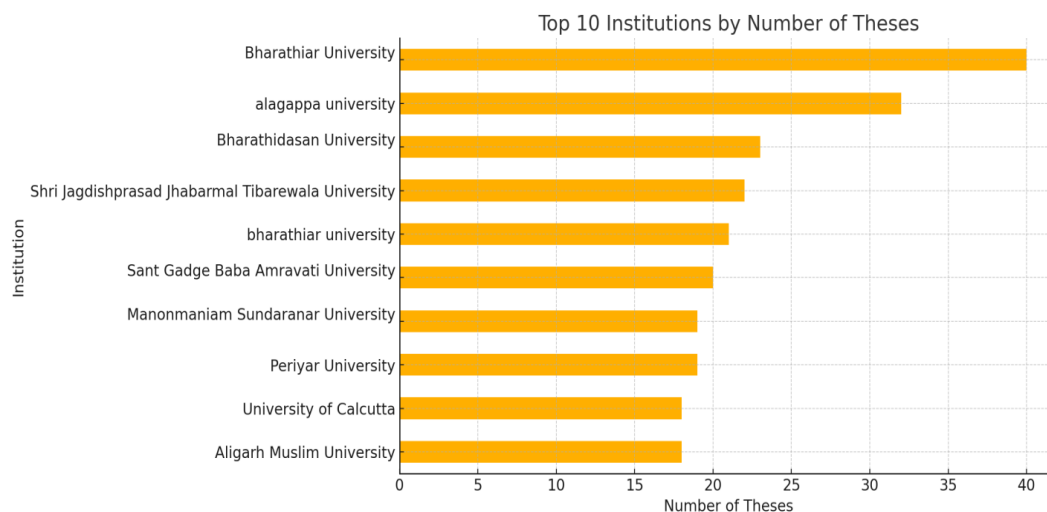
There was a noticeable rise in the number of LIS theses submitted between 2010 and 2020, indicating growing academic interest in the field. Submissions peaked in **2019**, followed by a dip in 2020, possibly due to the onset of the COVID-19 pandemic.



The initial years (2010–2014) showed modest contributions, but a sharp increase began post-2015. This could be attributed to growing digitization, increased awareness of open-access repositories, and policy mandates by UGC for research visibility through Shodhganga.

5.2 INSTITUTIONAL CONTRIBUTIONS

The analysis identified a cluster of **high-performing institutions**, predominantly from South India, contributing significantly to LIS research. **Bharathiar University, Bharathidasan University, Alagappa University, Shri JGT University, and University of Madras** emerged as the top five contributors.

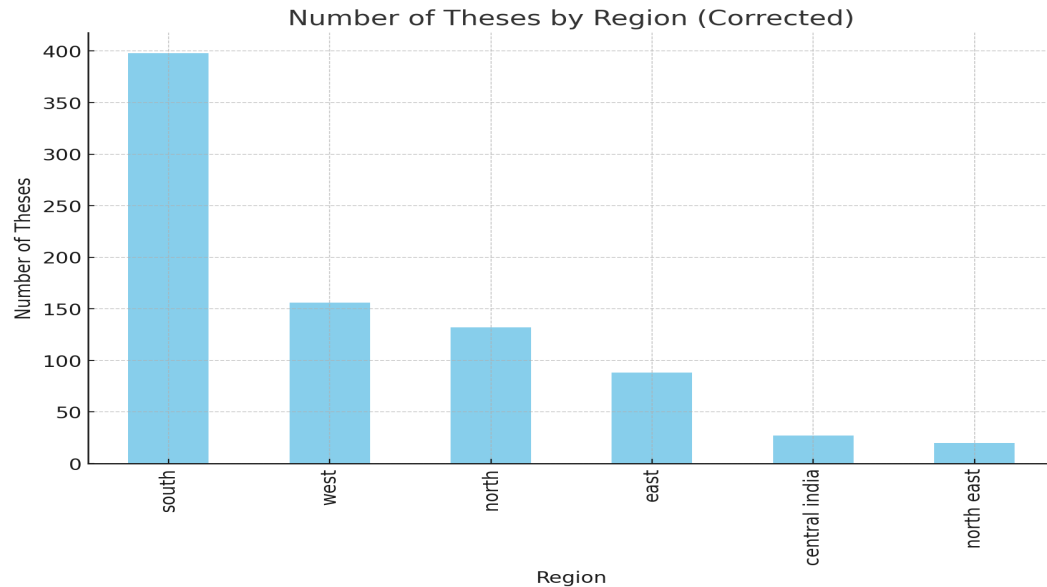


These universities consistently supported LIS research, often through structured doctoral programs, specialized LIS departments, and research funding. Their dominance also reflects a regional tilt in LIS academic infrastructure, particularly in Tamil Nadu.

5.3 REGIONAL DISTRIBUTION OF RESEARCH OUTPUT

A regional analysis categorized institutions into six zones: **North, South, East, West, Central, and North-East India**. The **Southern zone** accounted for over half of the total submissions, underlining the regional disparity in research capacity and LIS program availability.

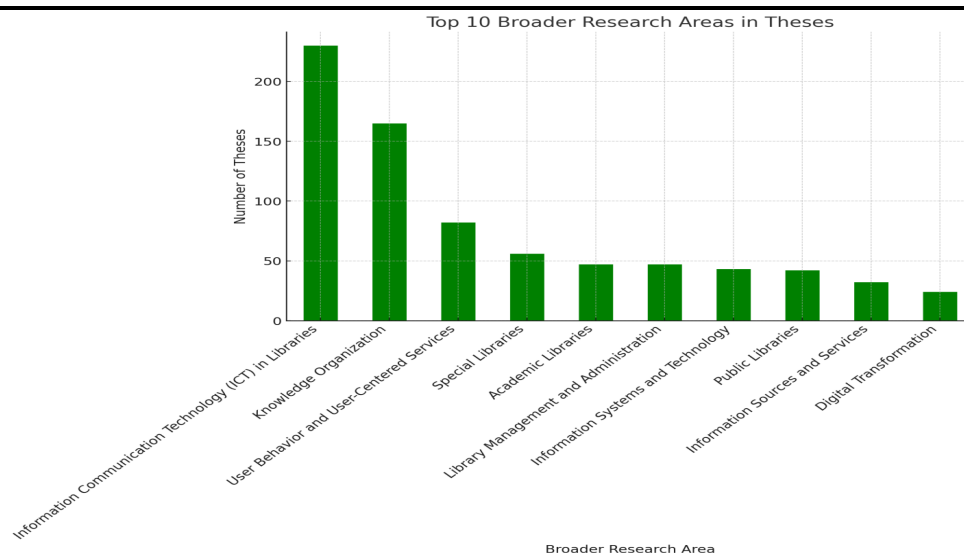
Institutions in the **Central and North-East regions** were underrepresented, pointing toward the need for targeted investment in faculty development, research infrastructure, and collaboration across regions.



5.4 THEMATIC DISTRIBUTION OF THESES

The 830 theses were categorized into **15 broader LIS research areas**. The most explored areas were:

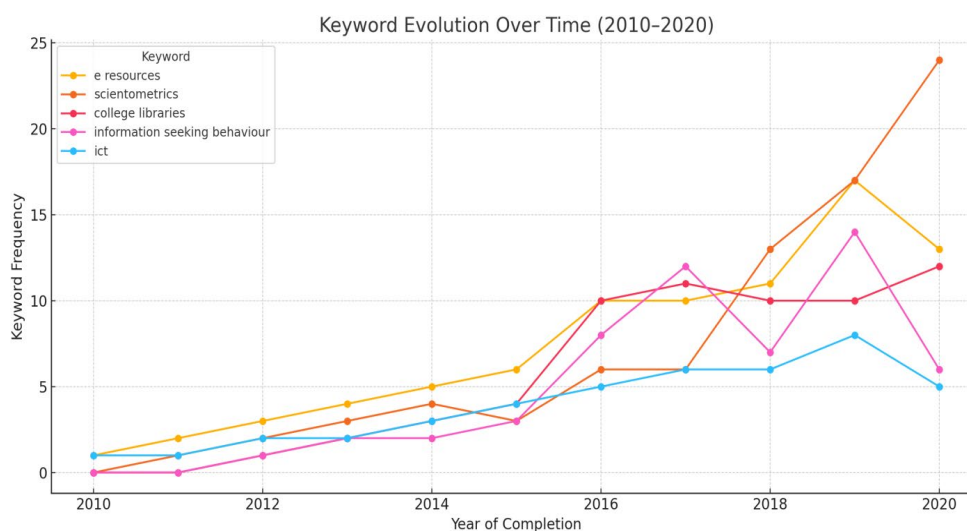
- **Information and Communication Technology (ICT) in Libraries**
- **Knowledge Organization**
- **User behavior and user- centered services**
- **Special libraries**
- **Academic libraries**



These themes reflect the impact of digital transformation on library services and the increasing interest in technology-enhanced learning and information systems. Less addressed topics included **digital preservation**, **open access**, and **metadata standards**, suggesting potential areas for future exploration.

5.5 KEYWORD ANALYSIS AND EVOLUTION

A keyword frequency and co-occurrence analysis was conducted to understand evolving research trends. Frequently appearing keywords included “**e-resources**,” “**scientometrics**,” “**college libraries**,” “**ICT**,” and “**information seeking behaviour**.”



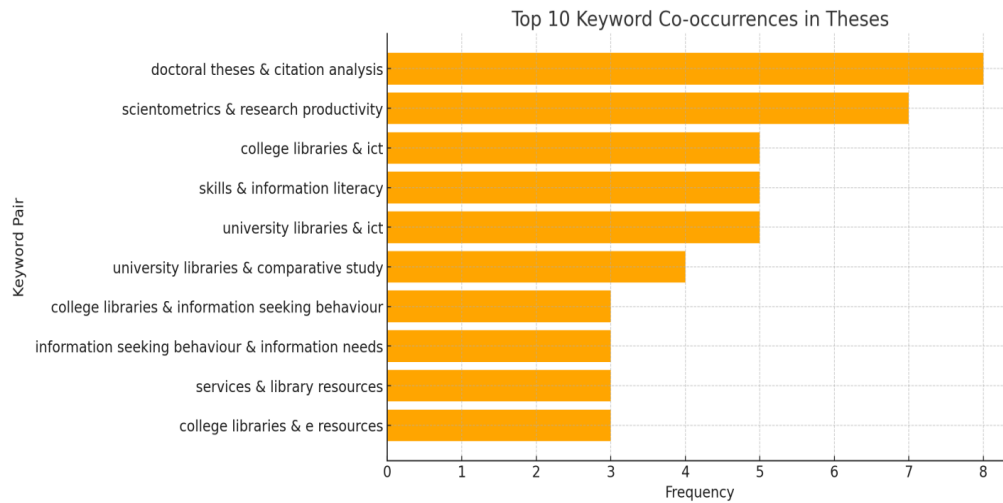
The graph shows increasing focus on “*scientometrics*” and “*e-resources*” especially post-2015, correlating with the rise of data-driven research evaluation and digital content proliferation. The upward trend in “*ICT*” and “*user behaviour*” indicates growing academic interest in user-centered and digital service design in libraries.

5.6 KEYWORD CO-OCCURRENCE AND CLUSTERING (FROM VOSVIEWER)

Using VOSviewer, the study also visualized keyword co-occurrence. Strong linkages were identified between terms like:

- “*Doctoral theses*” ↔ “*Citation analysis*”
- “*Scientometrics*” ↔ “*Research productivity*”

- “User studies” ↔ “Digital libraries”



These clusters suggest that LIS researchers in India frequently examine research performance, user behavior, and digital information access.

5.7 INTERPRETATION AND SUMMARY

- **GROWTH TRAJECTORY:** The steady rise in submissions indicates a maturing research culture in LIS.
- **INSTITUTIONAL DISPARITY:** A few institutions dominate output, while others lag, requiring democratization of research opportunities.
- **REGIONAL IMBALANCE:** Southern India remains the hub for LIS research. More institutional support is needed in the North-East and Central regions.
- **THEMATIC SHIFTS:** ICT, scientometrics, and user studies dominate the discourse, pointing to technology-driven transformations.
- **EMERGING GAPS:** Limited attention to themes like digital preservation and open data presents opportunities for future research.

6. CONCLUSION

This bibliometric study offers a comprehensive analysis of Library and Information Science (LIS) theses submitted to the Shodhganga repository over the ten-year period from 2010 to 2020. By examining 830 English-language theses, the research uncovers critical trends related to the volume of submissions, institutional productivity, regional disparities, thematic focus, and evolving keyword usage.

The findings reveal a clear upward trajectory in LIS research output during the decade, with notable peaks in 2018 and 2019. Southern India, particularly universities in Tamil Nadu, emerged as the epicenter of LIS research, led by institutions such as Bharathiar University, Alagappa University, and Bharathidasan University. This regional dominance highlights both the strengths of these academic hubs and the need for policy-driven support in underrepresented areas like Central and North-East India.

Thematically, LIS research in India has been driven by the growing influence of digital technologies. Topics such as ICT in libraries, e-resources, scientometrics, and user behavior have become dominant, reflecting global shifts toward digitization, data analytics, and user-centered service design. The rise of keywords like “scientometrics” and “information seeking behaviour” further signals a maturing interest in performance evaluation, user experience, and digital access.

Despite these positive developments, the study also identifies gaps in research distribution and topic diversity. Areas such as digital preservation, open access, and emerging technologies like AI and blockchain remain underexplored.

Moreover, the high concentration of research output in a few institutions suggests an uneven distribution of research opportunities, which can hinder broader scholarly development across the country.

In conclusion, this study not only documents the progress of LIS research in India but also provides strategic insights for future growth. By addressing regional and thematic imbalances, fostering institutional collaboration, and encouraging research in emerging and applied areas, stakeholders can contribute to a more inclusive, innovative, and impactful LIS research landscape in the years to come.

CONFLICT OF INTERESTS

None.

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