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Research Support Services in Academic Libraries

Machindra Kashinath Wakchaure

Librarian

GE Society's, ACS College

Jawhar, Dist. Palghar-401603

Mob.: 9822525803

Email: wakchauremk14@gmail.com

Abstract:

Academic libraries have undergone significant transformation in the digital age, evolving from traditional repositories of knowledge to active partners in the research process. Research support services provided by academic libraries play a crucial role in facilitating scholarly activities, improving research quality, and enhancing the visibility and impact of institutional research output. These services encompass literature search assistance, reference management, research data management, scholarly communication support, bibliometric analysis, plagiarism detection, and institutional repository management. This chapter explores the concept, objectives, types, tools, and challenges associated with research support services in academic libraries. It also highlights the evolving role of librarians as research partners and discusses future trends shaping research support in the academic environment.

Keywords: Academic libraries, research support services, scholarly communication, research data management, bibliometrics and institutional repositories.

1. Introduction:

Academic libraries are essential components of higher education institutions. Traditionally, libraries functioned primarily as repositories of books and journals, offering access to printed information resources for students and faculty members. However, the rapid advancement of digital technologies, the expansion of electronic information resources, and the changing nature of research activities have significantly transformed the role of academic libraries.

In contemporary academic environments, libraries play an active role in supporting the entire research lifecycle. Researchers require assistance not only in accessing scholarly literature but also in managing research data, publishing their findings, ensuring ethical research practices, and increasing the visibility and impact of their work. As a result, academic libraries have expanded their services to include a wide range of research support services.

Research support services encompass various activities and programs designed to assist researchers in conducting, managing, and disseminating their research effectively. These services are tailored to meet the needs of faculty members, research scholars, postgraduate students, and institutional research communities. By offering specialized expertise and technological tools, academic libraries help researchers navigate complex information environments and maximize the quality and reach of their scholarly work.

This chapter provides an in-depth discussion of research support services in academic libraries. It examines their significance, components, tools, challenges, and

future prospects within the context of modern scholarly communication and digital research environments.

2. Concept of Research Support Services:

The concept of research support services has evolved alongside the transformation of libraries into knowledge centres that actively contribute to academic research. Modern research environments are characterized by interdisciplinary collaboration, digital scholarship, open access publishing, and large-scale data generation. These developments require researchers to possess advanced information literacy skills and familiarity with digital tools and research management systems.

Academic libraries address these needs by providing professional expertise, training programs, and technological infrastructure that support research activities. Research support services often involve collaboration between librarians, information specialists, IT professionals, and research administrators.

The scope of research support services may include literature searching assistance, systematic review support, reference management training, research data management guidance, citation analysis, research impact measurement, open access publishing support, and institutional repository management. By integrating these services, academic libraries contribute to the research productivity and reputation of their institutions.

3. Need of Research Support Service in Academic Libraries:

1. Increasing Volume of Scholarly Information
2. Support for Literature Review
3. Assistance in Reference Management
4. Support for Research Data Management
5. Guidance in Scholarly Publishing
6. Enhancing Research Visibility and Impact
7. Promoting Academic Integrity and Ethical Research
8. Supporting Open Access and Knowledge Dissemination
9. Supporting Interdisciplinary and Collaborative Research
10. Enhancing Research Skills and Information Literacy

4. Objectives of Research Support Services:

The main objectives of research support services in academic libraries are as follows:

1. To provide researchers with the necessary information resources.
2. To help them find the literature required for research.
3. To provide guidance for research data and reference management.
4. To improve the quality of research.
5. To increase the global dissemination and visibility of research.
6. To create awareness about research ethics and academic integrity.

The primary objective of research support services is to enhance the effectiveness and efficiency of scholarly research within academic institutions. These services aim to support researchers in accessing reliable information resources, managing research outputs, and disseminating knowledge widely. One important objective is to facilitate access to scholarly information resources. Academic libraries subscribe to numerous databases, journals, and digital collections that provide researchers with access

to high-quality academic literature. Librarians assist users in identifying appropriate resources and developing effective search strategies.

Another objective is to support researchers in conducting comprehensive literature reviews. Literature reviews are essential for understanding the existing body of knowledge, identifying research gaps, and developing theoretical frameworks. Libraries provide training and consultation services to help researchers conduct systematic and efficient literature searches. Research support services also aim to assist researchers in organizing and managing their references and research data. Reference management tools and data management practices help researchers maintain accuracy, consistency, and reproducibility in their work.

Enhancing research visibility and impact is another key objective. Libraries provide guidance on publishing strategies, journal selection, and citation analysis to help researchers increase the reach and influence of their research outputs. Promoting ethical research practices is also a significant objective. Academic libraries provide training on proper citation practices, plagiarism avoidance, and copyright compliance. Finally, research support services aim to strengthen institutional research capacity by facilitating collaboration, knowledge sharing, and open access dissemination of research outputs.

4. Components of Research Support Services:

4.1 Literature Search and Information Retrieval:

Literature search support is one of the most fundamental research services offered by academic libraries. Researchers often require assistance in locating relevant scholarly literature from a vast and continuously expanding body of information. Academic librarians provide expertise in advanced search techniques, database selection, and keyword strategies. They guide researchers in using academic databases such as Scopus, Web of Science, PubMed, JSTOR, and other subject-specific resources.

Libraries also develop research guides and subject portals that help researchers navigate specialized information resources within their fields. These guides often include curated lists of databases, journals, and digital collections. In addition, libraries support systematic reviews and meta-analyses by helping researchers design comprehensive search strategies and document their search processes.

4.2 Reference Management Services:

Reference management is an essential component of academic writing and research documentation. Managing large numbers of citations manually can be time-consuming and prone to errors. Therefore, academic libraries provide training and support in the use of reference management software.

Popular reference management tools include Zotero, Mendeley, and EndNote. These tools enable researchers to collect, organize, annotate, and cite references efficiently. They also allow automatic insertion of citations and bibliographies into research manuscripts using various citation styles such as APA, MLA, Chicago, and Harvard. Libraries often organize workshops and training sessions to familiarize researchers with these tools. By adopting reference management software, researchers can improve the accuracy and efficiency of their scholarly writing.

4.3 Research Data Management:

The growing importance of data-driven research has led to the emergence of research data management services in academic libraries. Research data management

involves the organization, documentation, storage, preservation, and sharing of research data.

Libraries assist researchers in developing data management plans, which are often required by funding agencies. These plans outline how data will be collected, stored, protected, and shared during and after the research project. Academic libraries also provide guidance on metadata standards, file organization, and data documentation practices that enhance the usability and reproducibility of research data.

Many institutions have established research data repositories where researchers can deposit datasets for long-term preservation and public access. Libraries play a central role in managing these repositories and ensuring compliance with open science policies.

4.4 Scholarly Communication Services:

Scholarly communication refers to the processes through which research findings are created, evaluated, published, and disseminated within the academic community. Academic libraries provide support for various aspects of scholarly publishing, including journal selection, manuscript preparation, copyright management, and open access publishing. Librarians help researchers identify appropriate journals based on their research scope, impact factor, and indexing status.

Libraries also educate researchers about predatory journals and unethical publishing practices. By providing awareness and guidance, libraries help researchers avoid fraudulent publishers and maintain the credibility of their research. Open access publishing is another important aspect of scholarly communication. Libraries promote open access initiatives that allow research outputs to be freely accessible to the global academic community.

4.5 Institutional Repository Services:

Institutional repositories are digital platforms that collect, preserve, and disseminate the scholarly output of an institution. Academic libraries typically manage these repositories as part of their research support services. Institutional repositories contain a wide range of materials, including theses and dissertations, journal articles, conference papers, research reports, and datasets. By providing open access to these materials, repositories enhance the visibility and accessibility of institutional research. They also contribute to the preservation of scholarly outputs and support long-term knowledge dissemination.

4.6 Bibliometric and Research Impact Services:

Bibliometrics refers to the quantitative analysis of scholarly publications and citations. Academic libraries provide bibliometric services to help researchers and institutions evaluate research performance and impact.

Common bibliometric indicators include citation counts, h-index, journal impact factors, and altimetric. Libraries use specialized databases and analytical tools to generate bibliometric reports for researchers and academic departments. These services help researchers understand the influence of their work and identify opportunities to increase their research impact.

4.7 Plagiarism Detection and Research Ethics Support:

Maintaining academic integrity is a fundamental aspect of scholarly research. Academic libraries provide support for plagiarism detection and ethical research practices.

Libraries offer access to plagiarism detection software such as Turnitin and authenticate. These tools allow researchers to check their manuscripts for similarities with existing publications. In addition to plagiarism detection, libraries conduct workshops on academic writing, citation practices, and research ethics. These programs help researchers develop responsible research habits and avoid unintentional misconduct.

5. Role of Librarians in Research Support:

The role of librarians has expanded significantly in the modern research environment. Librarians are no longer limited to traditional library operations; they now serve as research partners and information specialists. Research librarians provide personalized consultation services to researchers at various stages of their projects. They assist with literature reviews, research methodologies, data management strategies, and publication planning.

Librarians also collaborate with academic departments to design information literacy programs that develop research skills among students and scholars. In addition, librarians participate in institutional research initiatives and policy development related to open access, data management, and scholarly communication.

6. Technologies Supporting Research Services:

Advancements in information technology have greatly enhanced the ability of academic libraries to provide effective research support services. Digital library systems, discovery platforms, and integrated library management systems allow researchers to access a wide range of information resources through a single interface. Research analytics tools provide insights into publication trends, citation networks, and research collaborations.

Data visualization tools enable researchers to analyze and present complex data in graphical formats. Artificial intelligence and machine learning technologies are also being integrated into research discovery systems, helping researchers identify relevant literature more efficiently.

7. Challenges in Providing Research Support Services:

Despite their growing importance, research support services face several challenges. One major challenge is the rapid pace of technological change. Libraries must continuously update their infrastructure and staff skills to keep up with evolving research tools and digital platforms. Limited financial resources also pose challenges for many academic libraries, particularly in developing countries. Subscription costs for academic databases and software tools can be extremely high.

Another challenge is the lack of awareness among researchers about the availability of research support services. Libraries must actively promote their services to ensure that researchers take advantage of available resources. Staff training is another critical issue. Librarians must acquire new competencies in areas such as data management, digital scholarship, and research analytics.

8. Future Trends in Research Support Services:

Research support services are expected to evolve significantly in the coming years as research practices become more digital, collaborative, and data-intensive. One

emerging trend is the growth of digital scholarship centres within academic libraries. These centres provide advanced tools and expertise for data analysis, visualization, and digital humanities research. Open science initiatives are also gaining momentum, promoting transparency and accessibility in research processes and outputs.

Another trend is the integration of artificial intelligence in research discovery and knowledge management systems. AI-powered tools can analyze large datasets, identify research patterns, and recommend relevant literature. Academic libraries are also increasingly involved in supporting interdisciplinary research collaborations by providing shared digital infrastructure and expertise.

9. Conclusion:

Research support services have become a central function of modern academic libraries. By offering a wide range of specialized services, libraries help researchers navigate complex information environments and enhance the quality and impact of scholarly work. The evolving research landscape requires academic libraries to adopt innovative approaches and technologies to meet the changing needs of researchers. Librarians must continue to develop new skills and collaborate with academic stakeholders to provide effective research support. As higher education institutions place greater emphasis on research productivity and knowledge dissemination, academic libraries will remain vital partners in advancing scholarly research and innovation.

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