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Research Article

Exploring Collaborative Practices: A Survey of Library Cooperation within University Networks

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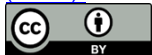**Correspondence**
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ABSTRACT

The University library is considered the heart of the educational system. Collaboration among university libraries is essential to fulfill the users' information needs. The current study is designed to examine areas of library cooperation between the central library and departmental libraries within the university domain. Benefits, obstacles, and preferences for library cooperation have also been explored. A quantitative research methodology was adopted to execute the study. A questionnaire was used as a data collection tool and data was collected only from those university libraries having central and departmental libraries. The data was collected from 110 academic librarians working in central or departmental libraries of universities across Pakistan. The findings revealed that libraries within a university are frequently cooperating in many areas. The highest cooperation is in the exchange of books followed by cooperation in the classification of books. More than half of the universities have established integrated cooperation among libraries within the university. One-fifth of the libraries have interactive relationships, and the remaining libraries have weak cooperation or no cooperation at all. Cooperation among libraries has improved access to print resources, improved quality of the library services, enhanced access to library services, and improved coordination in the acquisition of library material. Limited financial resources, lack of formal framework for library cooperation, and lack of technology infrastructure were major obstacles faced by libraries. Based on the study findings it is proposed that there should be an integrated relationship among libraries for cooperation and resource sharing within the university domain for uniformity in services.

KEYWORDS

University libraries, Collaboration, Cooperation, Departmental library, Central library, Pakistan

1 | INTRODUCTION

Information is an entity that has a vital role in building human civilization. The presence of libraries as information institutions acts as a bridge for the provision of information and knowledge. The resources and services offered by libraries seek to transfer information and form new ideas to build a creative and innovative information society. Without the existence of libraries, it would be difficult for society members to advance research and human insight, as well as safeguard world heritage to be passed on to future generations. The library functions as a vehicle for education, research, information preservation, and recreation to increase the intelligence and empowerment of the nation. A single library does not possess relevant resources to provide effective services. Library collaboration is a crucial thing that needs to be paid attention to by libraries and other institutions. Also, library cooperation can occur between central libraries and departmental libraries within the same university or between the central libraries of different universities. Sometimes, departmental libraries also collaborate in this regard to facilitate library users.

Library cooperation is a basic concept in library and information science. Collaboration and resource sharing among libraries may enhance access to information, improve the quality of services, and maximize the utilization of resources. In an era marked by rapid technological advancements and changing user expectations, libraries face numerous challenges in meeting the diverse needs of their patrons. To address these challenges effectively, libraries across the world have recognized the importance of cooperation, which allows them to pool their resources, expertise, and collections. In this context, collaboration between libraries within the university domain is a strategic step that plays a key role in enriching information access and improving service quality. The aim and objective of implementing this collaboration is to empower libraries to realize development as well as advancement in the fields of libraries, and librarianship, and to develop reading culture among library users. Cooperation among libraries helps users to gain enhanced access and use information better and more effectively. The object of this collaboration is the development and utilization of libraries.

Library collaboration can have an impact on cultural change in libraries (Majid, Eisenschitz, & Anwar, 1999). Through synergy and exchange of ideas, libraries can improve their ability to provide services with a variety of physical and intellectual resources to expand access to information and knowledge, as well as utilize libraries to encourage the adoption of innovation. This can form a library culture that is more dynamic, inclusive, and responsive to the needs of modern society. Through technology integration, libraries can provide access to digital resources and services that enable all society members to participate in them. Studies regarding the perceptions and needs of library users can provide direction for library programs and services based on research results, and it has been found that library services can be changed according to the user's needs. By taking into consideration the importance of cooperation among university libraries, it seems relevant to examine the impact of cooperation, the factors affecting it and recommendations for better cooperation. The current study has examined the areas of library cooperation, benefits and obstacles in library cooperation among libraries within a university domain. Also, the study will help to identify the preferences for library cooperation. That will help to meet the increasing needs and demands of researchers and students and the results may strengthen library cooperation in the future. This study creates awareness about the dynamics of library cooperation for the provision of information materials, and facilities suitable for academic work.

1.1 | Research Objectives

The current study intends to investigate the cooperation among libraries within the university domain by focusing on the following research objectives:
1. To identify the areas of library cooperation.
2. To identify the benefits of library cooperation.
3. To identify the obstacles in library cooperation.
4. To identify the preferences for library cooperation.

1.2 | Problem Statement

Libraries as information institutions play a role in bridging information and knowledge in society. The resources and services provided by libraries aim to fulfill the needs of the library members. Therefore, libraries must pay attention to their services to meet library users' information needs. It is a fact that no single library can fulfill the library users' needs so library cooperation is the need of the hour. Meeting the varied requirements of library users, libraries have to cope with several problems in an era of fast technological innovation and shift in users' expectations. Therefore, libraries should think about adopting cooperation among libraries to fulfill library users' needs. Also, collaboration among libraries is essential to combine their resources, services, knowledge, and holdings. Through interlibrary lending and resource sharing, libraries extend their reach and make a broader range of materials available to their patrons. It seems relevant to study library cooperation among central and departmental libraries in the university domain in Pakistan.

2 | LITERATURE REVIEW

Mensah and Dadzie (2022) conducted a study that revealed that resource sharing within organizations may be promoted freely to facilitate library users. However, they mentioned some barriers in resource sharing like the non-availability of sufficient finances, policy absence, and limited resources in libraries. Furthermore, they suggested arranging training and workshops to guide librarians about resource sharing among libraries. Also, a policy should

be developed for resource sharing to provide uniform services to library users. Collaboration enables libraries to offer more optimal services to users, creating dynamic spaces that encourage exploration and collaboration, and fulfilling the library's function of preserving information in the modern era. In the digital era, cooperation between libraries and information institutions allows expanding access to information and improving the quality of services to users. This is very much in line with advances in information technology which enable more effective collaboration with wider. Therefore, it is important to examine this collaboration more deeply to understand the benefits that can be obtained instantly and in the future. Collection development allows libraries to maximize their budgets and expertise to build comprehensive collections. Digital preservation initiatives ensure the long-term accessibility of digital materials. Consortiums and library networks facilitate resource sharing and advocacy, while professional development opportunities support the continuous growth of library staff. Resource Sharing is typically composed of two activities. The first is collaborative collection development, where subject specializations are intended to be distributed among libraries within a clearly defined geographic region so that individual libraries need not attempt to collect resources in all fields; but can concentrate on a particular field. The second form of resource sharing is through various document delivery mechanisms. Inter-library loans might suitably fall into this category. Library cooperation, networking, and resource sharing are synonymous with cooperation and collaborative activities of the library and information center.

Ayub and Ghazanfar (1994) mentioned library automation's importance in resource sharing among libraries. Similarly, Javed (1992) stated that sharing information is easy through computer. Also, Taj (1995) mentioned the key role of computer technology usage in libraries by mentioning key functions like cataloguing, circulation, library classification, and resource sharing. Kaul (1999) reports that the Delhi Library Network (DELNET) is expanding as a resource-sharing service in the Delhi area, providing a variety of goods and services to help the 86 member libraries exchange information. Among participating libraries in the Association of Southeast Asian Nations region, very little resource-sharing activity was seen. Yet, the Delhi Library Network (DELNET) is a developing resource-sharing service in the Delhi region, providing a variety of goods and services to help the 86 member libraries exchange information. Haider (2003) has presented three models for cooperation among university libraries for providing library services to library users. These models are a. Central Library without departmental libraries; b. De-centralized Department Library with no coordination with the Central Library and c. Central Library having coordination with departmental libraries is the most appropriate model used in Pakistan.

A union catalogue of all libraries within the university is an important instrument for cooperation between libraries because it helps the teacher and student search for their desired material on all the library shelves through a single search (Nitecki & Renfro, 2004). Chatterjee (2002) discussed resource sharing among libraries in the digital era and mentioned that resource sharing is considered as library cooperation and the dimensions of library cooperation are changed due to the technological engagement in libraries and it may facilitate increased resource sharing among libraries and development of consortia is the best example of resource sharing. Geronimo and Aragon (2005) discussed the importance of resource sharing and mentioned many benefits such as knowledge sharing, cooperative acquisition of software and databases, serials catalogue and Online Public Access catalogue (OPAC). Furthermore, they mentioned library consortia as the best example of resource sharing by libraries. According to S.J. Haider (2003), while some libraries and organizations have made some significant attempts at library cooperation, they have not proven unsuccessful. "Awareness of resource-sharing in Pakistan in its present-day form is a phenomenon of the 1980s. An absence of proper planning, lack of competent human resources, non-availability of standards, non-existence of bibliographic apparatus and absence of leadership" are the main reasons that these certain resource-sharing programs have failed" (p. 55).

Nitecki and Renfro (2004) mentioned the direct borrowing model as the largest advancement in resource-sharing. It enables teachers and students to conduct a single search in a union catalogue, to know instantly what is available on the shelf, to place online requests, and to have a reasonably reliable guarantee that books will be available to collect within a certain number of days. Using such techniques, the readers can access necessary books with less staff participation. In Pakistan, university libraries are a special kind of library with a good staff and somewhat good resources. They invest a significant amount of their money in creating exclusive in-house collections. Despite the widespread use of information and communication technology (ICT), very little formal practice exists (Ameen 2005). This study, which employs a survey methodology, investigates the collaboration between Pakistan's major cities' well-established chartered university libraries. The survey's qualitative design was derived from an interview-based data collection method. Twenty chief/head librarians from Pakistan's five largest cities were questioned. These in-depth, semi-structured interviews took place in 2003 and 2004 at the librarians' places of employment. The

current study's data analysis showed that several procedurals, behavioral, psychological, and technical obstacles still stand in the way of planned and meaningful cooperation. It recommends examining the potential, advantages, and difficulties of collaboration in the new paradigm. The conclusions and recommendations could be helpful to developing nations with comparable university library situations, such as Pakistan's Library Cooperation.

Attaullah (1992) highlighted resource sharing among libraries is necessary and libraries should focus on resource sharing to facilitate library users. Also, Khalid (1988) discussed the role of resource sharing among libraries by mentioning library operations like cataloguing, issue and return transactions and reference services. Tufail Khan *et al*. (2022) stated that a collection development policy is essential and may guide librarians about resource sharing with other libraries to save finances and provide instant relief to library users. Universities are facing several challenges, including reduced funding, increased accountability, changing pedagogy, and rising customer expectations, especially with the student experience. Additionally, how staff and students access university services is being affected by the rapidly evolving technologies of social media and mobile devices. Tufail Khan *et al*. (2024) highlighted the importance of social media for collaboration and resource sharing in libraries. Khan and Rafiq (2019) mentioned social media as a tool that may play an important role in resource sharing and collaboration among libraries and library users. Khalid (1997) discovered that in developing nations, network and cooperative systems are created through ad-hoc and personal contacts. To promote networking and cooperation at the local, regional, and national levels in developing nations, Khalid's study offered a multi-staged strategy. It also concluded that one of the main barriers to the development of cooperative activities is the absence of standards in technological processes and services.

Samdani and Mahmood's (1999) published an Index of 50 years' work in Pakistan (1947-1997). It included seven works under the resource sharing heading and five under the collaboration heading. This topic has been the subject of two noteworthy PhD studies. Khan (1991) concluded that Pakistan hardly ever used formal collaboration. On the other hand, unofficial collaboration takes the shape of inter-library loans made possible by reprographic services. Carroll (2017) stated that organizational goals should be focused on while making any collaboration. Professionals have talked about the advantages of computer science in theory, but Haider (2003) points out, that there haven't been many notable, short-lived attempts at collaboration between scientific and special libraries in practice. In theory, experts have talked about the advantages of computer science, but in practice, there have been very few notable, short-lived initiatives at collaboration between scientific and special libraries. Also, Jaswal (2006) explored options for resource sharing utilizing digital technology in Pakistan, while Sharif (2006) suggested many potential strategies to start collection-sharing among various types of libraries in Lahore. Furthermore, Jaswal (2006) noted that Pakistani librarians have an unwritten code of conduct that allows them to lend and borrow materials to one another in an emergency. This practice helps them to maintain the resource-sharing tradition, although in small ways. Nevertheless, academic and public libraries hardly ever provide formal computer science programs. However, the universities haven't done much further in this area after three years. This might be a result of chief librarian jobs being unfilled in most Punjabi university libraries (Ilyas, 2007).

At the national level, the Higher Education Commission (HEC) of Pakistan also considers the importance of resource sharing among libraries and organized a five-days "National Workshop on Resource Sharing and Networking of Libraries and Documentation Centers," held in Islamabad from April 11–15, 2005. The Directorate of Scientific Information, National Agriculture and Research Council, Islamabad in collaboration with HEC Islamabad arranged this workshop, and it was attended by approximately 90 chief librarians and document lists from all over Pakistan. The literature demonstrates that awareness of reciprocal cooperation among librarians has existed. Ameen (2005) said that a lack of fundamental infrastructure, the absence of a union catalogue, and the non-development of web OPACs necessary for accessing one another recourses are procedural reasons for the lack of authority librarians for developing cooperative plans. The possessive mindset of library and university administration and a shortage of staff in university libraries are psychological behavioral barriers to collection-sharing mechanisms among university libraries. In the current context, Haider's assertion that "resource sharing... is an almost untouched aspect of librarianship in Pakistan" (2003, p. 58) remains valid. This analysis of the literature shows that despite acknowledging the importance of computer science, the suggestions made in two PhD studies regarding library cooperation, and a special workshop on the topic, not much has changed and obstacles still exist. As role of the library, cooperation and resource sharing are vital to overcoming resource limitations, providing diverse and cost-effective services, enhancing access to information, and supporting the needs of library users and the broader community. These practices are integral to the success and relevance of modern libraries. With the hope that the results of the study will fill the research gap and provide relevant useful information and guidance to the library leaders to plan for library cooperation among libraries formally.

3 | RESEARCH METHODOLOGY

A selection of a suitable research approach is necessary to achieve the research objectives. This research utilizes a quantitative research method. This approach allows researchers to explore a deeper understanding of the phenomenon being studied, as well as provide a comprehensive description of the research topic. Creswell (2016) stated that quantitative research is a research method for investigating and understanding meanings that are considered rooted in social or humanitarian problems by several individuals or groups of people. Focusing on the study objectives, a survey questionnaire is adopted. The questionnaire with close-ended questions is designed for data collection. The sample of the study is comprised of librarians working in different university libraries in Pakistan. The study adopted a purposive sampling technique to collect data from respondents. However, the population of the study consisted of academic librarians working in different Pakistani universities. Those universities having central and departmental libraries were considered as respondents for the study. The research questionnaire was shared through Google Forms with only ten librarians in the selected universities. Follow-ups for data collection were made by personal visits, email reminders, and phone calls to get maximum response. The data was collected from 110 academic librarians working in different universities across Pakistan. Reliability of data is conducted by using Cronbach's alpha. Cronbach's Alpha is used to determine the reliability analysis of the data. Cronbach's Alpha values were found reliable as it falls between 0.78 to 0.9. The collected data were imported into SPSS and further data cleaning was processed before data analysis. Descriptive and inferential statistics were used to analyze data as per the study objectives and a conclusion was drawn based on the study results.

4 | DATA ANALYSIS AND INTERPRETATIONS

Data is collected from 110 respondents' librarians working in public and private sector universities. Most respondents (77%) are affiliated with public-sector university libraries; however, a small (23%) portion of the respondents belong to private-sector university libraries (Table 1).

Table 1
Demographic Information of the Respondents

Variables		Frequency	(%)
Type of University	Public	85	77.27
	Private	25	22.73
Nature of Library	Central Library	78	70.90
	Departmental Library	32	29.10
Policy	Formal Policy	63	57.27
	No formal Policy	47	42.73
Type of Cooperation	Central Library	83	75.45
	Departmental Library	22	20.0
	Both	05	04.54
	Integrated	66	60.0
Cooperation System	Interactive	21	19.0
	Weak	12	11.0
	No	11	10.0
	Total	110	100.0

In terms of the nature of the library, there are a good number (71%) of the respondents from central libraries; however, less number (29%) of the respondents from departmental libraries (Table 1). In terms of cooperation policy in libraries, a reasonable (57%) respondents narrated that formal policy has been formulated for cooperation among libraries within the university domain; however, forty-three percent of the librarians mentioned that they have not formulated any policy for cooperation among libraries within a university. Similarly, a major segment of the respondents (75%) opined that only the central libraries are cooperating, and twenty percent of the respondents have a point of view that departmental libraries are cooperating. However, a small portion (4%) of the respondents have stated that both the central and departmental libraries are cooperating. More than half of the respondents (60%) narrated that their universities have established an integrated cooperation system among libraries within the university. On the other hand, nineteen percent of the respondents mentioned that the cooperation system is based on relationships among librarians. However, eleven percent of the respondents mentioned that the cooperation system is weak among librarians and ten percent of the respondents mentioned no cooperation among librarians.

4.1 | Areas of Library Cooperation

A segmentation of areas for library cooperation is necessary to understand the true picture of phenomena. A mean score is used to evaluate the areas of library cooperation (Table 2). The highest mean (M = 3.76) is noted for the exchange of books within university libraries followed by cooperation in the classification of books (M = 3.71) and acquisition (M = 3.65) of reading material. Inter-library loan service (M = 3.48), organization of training workshops (M = 3.44) and joint celebration of library days and events (M = 3.41) are other areas of frequent cooperation among libraries. The exchange of journals (M = 3.34) is less frequent as compared to the exchange of books. Cooperation in the Development of OPACS (M = 3.31), virtual reference service (M = 3.28), and using automation systems (M = 3.23) has a lower mean score as compared to other areas of library cooperation.

Table 2
Areas of Library Cooperation

Areas of cooperation	Mean	St. Dev.
Exchange of books	3.76	1.215
Cooperation in Classification	3.71	1.401
Cooperation in acquisition	3.65	1.414
Interlibrary loan service	3.48	1.456
Organization of joint training workshop	3.44	1.403
A joint celebration of library days and events	3.41	1.492
Developing a common web presence	3.39	1.426
Digitization and preservation	3.36	1.396
Exchange of journals	3.34	1.434
Cooperation for the development of OPACS	3.31	1.489
Partnership for Virtual Reference	3.28	1.433
Cooperation for using automation systems	3.23	1.457

Scale: (Never=1, Rare=2, Often=3, Frequent=4, and Alway=5)

4.2 | Benefits of Library Cooperation

The mean values (Table 3) show that respondents have agreed that cooperation among libraries within the university domain has benefits. The respondents strongly agreed that cooperation has improved access to print resources (M = 4.23), quality of library services (M = 4.15), access to library services (M = 4.12), and coordination in the acquisition of library material (M = 4.09). Cooperation in access to electronic resources is less than for print resources. Libraries are also cooperating to develop professionals for better library services. Respondents have benefited less in cooperation for research productivity and infrastructure development as compared to other benefits of cooperation.

Table 3
Benefits of Library Cooperation (N=110)

Benefits of cooperation	Mean	St. Dev
Improved Access to Print Library Resource	4.23	1.005
Improved quality of library services	4.22	1.022
Improved access to library services	4.15	1.062
Coordination in the acquisition of resources	4.12	1.096
Improved Access to Electronic Resources	4.09	1.083
Enhanced professional development activities	4.02	1.146
Enhancement of research productivity among libraries	3.95	1.076
Advancement of library infrastructure	3.93	1.110

Scale: Strongly Disagree=1, Disagree=2, Neutral=3, Agree=4, Strongly Agree=5

4.3 | Obstacles to Library Cooperation

The mean values show that respondents have experienced obstacles during cooperation with fellow librarians within the university. Limited financial resources (M=3.62), lack of formal framework for cooperation (M=3.48), and lack of technology infrastructure (M=3.43) are the major three obstacles faced by respondents. Lack of interest by university administration (M=3.32), lack of cooperation culture (M=3.29), and lack of power for library heads (M=3.22) are also hampering cooperation among libraries. Use of different library automation systems, outdated library systems, and lack of standardized library services are often hampering library cooperation. Lack of training is also an obstacle, but it is less hampering as compared to other obstacles.

Table 4
Obstacles in Library Cooperation (N=110)

Statements	Mean	St. Dev
Limited financial resources are hampering cooperation	3.62	1.241
Lack of formalized framework for collaboration	3.48	1.254
Lack of technological infrastructure	3.43	1.245
Lack of interest of university administration to cooperate	3.32	1.336
Lack of cooperation culture among libraries	3.29	1.394
Lack of power of library head	3.22	1.430
Use of different library automation systems	3.09	1.424
Lack of standardization in services	3.04	1.370
Outdated library system	3.03	1.287
Lack of standardization in technical processing	3.01	1.306
Untrained library staff	2.86	1.417

Scale: Never=1, Rare=2, Often=3, Frequent=4, Alway=5.

4.4 | Preferences for Library Cooperation Mechanisms

Mean values show that all the respondents strongly agreed with the need for developing a formalized cooperation mechanism (M=4.36) for better and enhanced cooperation. They strongly agreed that there should be an integrated relationship (M=4.34) among libraries within the university domain. They agreed on three different collaboration mechanisms. They rated the role of the central library higher (M=4.34) as compared to the creation of a special post in the central library (M=4.10) for cooperation and establishing a separate office (M=3.86) for cooperation among libraries.   11

Table 5
Preferences for library cooperation mechanisms (N=110)

Statements	Mean	St. Dev
There is a need for developing formalized cooperation	4.36	.893
There should be integrated relationship among libraries	4.34	.882
Central Library may coordinate activities for cooperation among libraries	4.34	.921
A Special post in the central library may be created to coordinate activities for cooperation	4.10	1.073
Creation of a separate library office (e.g. director general of libraries) within each university for buildings tools of collaboration	3.86	1.185

Scale: Strongly Disagree=1, Disagree=2, Neutral=3, Agree=4, Strongly Agree=5.

4.5 | Differences in Cooperation based on the type of university

To compare the differences in cooperation based on the type of university, an Independent Sample t-test was used to compare the mean scores of the constructs of cooperation. The results show that type of university has significantly influenced the frequency of library cooperation (t=-2.66, sig=.011), benefits of cooperation (t=-2.66, sig=.011), and obstacles in cooperation (t=-2.01, sig=.051). Private universities have a higher mean for frequency, benefits, and obstacles in cooperation. For proposals to enhance library cooperation, there is no significant difference of opinions between government and private sector respondents.

Table 6
Differences in cooperation based on type of university

Variables	Type of university	Mean	t	Sig (2-tailed)
Frequency of Library Cooperation	Public	39.35	-2.66	**.011***
	Private	46.72		
Benefits of cooperation	Public	32.08	-1.78	**.060***
	Private	34.78		
Obstacles in cooperation	Public	34.39	-2.01	**.051***
	Private	39.30		
Preferences for library cooperation mechanisms	Public	21.35	1.32	.194
	Private	20.04		

4.6 | Differences In Cooperation Based On The Type Of Library

To compare the differences in cooperation based on the type of library i.e. central library or department library

affiliation of respondents, an Independent Sample t-test was used to compare the mean scores of the constructs of cooperation. The results show that the type of library has not significantly influenced the frequency of cooperation, benefits of cooperation, and obstacles in cooperation and proposal of respondents.

Table 7
Differences in Cooperation based on type of library

Variables	Type of Library	Mean	T	Sig (2-tailed)
Frequency of Library Cooperation	Central	40.23	-1.239	.220
	Departmental	40.44		
Benefits of cooperation	Central	32.40	-.645	.522
	Departmental	33.41		
Obstacles in cooperation	Central	35.72	.337	.737
	Departmental	34.91		
Preferences for library cooperation mechanisms	Central	21.01	-.164	.870
	Departmental	21.17		

4.7 | Differences Based On Policy For Library Cooperation

To compare the differences in cooperation based on the existence of policy for cooperation, an Independent Sample t-test was used to compare the mean scores of the constructs of cooperation. The results show that the type of university has significantly influenced the frequency of cooperation (t=1.68, sig=.055), and proposals to enhance cooperation (t=1.60, sig=.000). Library that has policies have a higher frequency of cooperation and higher desire among respondents for cooperation. In the case of benefits of cooperation, and obstacles in cooperation there is no significant difference of opinion among respondents but the mean for obstacles is higher for libraries that have not developed policies for cooperation.

Table 8
Differences based on policy for library cooperation

Variables	Existence of Policy	Mean	t	Sig (2-tailed)
Frequency of Library cooperation	Yes	43.01	1.68	**.055**
	No	38.90		
Benefits of cooperation	Yes	32.76	.101	.923
	No	32.62		
Obstacles in cooperation	Yes	33.98	1.358	.178
	No	37.04		
Preferences for library cooperation mechanisms	Yes	20.00	1.605	**.000**
	No	22.43		

5 | DISCUSSION

The study's aim was to examine the cooperation among libraries within a university by focusing on areas for library cooperation, benefits from library cooperation, obstacles faced in library cooperation, and preferences for library cooperation. The data was collected from 110 library professionals working in different university libraries across Pakistan.

6 | AREAS OF LIBRARY COOPERATION

Libraries within a university are frequently cooperating in many areas. The highest cooperation is in the exchange of books followed by cooperation in the classification of books and acquisition of reading material. Inter-library loan service, organizing training, workshops and joint celebration of days like World Book Day etc. are other areas of frequent cooperation among libraries. Cooperation in the exchange of journals is less frequent as compared to the exchange of books. Libraries often cooperate in the development of OPACS, virtual reference services and automation systems.

7 | BENEFITS OF LIBRARY COOPERATION

Libraries have many benefits due to cooperation with other libraries. Cooperation among libraries has improved access to print resources, improved the quality of library services, enhanced access to library services, and improved coordination in the acquisition of library material. Respondents are of the view that cooperation access to print resources was higher as compared to electronic resources. Librarians cooperate with their professionals to create better library services. Respondents are of the view that cooperation has not increased research productivity and infrastructure development as compared to other benefits of cooperation by libraries.

8 | OBSTACLES TO LIBRARY COOPERATION

The results show that limited financial resources, lack of formal framework for cooperation, and lack of technology infrastructure were major obstacles faced by libraries. Lack of interest by the university administration, lack of cooperation culture, and lack of power for the library head have also hampered the cooperation among libraries within the university domain. Use of different library automation systems, and outdated library systems have created hurdles for cooperation among libraries. Differences in services due to the lack of a standardized library has negatively affected library cooperation. Lack of training among respondents has also created hurdles but the mean was less as compared to other obstacles.

9 | PREFERENCES FOR DIFFERENT LIBRARY COOPERATION MECHANISMS

The results showed that respondents strongly agreed with the need for developing a formalized cooperation mechanism. The respondents proposed that there should be an integrated relationship among libraries within the university domain. Out of three different collaboration mechanisms, the respondents rated the role of a central library as a leader as compared to the creation of a special post in the central library and establishing a separate office.

10 | CONCLUSION

The growth of information and communication technology has increased the chances of cooperation among libraries. The variety of formats of information has increased the need to develop cooperation to achieve maximum benefits. Furthermore, decreasing financial resources and increasing prices of library resources have also forced libraries to increase cooperation. Departmental libraries have a key role in providing specialized services related to a particular discipline and central library provides services to all the faculties and disciplines within a university. Collaboration of the central library with departmental libraries of schools, centers, colleges, or institutes is a need of the hour. Many benefits are associated with the cooperation between the central library and departmental libraries within a university. It can decrease the financial burden on a central library for the purchase of a huge collection of different disciplines. A central library may focus on purchasing reference and general books. More departmental libraries may be established as students feel comfortable and offer relevant material and a constructive relationship may be created with the central library to fulfill the needs of users. It is concluded that the relationships among libraries within a university should be based on equal partnership. Integrated relationships suggested by respondents may help libraries to respond quickly to library users' queries in the changing information architecture. A constructive and efficient integrated relationship will help in meeting the needs of library users more effectively. Departmental libraries and central libraries must be embedded into an integrative mechanism to make them a coordinated organ of the university.

11 | RECOMMENDATIONS AND FUTURE RESEARCH DIRECTIONS

The following recommendations are proposed here based on the findings of the current study:
1. A culture of cooperation among libraries within the university domain should be created to meet the needs of library users.
2. The cooperation within the university domain will pave the way for developing different cooperation mechanisms among libraries across the country.
3. This cooperation will contribute to the development of a shared vision among university libraries within a university and among universities.

4. This study proposes cooperation will be helpful for the creation of better services.
5. Financial resources may be enhanced to increase cooperation among libraries.
6. There is a need to develop a formal framework for cooperation to enhance collaboration.
7. Lack of technology infrastructure is hampering cooperation. So financial resources may be allocated to purchase modern technology equipment.
8. University administration should take a keen interest in enhancing cooperation.
9. There is a lack of cooperation culture, and efforts are required to change this culture into a dynamic one.
10. The power of the library head should be increased as the lack of power for the library head has hampered cooperation.
11. Similar library automation systems should be used in libraries to enhance cooperation among libraries.
12. Standardized library services may be adopted as they can enhance library cooperation.
13. Continuing professional training programs may be developed to develop the competencies required for cooperation.
14. The central library of the university should come forward and coordinate collaboration among libraries within a university.
15. An office of the Director General may be created within each university for building and implementation of a framework for library cooperation.
16. Interactive relationships may be converted into integrated relationships.

12 | RESEARCH IMPLICATIONS

Cooperation among university libraries is of paramount importance for overcoming challenges, maximizing resource utilization, and improving library services. The establishment of library consortia has demonstrated successful models for resource sharing and improved access to information material. The impact of corporations is evident in the expansion of resources advancement in library infrastructure and professional development opportunities for Libraries. It is crucial to establish a formalized structure to secure sustainable funding and investment in modern technologies by working together. Libraries in Pakistani universities can create a more robust and comprehensive ecosystem, benefiting the academic community. The current study is an important effort to the library and information management literature in Pakistan. Also, the findings of the study would be helpful for library professionals to understand the dynamics of cooperation among libraries. Also helpful in developing strategies for library cooperation, and overcoming library cooperation obstacles, and the results would be beneficial for creating better mechanisms for library cooperation within the university domain. Studies in the relevant area may be conducted to explore the current level of library cooperation, the methodology may be changed to explore such area of research by confirming results like explanatory sequential mixed method, a study may be conducted to check library cooperation among college libraries, and a study may be conducted on the practices used for library cooperation internationally.

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