Bibliometric Analysis of Literature on Library
Services in Pakistan

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This study explores the bibliometric dynamics, publication trends, and scholarly landscape of library services research in Pakistan from 1991 to 2023. It aimed to assess the growth, collaboration, and impact trends in Pakistani library services research. 449 documents were retrieved from the Scopus database and analyzed using the bibliometric analysis tool Biblioshiny.

Findings have revealed significant growth in research output, collaborative endeavors, and international recognition of Pakistani scholarship. However, a disparity between the publication output and citation uptake after 2011 was identified, signaling a potential research gap. The study highlights leading sources, highly cited papers, prominent institutions, prolific authors, and trending topics shaping the discourse in this field. The conclusion underscores the need for continued investment, interdisciplinary collaboration, and responsive research efforts to ensure the relevance, visibility, and sustainability of library services research in Pakistan. Implications include informing policy, guiding academic institutions, enhancing professional development, fostering global collaboration, and identifying future research directions to address critical issues facing library services in Pakistan.

Keywords: Bibliometric Analysis, Library Services Research, Scholarly Impact, Global Collaborations, Publication Trends, Pakistani Academic Landscape

INTRODUCTION

Libraries serve as indispensable repositories of knowledge, fostering intellectual growth and societal development (Lee, 2024; Ni et al., 2023; Ryan et al., 2023; Sulaiman & Laksmi, 2024). In the ever-evolving landscape of information dissemination, libraries are not static entities; they dynamically adapt to the changing needs of their patrons (Mahmood, 1996). This bibliometric exploration delves into the vast expanse of library services in Pakistan, unraveling the intricate web of scholarly contributions and mapping the trajectory of knowledge dissemination within the country. Pakistan is a nation with a rich cultural heritage and a diverse population (Hayat & Azamtullah, 2024; Raza et al., 2023) and has a burgeoning need for effective information access and dissemination (Ali et al., 2023; M. A. Mushtaq et al., 2024).

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Libraries, as the custodians of knowledge, play a pivotal role in meeting this need (Le et al., 2023). The evolution of library services in Pakistan is a multifaceted narrative that intertwines with the country's educational, social, and technological developments (Ashiq et al., 2021a; S. A. Khan & Shahzad, 2024a; Siddique et al., 2021; M. Ullah, 2024). Understanding this evolution requires a comprehensive analysis of scholarly output; a task bibliometrics is uniquely positioned to undertake (A. Khan et al., 2021).

The significance of this bibliometric exploration lies in its potential to inform policymakers, educators, and librarians about the current state of library services in Pakistan. By analyzing the trends, patterns, and influential works, we aim to provide a nuanced understanding of the strengths and areas for improvement within library services (S. A. Khan & Bhatti, 2012). Such insights can guide strategic decision-making, effective resource allocation, and the formulation of policies that align with the evolving needs (M. N. Islam & Aziz, 2023; Md. M. Islam et al., 2023; Md. N. Islam & Aziz, 2023) of the Pakistani populace.

This exploration unfolds in a structured manner, beginning with an overview of the evolution of libraries in Pakistan. Subsequently, we delve into the thematic areas and key concepts that emerge from the bibliometric analysis (M. N. Islam et al., 2023; Md. N. Islam et al., 2023; Md. Nurul Islam et al., 2023). The study further identifies influential authors, journals, and institutions, shedding light on the collaborative networks that underpin the scholarly landscape of library services in Pakistan. In the final sections, we discuss the implications of our findings, offering recommendations for policymakers, educators, and practitioners in the field. It is imperative to trace the historical trajectory of libraries within the nation to comprehend the current state of library services in Pakistan.

The roots of library culture in Pakistan can be traced back to its independence in 1947. Initially, libraries were established to support educational institutions and facilitate research endeavors. Over the years, the scope and functions of libraries have expanded in response to the evolving needs of a growing and diversifying population (M. Mushtaq & Shah, 2023; S. Mushtaq et al., 2021).

The digitization era has brought about a paradigm shift in how libraries operate. The advent of information and communication technologies has transformed libraries from traditional repositories of physical books to dynamic hubs of digital resources (Qutab et al., 2014). The integration of online catalogs, electronic databases, and digital archives has not only enhanced accessibility but posed new challenges in information management and preservation (Rehman, 2012). While the evolution of libraries in Pakistan has been commendable, it is not without its challenges. Limited financial resources, inadequate technological infrastructure, and a need for skilled li-

brarians are among the hurdles libraries face routinely. However, within these challenges lie opportunities for innovation and collaboration (Shahzad et al., 2021).

Libraries in Pakistan can potentially serve as catalysts for social and economic development. By addressing the challenges strategically, libraries can transform into vibrant knowledge hubs that empower individuals and communities. This bibliometric exploration aims to identify the key areas where interventions and investments can make a meaningful impact on the evolution and effectiveness of library services in Pakistan (Shahzad & Khan, 2023). In the subsequent sections, we will delve into the thematic analysis of the retrieved documents, shedding light on the prevailing trends, key concepts, and emerging areas of focus within the landscape of library services in Pakistan.

LITERATURE REVIEW

Libraries are not mere repositories of books; they are dynamic entities that evolve in response to societal needs, technological advancements, and educational paradigms (Lamba, 2022; Owusu-Ansah, 2024). The literature surrounding library services in Pakistan provides a rich tapestry of insights, capturing the essence of this evolution. This literature review endeavors to contextualize our bibliometric exploration within the broader discourse, examining key themes, seminal works, and the current state of knowledge regarding library services in Pakistan (Taufiq et al., 2020; Warraich & Rorissa, 2022). The roots of library culture in Pakistan are deeply embedded in its post-independence history. Early efforts were directed toward establishing libraries as integral components of educational institutions (Mahmood et al., 2006; A. Ullah et al., 2022). Notable pioneers such as Dr. Muhammad Hamidullah advocated for the development of libraries to promote research and intellectual growth.

The establishment of the Quaid-e-Azam Library in Lahore in 1952 marked a significant milestone, symbolizing the commitment to creating accessible knowledge hubs. The literature underscores the transformative role of libraries in the educational landscape of Pakistan. Previous discussions have revolved around the foundational principles of libraries as facilitators of learning (Qazi et al., 2024) repositories (Awan et al., 2022; Gul et al., 2019; Rafiq, 2022) of cultural heritage (Khalid, 2021) and agents of social change (Ashiq et al., 2021b; Khalid et al., 2021). As the nation struggled with the challenges of nation-building, libraries emerged as crucial pillars supporting the dissemination of knowledge and fostering a culture of inquiry (Batool et al., 2022).

Information and communication technologies have reshaped libraries' landscape worldwide, and Pakistan is no exception. A significant body of literature delves into the impact of digitization on library services. Digital libraries have emerged as powerful tools for information access and retrieval, transcending physical space and time limitations. The literature reflects on the challenges and opportunities presented

by this digital paradigm shift, emphasizing the need for infrastructure development, digital literacy, and the preservation of digital resources (Hedstrom, 1997; A. Khan & Ahmed, 2013; A. Khan & Qutab, 2016; S. A. Khan & Shahzad, 2024b). There is potential to bridge information gaps, especially in remote and underserved areas. The digitization of rare manuscripts, historical documents and indigenous knowledge has been lauded for its role in preserving cultural heritage. However, scholars also caution against the digital divide, urging a concerted effort to ensure equitable access to digital resources across diverse socio-economic strata (Montiel-Overall, 2008; Mubeen et al., 2021).

The literature highlights the role of libraries in supporting curriculum development, fostering information literacy, and enhancing the research capabilities of academic institutions. Research-oriented libraries, such as those affiliated with universities and research organizations, have been subjects of specific attention in the literature. Scholars have delved into the challenges faced by these libraries, ranging from budgetary constraints to the need for specialized collections. The literature also explores the collaborative initiatives between libraries and academic institutions, underscoring the importance of partnerships in advancing research agendas (Li, 2007).

As articulated in the literature, libraries in Pakistan face an array of challenges. Financial constraints, outdated infrastructure, and a shortage of qualified librarians have been recurrent themes. The literature underscores the need for strategic planning, resource mobilization, and capacity building to address these challenges effectively. In addition to internal challenges, external factors such as socio-political dynamics, cultural perceptions, and global trends have shaped the operating context of libraries in Pakistan. Opportunities for innovation and growth within the library landscape have also been identified. Collaborative networks, both nationally and internationally, have emerged as avenues for sharing resources and expertise.

The Literature calls for a proactive approach to harnessing technological advancements, advocating for the integration of cutting-edge technologies to enhance library services. Initiatives that promote community engagement, lifelong learning and cultural exchange have been identified as pathways that can help position libraries as vibrant and inclusive spaces. Recent literature points towards emerging trends that shape the trajectory of library services in Pakistan.

The concept of 'smart libraries' has been gaining traction, emphasizing the integration of technology for enhanced user experience and efficient management. Discussions around open access, open data, and open educational resources reflect a global shift towards democratizing knowledge and dismantling barriers to information access. Community-focused library services have also garnered attention in the literature.

Libraries have been increasingly viewed as community hubs that go beyond traditional roles, catering to the diverse needs of their local populations. Initiatives promoting inclusivity, cultural diversity, and social engagement have also been explored as possible avenues to make libraries more responsive to their communities (Mahmood, 1997). The research aimed to comprehensively explore the bibliometric dynamics, publication trends, leading sources, highly cited papers, institutional contributions, authorship patterns, trending topics, and country collaborations in Pakistani library services research from 1991 to 2023. By conducting a thorough analysis of these facets, this study endeavors to provide valuable insights into the evolution, impact, and future directions of scholarly activity in the field of library services in Pakistan.

RESEARCH QUESTION

RQ: What are the bibliometric dynamics, publication trends, leading sources, highly cited papers, institutional contributions, authorship patterns, trending topics, and country collaborations in Pakistani library services research from 1991 to 2023, and what insights do they provide into the evolution, impact, and future directions of scholarly activity in this field?

METHODOLOGY

Data Retrieval

The data for this research was obtained using the bibliometric analysis tool Biblioshiny. A database search was conducted on Scopus, a comprehensive bibliographic database, on March 17, 2024. The search query used was "librar*" AND "servic*" with search parameters set to title, abstract, and keywords. This initial search yielded a total of 53,590 documents.

Data Filtering

The retrieved data was meticulously filtered based on the country affiliation to maintain a specific focus on library services research in Pakistan. Initially, 462 documents were identified with affiliations to Pakistan, ensuring the specificity of our study.

Exclusion Criteria

Documents published in 2024 were excluded to ensure consistency and relevance to the study period. This led to 16 documents being excluded, leaving a final dataset comprising 449 documents published from 1991 to 2023.

Data Analysis

The selected dataset was then subjected to a comprehensive bibliometric analysis to explore the various aspects of library services research in Pakistan. Key metrics

such as publication trends, citation patterns, leading sources, highly cited papers, institutional contributions, authorship patterns, trend topics and country collaborations were examined to provide insights into the evolution, impact and future directions of scholarly activity in this domain.

Bibliometric Tool

Biblioshiny, a powerful bibliometric analysis tool, was utilized to analyze the selected dataset. This tool offers advanced functionalities for visualizing and interpreting bibliometric data, allowing for a comprehensive exploration of scholarly literature (M. M. Islam et al., 2022; M. N. Islam & Hu, 2023; N. Islam et al., 2022).

Limitations

It is essential to acknowledge the study's limitations, including potential biases introduced by selecting the Scopus database and using specific search parameters. Additionally, the exclusion of documents published in 2024 may have affected the comprehensiveness of the analysis for recent trends. However, efforts were made to mitigate these limitations by employing rigorous filtering criteria and focusing on a specific geographic region and time frame.

Ethical Considerations

The study adhered to ethical guidelines regarding data usage and publication ethics. All of the analyzed data were obtained from publicly available sources, and proper attribution was given to the original authors and publishers. Overall, the methods employed in this research aimed to provide a rigorous and comprehensive analysis of library services research in Pakistan, utilizing advanced bibliometric techniques and tools to generate valuable insights into the scholarly landscape in this domain.

DATA ANALYSIS AND RESULTS

Key data information

Figure 1

A Comprehensive Snapshot of Bibliometric Dynamics in Pakistani Library Services
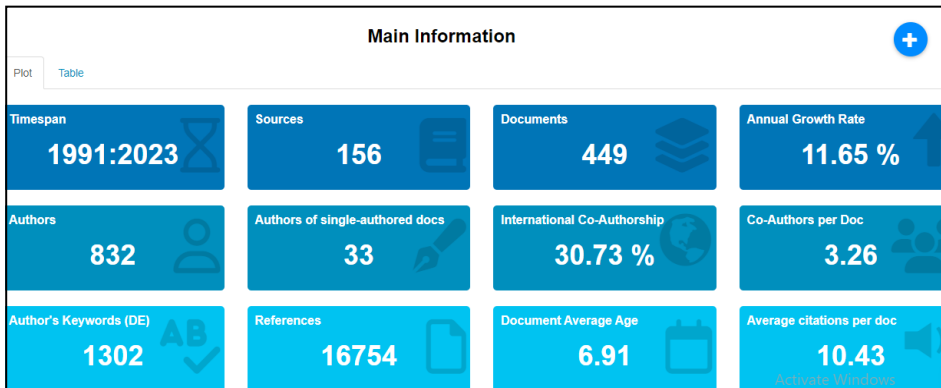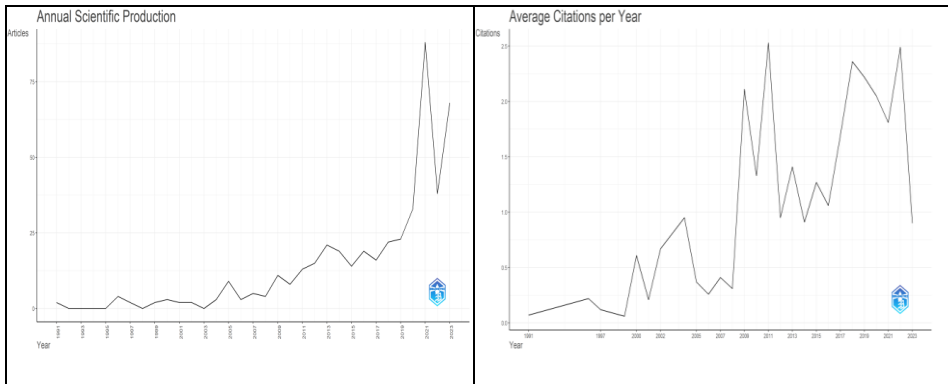
Research (1991-2023)

Figure 1 shows the bibliometric exploration of library services in Pakistan from 1991 to 2023, revealing a comprehensive landscape with significant growth and collaboration. With 449 documents from 156 journals and books, the field exhibits an impressive annual growth rate of 11.65%. The average age of documents is 6.91 years which indicates a relatively current focus. Each document received an average of 10.43 citations, suggesting a degree of influence within the scholarly community. There have been notable collaborations, with an average of 3.26 co-authors per document and international co-authorships comprising 30.73%. Document types varied, dominated by articles (344), with substantial contributions from reviews (62) and conference papers (26). This data underscores a vibrant and interconnected research landscape in library services within Pakistan, with robust international engagement and a diverse range of scholarly outputs.

Annual Scientific Productions and Citations

Figure 2

Publication and citation trends of literature if library services in Pakistan

The publication trends of literature on library services in Pakistan, as depicted in Figure 2, reveal a significant increase over time, particularly from 2009 onwards. This surge in research activity, possibly driven by increased interest or funding is evidenced by a notable spike in articles published in 2021. However, the slight decrease in publication counts in 2022 and 2023 suggests potential fluctuations in research focus or better resource availability in earlier years. Simultaneously, the citation trends highlight fluctuating patterns. At the same time, there was a steady increase in mean total citations per article until 2011, with a peak of 35.46. This trend plateaus and declines after that, reaching 7.47 by 2022. Conversely, mean total citations per year show fluctuations but generally increase until 2019, followed by a notable decline. This disparity between publication and citation trends suggests a potential saturation of research output relative to citation uptake, hinting at a need for more impactful or targeted research efforts. The decreasing number of citable years also implies a potential decline in the longevity of research relevance. A coherent analysis combining these trends suggests a complex interplay of factors shaping the landscape of library services research in Pakistan, warranting further investigation into the field's sustainability and impact amidst changing research priorities and resource dynamics.

Leading sources (journals) publishing research on library services in Pakistan

Table 1

Top 10 journals publishing research on library services in Pakistan

Sources	Articles	IF 2022	Cite Score 2022	Q (Scopus)	Publisher	Country
Library Philosophy and Practice	84	NA	NA	NA	The University of Nebraska	USA
Global Knowledge, Memory, and Communication	17	1.8	2.9	2	Emerald Publishing	UK
Electronic Library	15	1.9	3.9		Emerald Publishing	UK
Pakistan Journal of Information Management and Libraries	15	NA		4	University of the Punjab	Pakistan
Library Review (Now renamed Global Knowledge, Memory, and Communication)	12	NA	NA	NA	Emerald Publishing	UK
LIBRI	12	1	1.4	2	De Gruyter	Germany
Journal of Academic Librarianship	11	2.6	4.1	1	Elsevier	Netherlands
Journal of Librarianship and Information Science	11	1.7	5.1	1	Sage	USA
Emerald Emerging Markets Case Studies	10	NA	0.3	4	Emerald Publishing	UK
International Information and Library Review	10	NA	2.3	2	Taylor and Francis Ltd.	UK

　　　　Table 1 provides insights into the leading sources (journals) publishing research on library services in Pakistan. Notably, "Library Philosophy and Practice" emerges as the most prolific source, with 84 articles indicating its significance in disseminating research in this domain. "Global Knowledge, Memory and Communication" and "Electronic Library" from Emerald Publishing in the UK also make notable contributions with 17 and 15 articles, respectively along with competitive citation metrics. Local journals like the "Pakistan Journal of Information Management and Libraries" demonstrate a growing presence, with 15 articles published by the University of the Punjab. Additionally, internationally renowned publishers like Elsevier and Sage have contributed through journals such as the "Journal of Academic Librarianship" and the "Journal of Librarianship and Information Science," reflecting the diverse publishing landscape shaping research on library services in Pakistan.

Top Ten Highly Cited Papers

Global cited Documents

Table 2

The most frequently cited articles

Paper	Total Citations	TC per Year	Normalized TC	Pakistani Author(s)
Corrall S, 2013, Libr Trends	165	13.75	9.73	Sheila Corrall, Mary Anne Kennan, Waseem Afzal
Bhutta Za, 2009, Bmc Pregnancy Childbirth	119	7.44	3.52	Zulfiqar A Bhutta, Mohammad Yakoob
Ali My, 2020, Health Inf Libr J	118	23.60	11.49	Muhammad Yousuf Ali
Afzal B, 2019, Future Gener Comput Syst	102	17.00	7.64	Bilal Afzal , Muhammad Umair, Ghalib Asadullah Shah
Rafiq M, 2021, J Acad Librariansh	98	24.50	13.52	Muhammad Rafiq, Syeda Hina Batool, Amna Farzand Ali, Midrar Ullah
Haider Ba, 2011, Bmc Public Health	98	7.00	2.76	Batool Azra Haider, Mohammad Yawar Yakoob, Zulfiqar A Bhutta
Awan Mj, 2021, Sustainability	93	23.25	12.83	Mazhar Javed Awan, Umar Farooq, Hafiz Muhammad Aqeel Babar, Awais Yasin, Haitham Nobanee, Muzammil Hussain, Owais Hakeem, Azlan Mohd Zain
Mahmood K, 2011, Program	88	6.29	2.48	Khalid Mahmood
Yakoob My, 2011, Bmc Public Health	84	6.00	2.37	Mohammad Yawar Yakoob, Mahrukh Ayesha Ali, Mohammad Usman Ali, Aamer Imdad, Zulfiqar A Bhutta
Khan Sa, 2012, Webology	80	6.15	6.45	Shakeel Ahmad Khan, Rubina Bhatti

Table 2 displays the top ten highly cited papers in library services, reflecting their global impact. Notably, "CORRALL S, 2013" leads with 165 total citations, emphasizing its significant contribution. Several papers feature authors affiliated with Pakistan, indicating the country's involvement in impactful research. For instance, "ALI MY, 2020" and "YAKOOB MY, 2011" address health information and public health, underscoring diverse research areas within library services. Additionally, papers like "AFZAL B, 2019" and "KHAN SA, 2012" demonstrate Pakistan's engagement in future computing systems and webology. Overall, these highly cited papers highlight the global recognition of research originating from Pakistan and its contribution to advancing knowledge in library services and related domains.

Most locally cited documents

Table 3

Most locally cited documents

Title	Authors	Journal Name	Year	Local Citations	Global Citations	LC/GC Ratio (%)	Normalized Local Citations	Normalized Global Citations
Service quality of the University of the Punjab's libraries: An exploration of users' perceptions	Alia Arshad, Kanwal Ameen	Performance Measurement and Metrics	2010	11	27	40.74	3.67	1.36
Status of information technology applications in Pakistani libraries	Muhammad Ramzan, Diljit Singh	The Electronic Library	2009	10	34	29.41	7.33	1.01
Competencies needed for future academic librarians in Pakistan	Khalid Mahmood	Education for Information	2002	10	29	34.48	2.00	1.87
Internet use in university libraries of Pakistan	Hamid Saeed, Muhammad Asghar, Muhammad Anwar, Muhammad Ramzan	Online Information Review	2000	10	28	35.71	2.73	1.83
Instructing usability evaluation in LIS curriculum: A case of the U.S.	Kanwal Ameen, Sanda Erdelez	Pakistan Journal of Library & Information Science	2011	9	4	225.00	5.57	0.11
Changing scenario of librarianship in Pakistan: managing with the challenges and opportunities	Kanwal Ameen	Library Management	2011	9	41	21.95	5.57	1.16
Designing Effective In-service Training for Librarians in Pakistan	Arif Khan, Muhammad Rafiq	Library Philosophy and Practice	2013	9	15	60.00	3.78	0.88
The COVID-19 (Coronavirus) pandemic: reflections on the roles of librarians and information professionals	Muhammad Yousuf Ali, Peter Gatiti	Health Information & Libraries Journal	2020	8	118	6.78	9.43	11.49
Developing competencies for medical librarians in Pakistan	Midrar Ullah, Mumtaz A. Anwar	Health Information & Libraries Journal	2013	8	22	36.36	3.36	1.30
Library services and user satisfaction in developing countries: a case study	Muhammad Ijaz Mairaj, Mirza Muhammad Naseer	Health Information & Libraries Journal	2013	8	22	36.36	3.36	1.30

Table 3 presents the most locally cited documents in the field of library services in Pakistan. The data highlights key research contributions and their impact within the local context. Notably, papers addressing specific issues within Pakistani libraries, such as service quality and the status of information technology applications, have received considerable attention, suggesting a strong interest in improving library services and infrastructure. Additionally, studies focusing on professional development, like competencies needed for future librarians, indicate a commitment to enhancing the skills and capabilities of library professionals in Pakistan. Moreover, the impact of global events, such as the COVID-19 pandemic, on the roles of librarians and information professionals is reflected in the citations, demonstrating the relevance of timely and responsive research. This analysis underscores the significance of locally relevant research in informing and improving library services in Pakistan.

Leading Institution on Library Service Literature in Pakistan

Table 4

Top literature publishing institution on library services in Pakistan

Affiliation	Articles
University of the Punjab	147
Aga Khan University	60
The Islamia University of Bahawalpur	30
University of Sargodha	25
Imam Abdulrahman Bin Faisal University	23
Allama Iqbal Open University	22
Nanjing University	22
Comsats University Islamabad	20
Khushal Khan Khattak University Karak	16

Table 4 presents the leading institutions contributing to the literature on library services in Pakistan. The University of the Punjab emerges as the most prolific institution, with 147 articles showcasing its significant influence and contribution to research in this field. Aga Khan University follows closely, with 60 articles indicating its substantial research output and impact on library services. Other institutions, such as The Islamia University of Bahawalpur, University of Sargodha, and Imam Abdulrahman Bin Faisal University, also demonstrate noteworthy contributions, underscoring a distributed network of academic institutions actively engaged in advancing knowledge and scholarship in library service literature within Pakistan.

Most Relevant authors

Table 5

Most productive authors in the field

Authors	Country	Articles	Articles Fractionalized
MAHMOOD K	Pakistan	49	21.40
BHATTI R	Pakistan	32	13.50
AMEEN K	Pakistan	31	16.92
KHAN A	Pakistan	21	7.75
SHAHZAD K	Pakistan	18	8.25
ASHIQ M	Pakistan	17	5.58
WARRAICH NF	Pakistan	16	6.75
AHMED S	Pakistan	15	7.20
KHAN SA	Pakistan	15	6.25
RAFIQ M	Pakistan	13	4.67

Table 5 presents the most relevant authors in the field of library services in Pakistan. Khalid Mahmood emerges as the most prolific author with 49 articles, showcasing his significant contribution to the literature. Other prominent authors include Rubina Bhatti, Kanwal Ameen, and Arif Khan, each demonstrating substantial research output in the field. These authors have likely played a crucial role in shaping the discourse and advancing knowledge within the domain of Pakistani library services. Their contributions reflect a diverse range of interests and expertise, underscoring the depth and breadth of research conducted by Pakistani scholars in this field. Collaborative efforts among these authors may further enhance the impact and scope of their research endeavors.

Trend Topics
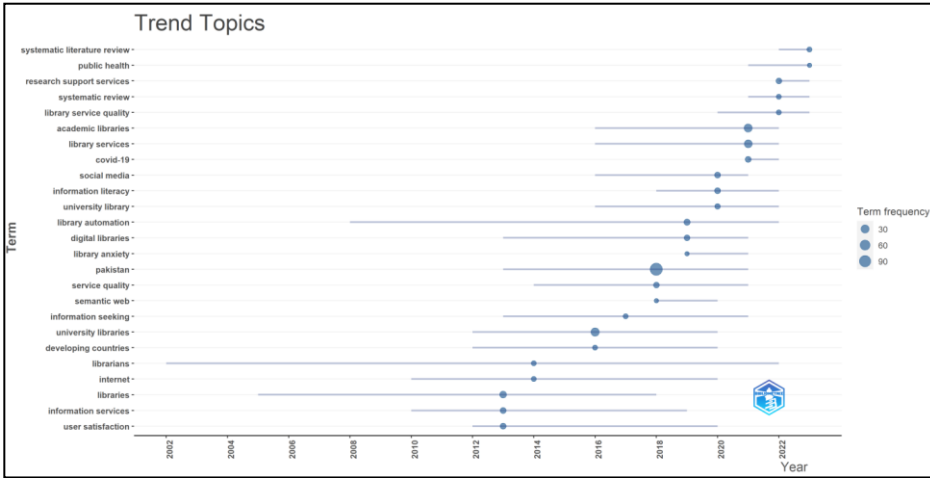
Figure 3

Trend topics (author keywords)

Figure 2 presents the frequency of key terms in the literature on library services in Pakistan. Notably, "Pakistan" emerges as the most frequently occurring term, reflecting a focus on research within the country. "University libraries" and "academic libraries" follow closely, indicating a specific interest in the academic library context. "Library services" and "libraries" are also prominent, highlighting a broad interest in various aspects of library operations. Additionally, terms such as "library automation," "information services," and "information literacy" underscore ongoing efforts to enhance library technology and user education. The presence of terms like "COVID-19" and "public health" suggests a recent focus on the impact of the pandemic on library services and broader health-related issues. Overall, this analysis provides insights into the key themes and areas of focus within library services research in Pakistan.

Country Collaboration

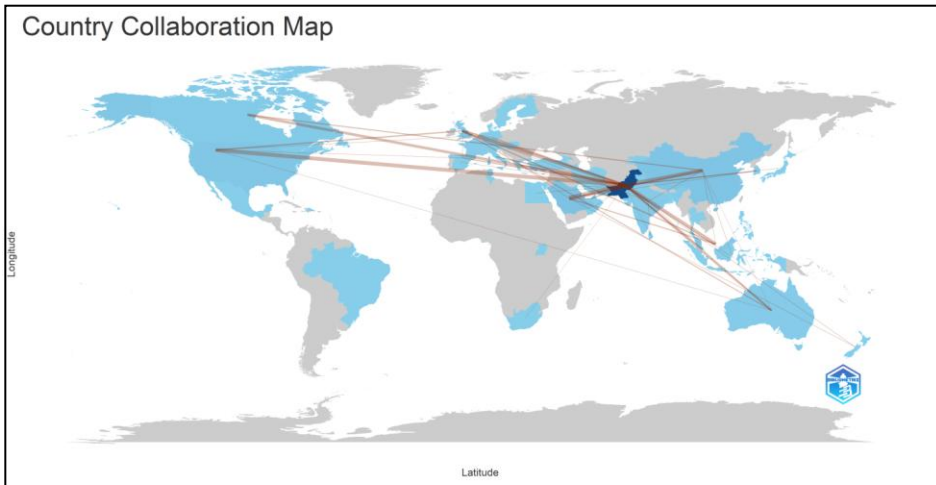**Figure 4**

Map of collaborating countries

Figure 4 illustrates the collaborative relationships between Pakistan and other countries in the field of library services. Pakistan's most frequent collaborations have been with Saudi Arabia, China, and the USA, suggesting a diverse range of international partnerships. Notably, collaborations with neighboring countries like Saudi Arabia and China are prominent, highlighting regional cooperation in research endeavors. Collaborations with countries such as Malaysia, the United Kingdom, and Canada also demonstrate a global outreach in Pakistani library services research. These collaborative efforts likely facilitate knowledge exchange, resource sharing, and the development of diverse perspectives, contributing to the advancement of library services both domestically and internationally.

DISCUSSION

The comprehensive analysis of bibliometric dynamics, publication trends, leading sources, highly cited papers, institutions, authors, trend topics, and country collaborations in Pakistani library services research from 1991 to 2023 provides valuable insights into the landscape of scholarly activity in this domain. This discussion aims to elucidate the key findings and their implications for understanding the evolution, impact, and future directions of library services research in Pakistan. The analysis has revealed a vibrant and interconnected research landscape in Pakistani library services, characterized by significant growth and collaboration. The annual growth rate of

11.65% in the number of documents underscores the increasing scholarly activity in this field over the past three decades. The collaborative nature of research is evident from the average of 3.26 co-authors per document and the substantial proportion (30.73%) of international co-authorships, indicating active engagement with the global scholarly community. This collaborative ethos reflects a concerted effort to leverage diverse expertise and resources to address complex challenges and advance knowledge in library services (Malik & Ameen, 2018).

The publication trends indicate a notable increase in research output, particularly since 2009, suggesting growing interest or funding support for library services research in Pakistan. However, the slight decrease in publication counts in 2022 and 2023 raises questions about the sustainability of this growth trajectory and underscores the need for continued investment and support for research in this area. The citation trends, on the other hand, reveal a nuanced picture, with a steady increase in mean total citations per article until 2011, followed by a plateau and subsequent decline. This divergence between publication and citation trends suggests a potential saturation of research output relative to citation uptake, indicating a need for more impactful or targeted research efforts to ensure the dissemination and uptake of scholarly findings within the broader academic community.

The analysis of leading sources and highly cited papers provides valuable insights into the influential publications and journals shaping the discourse on library services in Pakistan. Journals such as "Library Philosophy and Practice," "Global Knowledge, Memory and Communication," and "Electronic Library" have emerged as significant contributors, reflecting the diverse publishing landscape and the international reach of Pakistani scholarship in this field. The presence of highly cited papers authored by Pakistani researchers underscores the global recognition of their contributions and highlights the country's substantive involvement in advancing knowledge and scholarship in library services and related domains.

The analysis of locally cited documents underscores the significance of research addressing specific issues within Pakistani libraries and the broader socio-cultural context. Papers focusing on service quality, information technology applications, and professional development reflect a keen interest in enhancing library services and infrastructure to meet the evolving needs of users and communities. Moreover, the impact of global events such as the COVID-19 pandemic on the roles and functions of librarians and information professionals highlights the relevance of timely and responsive research in addressing contemporary challenges and informing evidence-based practice. The identification of leading institutions and authors in Pakistani library services research sheds light on the distribution of scholarly activity and expertise within the academic community.

The University of the Punjab has emerged as the most prolific institution, followed by the Aga Khan University and other academic institutions, reflecting a distributed network of research excellence and collaboration across the country. Similarly, authors such as Khalid Mahmood, Rubina Bhatti, Kanwal Ameen, and Arif Khan have demonstrated substantial research output and influence within the field, underscoring the depth and diversity of expertise driving scholarly inquiry and innovation in library services in Pakistan.

The analysis of trend topics and country collaborations provides valuable insights into the key themes and areas of focus within Pakistani library services research and the global networks and partnerships driving scholarly exchange and collaboration. The prominence of terms such as "Pakistan," "university libraries," "library services," and "library automation" reflects a broad interest in various aspects of library operations and technology. Additionally, the inclusion of terms such as "COVID-19" and "public health" underscores a recent focus on the impact of the pandemic on library services and broader health-related issues, highlighting the responsiveness of research to contemporary challenges and developments.

In summary, the findings presented in this analysis provide a comprehensive overview of bibliometric dynamics, publication trends, leading sources, highly cited papers, institutions, authors, trending topics, and country collaborations in Pakistani library services research. The growth, collaboration, and impact observed in this domain underscore the importance of sustained investment, interdisciplinary collaboration, and responsive research to address the evolving needs of users and communities and advance knowledge and innovation in library services in Pakistan and beyond. Moving forward, continued efforts to foster collaboration, promote research excellence, and address emerging challenges and opportunities will be essential to ensure the relevance, impact, and sustainability of library services research in Pakistan in the years to come.

IMPLICATIONS OF THE RESEARCH

The findings of this research can inform policymakers and funding agencies about the state of library services research in Pakistan. Understanding the growth, collaboration, and impact trends can guide the allocation of resources and the development of policies aimed at promoting research excellence, interdisciplinary collaboration, and knowledge dissemination in this domain. Academic institutions, particularly those identified as leading contributors, can use the insights from this research to assess their research productivity, identify areas of strength and opportunities for collaboration and inform strategic planning and resource allocation to further enhance their contributions to library services research. Researchers and practitioners in the field of library services in Pakistan can benefit from the identification of leading sources, highly cited papers, trend topics, and emerging areas of interest. These insights can guide

their literature review, research design, and publication strategies, enabling them to contribute meaningfully to advancing knowledge and practice in library services.

The recognition of highly cited papers authored by Pakistani researchers and the analysis of country collaborations can enhance the global visibility of Pakistani scholarship in library services. This, in turn, can foster international collaboration, knowledge exchange, and partnerships, leading to the enrichment of research agendas, the sharing of best practices, and the development of innovative solutions to common challenges faced by libraries worldwide.

The focus on trending topics, local relevance, and the impact of global events such as the COVID-19 pandemic can inform capacity-building initiatives and professional development programs for librarians and information professionals in Pakistan. By addressing current challenges and emerging trends, such initiatives can help equip professionals with the knowledge, skills, and resources needed to meet the evolving needs of users and communities effectively.

FUTURE RESEARCH DIRECTIONS

Finally, this research can serve as a foundation for future studies exploring specific aspects of library services research in Pakistan, such as the adoption of emerging technologies, the evaluation of service quality, and the assessment of user information behaviors. By identifying gaps, opportunities, and areas for further investigation, this research can guide the formulation of research agendas and the prioritization of research efforts to address critical issues facing library services in Pakistan.

CONCLUSION

In conclusion, the comprehensive analysis of bibliometric dynamics, publication trends, leading sources, highly cited papers, institutional contributions, authorship patterns, trending topics, and country collaborations in Pakistani library services research provides valuable insights into the evolution, impact, and future directions of scholarly activity in this domain. The findings highlight significant growth and collaboration in Pakistani library services research over the past three decades, with notable contributions from leading institutions and authors. However, a notable research gap emerges concerning the disparity between publication output and citation uptake, particularly after 2011. Addressing this gap through further investigation could enhance the effectiveness of research dissemination strategies and the overall impact of scholarly work in the field. Continued investment, interdisciplinary collaboration, and responsive research efforts will be essential to ensure the relevance, visibility, and sustainability of library services research in Pakistan and its contribution to advancing knowledge and practice in the field globally.

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