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LIBRARY CONSORTIUM AMONG PUBLIC AND PRIVATE DEGREE-AWARDING MEDICAL INSTITUTIONS: A STUDY

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LIBRARY CONSORTIUM AMONG PUBLIC AND PRIVATE DEGREE-AWARDING MEDICAL INSTITUTIONS: A STUDY

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ABSTRACT:

The main objective of this study was to find out the challenges and opportunities of medical teaching libraries in Lahore for resource sharing and to know the situation of availability of prerequisites and problems in the way of resource sharing among libraries. To achieve these objectives, a comprehensive questionnaire was developed as an instrument for data collection through a survey. The population of the study consisted of medical teaching libraries situated in Lahore. Keeping in view the relevant literature, extent, nature, and timeline given to accomplish this study and available resources a comprehensive sample of 26 medical libraries of Lahore has been selected for this study. The Census Sampling technique was applied to gather the required data. An instrument of the questionnaire was applied for data collection. Major findings of the study show that there is no significant variation in the availability of prerequisites among different institutions. The findings of the study reveal that this is the area where the majority of institutions

have missing elements. The most common requisite which is not available within a major part of the population is the unavailability of the catalog on the World Wide Web. Most institutions show this unavailability to bear a major part of the cost to build a shared collection in any other library to be detrimental to resource sharing. The unavailability of Z39.50 compatible software and catalog has been seen as a missing prerequisite in most cases. The majority of respondents showed their absence to provide space and share cost for hosting a shared collection. Availability of a machine-readable catalog is commonly present in most institutions. It was found that financial resources, shortage of staff, unsupportive organizational culture and unavailability of catalog, etc. are other major problems.

***Keywords:** Resource Sharing among Medical Libraries, Library Cooperation, Library Cooperation among Medical Teaching Hospitals Libraries*

INTRODUCTION AND BACKGROUND:

Ashfaq (2016) mentioned that the term 'Resources sharing has been used in the library profession since 1960 and mainly existed in the form of inter-library loans. Kraus and Schechter (2003) "The idea that libraries should in some way, find means to work co-cooperatively to provide people with access to books unavailable in nearby libraries is a deeply rooted concept in co-cooperation had been suggested and in some cases, attempted with some success. Interlibrary cooperation began in America during the 19th century. The formative years of the American Library Association were characterized by the notion of cooperation and the first Inter-Library Loan Code became operative in 1917. World War II and the immediately following period saw the emergence of concern among library professionals, to embark on cooperative and resource sharing activities.

The formal cooperative efforts of the 1950s and 1960s known as resource sharing were born of a union between necessity and possibility. Government agencies, professional organizations, and individual institutions realized that certain functions, such as cataloging, could be done more effectively and efficiently in a central location with the results distributed to participating institutions. In the 1970s, it was realized that an entirely new system of information storage and retrieval should be organized in which all libraries shared. During the 1970s the long-

nurtured but fragile library cooperation took the form of library resource sharing. In modern times, the move is from an era of private resources, serving a local clientele, to a system of community resources, serving an entire citizenry.

Resource sharing' means a mode of library operations whereby all or parts of library functions are common among several libraries. The functions included are acquisitions, processing, storage, and delivery of services. However, resource sharing is not limited to sharing of books only. It includes sharing-special staff skills; or sharing-special staff skills; or sharing the cost of a telecommunication network; or a central union catalog. The doctrine of self-sufficiency has gradually been abandoned and modern developments in librarianship forced a basic change from material-oriented to client-oriented library services. This shift has been of great importance in the growth of newer concepts of pooled collections and library resource sharing as an increasingly attractive alternative to the exclusive ownership of books and journals. The importance of resource sharing is evident from the following points:

- No library can afford to purchase more than a small fraction of the total number of books/journals published only in the English language.
- Due to financial constraints, it is difficult for an individual library to build an adequate collection, consequently, it is unable to provide satisfactory reader services.
- The rising cost of library material has done beyond the capacity of an individual library to acquire even the essential documents required for catering the minimum necessary library service to its user community.
- Duplication of resources may be avoided and the money thus saved can be utilized for acquiring additional useful library materials.

As Kent (1979) expressed "The success and survival of libraries depend on how much and to what extent libraries cooperate in future". The growth of information technology provides new ways to bring the entire world into the form of the global information society. Accordingly, a sharing of holdings among libraries is increasingly accepted as an unavoidable necessity and as the only realistic means of providing the full range of resources needed for scholarly research. Bouazza (1986) resource sharing is an essential feature of any library in terms of financial

constraints as well as functionality. In the present era of the excess of information technology, it is almost not possible for a library to provide the right to use all available information. The term "Resource Sharing" incorporates many tricks of cooperation among libraries and other stakeholders. Interlibrary loans, union catalogs, joint collections, document delivery, joint collections, and other related terms come under the support of resource sharing.

Millions of traditional and nontraditional resources are being created in this era of information technology and it's quite impossible to cover all the ground for a specific library but the necessities can be satisfied with resource sharing. The overall economic crisis in the global economy and cuts in the library budget are contributing factors to the essentiality of resource sharing. León and Busby (2001) said the economic crisis of the past few years means that libraries have to do more with less. Liang et al. (2010) are of the view that resource-sharing programs help libraries remedy their collection insufficiencies and broaden the scope of resources that users can access. Kent (1978) stated that when it comes to expenditure, libraries can use their money much more successfully and provide better services. Via interlibrary loan or document delivery arrangements, users can have access to from (or access materials at) other libraries when the needed resources are not available at the local library.

Interlibrary loans remained an idea rather than a practice till 1876. Green (1876) wrote an article and suggested the need for a mutual agreement between libraries to lend books to each other for a short period in order to facilitate improved reference services. There were undeveloped forms of unofficial and voluntary resource sharing in 1890, such as the services started in several libraries like Boston Public Library which was providing books on loan to other libraries in New England during the 1890s. Green (1892) reveals another letter Columbia printed in the library journal. Stubb, who was the University Librarian, that purposed some guidelines for framing agreements of interlibrary loans. Green (1913) tried to detail his point of view but he did not show much tenacity in his encouragement of the code for interlibrary loan.

Stubbs and Hunt (1975) indicated that in the era of 1890s direct mail service of the National Medical Library was an excellent service. A sum of 50\$ was required as security money if anyone wanted to avail of this service. This was duly noted by the Boston Post which published in an

editorialist that the direct mail service of the National Library of Medical is an example to be followed. It was compulsory to follow a written agreement containing details on a loan duration, shipment means, and payment of charges by the borrowing library to avail of this service. Other libraries were also volunteering their collection in the same era. Some of the best examples were the Boston Public library where a printed form having special terms and conditions for other libraries to borrow books from Boston Public Library was written for inter-library loan ability. The University of California showed its willingness to agree with other libraries to share resources. The Committee for Cooperation of the American Library Association noted these two initiatives and reported briefly on these initiatives on July 5th, 1898 at the Chautauqua Conference.

The idea of the interlibrary loan was well refined and adopted as a practice in the major part of the developed world in the 20th century. European and American libraries widely accepted this idea as practice and several initiatives, efforts, and decisions were made to simplify the procedures and process of resource sharing among libraries around the globe. Anwar and Abdulqader Al-Jasem (2001) have their views that resource sharing was more concrete and tangible in the last decade of the century. The turning point in resource-sharing practices in American libraries was the use of networked and technological resources for library communication. Meise (1969) pointed out that in the mid-1960s the general notion of networking and networking configurations was explored for libraries in America to facilitate resource sharing. In the development of resource sharing the American Library of Congress played a different role during the 1960s. According to Geronimo and Aragon (2005), the first proposal of library networks for resource sharing was established in the middle 19th century after the organization of the American Library Association in America. The association started a helpful cataloging program. The next step toward library network and consortia was the delivery of catalog cards by the Library of Congress. The development and use of MARC formats and tapes at the Library of Congress produced a new look at networking. MARC is a set of special letters, numbers, and characters to represent a bibliographic record in a computer file which started a new concept in standards and resource sharing.

Stevens (1980) was of the view that the situation of resource sharing among libraries could have been much better if the Library of Congress had decided to approve its role as the national

library instead of a continuation of its services as a library of United States Congress. Commercially and individually testing of MARC tapes was started and it was found very valuable for sharing metadata or information within a specified framework. As a result, several networks of information sharing and library resource sharing were established. NELINET (New England Library Information Network) was a network of six land grant universities of England. Meise (1969) explains that the formation of OCLC (Ohio College Library Center), a network of academic libraries in Ohio was the most notable network for resource sharing.

The current study reveals the status of requisites-availability needed for the success of library consortium among medical libraries of Lahore, Pakistan. The study also highlights problems that take place in the implementation of resource-sharing networking among medical libraries to present practical solutions. Before this, no comprehensive study has been done on resource sharing among medical libraries of Lahore. This study will be a valuable addition to the literature. This research will assist policymakers to shape policies for the resource-sharing activities among libraries to uplift the standards of library services and to facilitate the medical users of the libraries efficiently.

RESEARCH QUESTIONS:

1. Are the prerequisites available for resource sharing in libraries?
2. What are the problems regarding resource sharing?

LITERATURE REVIEW:

The term Resource Sharing is very huge in meaning and implication. The process and practice of interlibrary loan, library cooperation, consortium, shared resources, joint collections, and all related terms and practice where one or more than one institution share their resources with other institutions are being considered as linked to or part of resource sharing. Resource sharing provides solutions to daily problems as well as improving the quality of the library as a service provider.

Need of Resource Sharing

The Discovery of computer networks, the internet, and e-publishing allied technology has resulted in an information blast. Now no library can have all the resources to achieve all the requirements of its patrons. Financial cuts on library budgets, poor economic conditions, growing demands of patrons, and changing information-seeking behavior demands resource sharing among libraries to improve the quality of services as service providers. Anwar and Abdulqader Al-Jasem (2001) has conducted a research study on resource sharing in Kuwait. His findings are outlined below:

- Resource sharing among libraries is needed for better information services.
Resource sharing is needed for the quick provision of information services.
- Resource sharing is needed to share the cost of expensive resources.
- Resource sharing is needed to develop an adequate collection.
- Resource sharing is needed for cost-effective document delivery services.
- Resource sharing is needed as existing resources cannot meet the needs.
- Resource sharing is needed to maximize the use of subscribed resources.

Advantages of Resource Sharing

Tedd, Galyani Moghaddam, and Talawar (2009) Outlined the following points to highlight the need for resource sharing among libraries:

- Shared access to information sources.
- Site-wide access for all participating libraries.
- Resource sharing is a comparatively most valuable practice for smaller libraries to maximize their services.
- Global access to resources through networks and the internet.
- Resource sharing provides a common interface to all users.
- Cost-effective solution to improve library services for developing countries.
- There may be a possibility to attract foreign funding/investment.

Mahoney and Pandian (1992)) expressed the benefits as follows:

- Resource sharing brings economy.
- Resource sharing enhances efficiency.
- Resource sharing provides equality in the availability of information and use.
- Resource sharing provides resources to all participating libraries.
- Resource deficient libraries can get access to other libraries to enrich their collections.

Pettersen et al. (2004) considered that resource sharing is more important than building a collection in a specific library. Resource sharing can collectively strengthen resources of all institutions networked in resources sharing. Resource sharing networks enable the benefit of wider access to electronic resources. Majid, Anwar, and Eisenschitz (2001) described the benefits of resource sharing as under:

- Resource sharing enables affordable quality services.
- Resource sharing improves the level of user satisfaction.
- Resource sharing saves time, effort, and money.
- Resource sharing prevents duplication.
- Resource sharing improves the image of libraries.
- Resource sharing strengthens the library collection.
- Resource sharing raises the usability of library material.
- Resource sharing utilizes professional capabilities in a better way.

Pre-Requisites for Resource Sharing

Sharif (2006) denoted two major methods of resources sharing the conventional method and the advanced method. The conventional method is designed for sharing printed material in an offline environment where participating libraries publish their union catalog or exchange the holding list with each other to share resources through an interlibrary loan practice. The Advanced method has been formulated to enable the use of ICT (Information & Communication Technology)

in the resource sharing practice. In the era of information technology and information explosion, an individual library cannot encompass all the knowledge resources on its own. The emergence of digital paradigms like web-based catalogs, digital and virtual libraries; information networks, and social media reshaped the practice of resource sharing among libraries.

The conventional method of resource sharing was used during the 19th century but with the invention of computers and the emergence of technological aids to libraries this method was replaced with an advanced or automated method of resource sharing. Computer networks, internet, library portal, web-based catalogs, union catalogues, email, electronic delivery system, MARC, z39.50, and other protocols became pre-requisites for a better information resource sharing network. At first, American libraries used networked and technological resources for library transactions. Meise (1969) pointed out that in the mid-1960s the general notion of networking and networking configurations was explored for libraries in America for better resource sharing.

In the development of resource sharing and technological implementations, the American Library of Congress played a different role during the 1960s. The development and use of MARC formats and tapes at the Library of Congress shaped a new vista of networking. MARC is a set of special letters, numbers, and characters used to represent a bibliographic record in computer files. The situation of resource sharing among libraries could have been much better if the Library of Congress had established its role as a national library instead of the continuation of its services as the library of the United States Congress. Libraries started testing MARC tapes commercially and individually and it was found to be very useful for sharing metadata or information within a specified framework. As a result, several networks for information sharing and library resource sharing were built. NELINET (New England Library Information Network) was a network of six land grant universities of England.

According to Meise (1969) formation of OCLC (Ohio College Library Center), a network of academic libraries in Ohio was the most notable network for resource sharing. The Washington State Library organized the WLN (Washington Library Network). Libraries in the developed world especially the United States of America feel no hesitation in adopting these standards which were pre-requisites for effective information resource sharing networks. The second half of the 20th

century was the blooming period for this practice especially the late 1990's after the intervention of computer networks and related technologies in libraries; the practice of resource sharing was reshaped. It was the era when resource sharing was solidified as several standards were developed by various bodies for library resource sharing and libraries widely accepted these standards. Anwar and Abdulqader Al-Jasem (2001) have expressed similar views in their study that resource sharing was more concrete and tangible in the last decade of the century. European and particularly American libraries widely accepted this idea as practice and several initiatives, efforts, and decisions were made to simplify the procedures and process of resource sharing among libraries around the globe.

After the delivery of the MARC format from the Library of Congress and adoption of technological support for resource sharing at large the Ohio College Library Center founded in 1967 transformed into a non-profit organization for promotion and network of libraries across the globe and changed its name to Online Computer Library Centre (OCLC). Other Resource sharing networks on advanced (automated method) from North America include "Academic Libraries of Indiana, Boston Libraries Consortium and Ontario Library Consortium." Each consortium had its online union catalog available on the internet to facilitate the participating libraries. Developed countries where the early adoption of pr-requisites was made have concrete frameworks for resource sharing. The Canadian Information resource sharing strategy may be the best example, "Interlibrary loan, union catalog development, cooperative cataloging, cooperative reference, cooperative collection development and joint storage of material are all components of Canadian Information Resource Sharing Strategy" (National and International Programs, (National Library of Canada, 2001). A consortium of the State Library of Catalonia and universities funded by the state is functional in Spain with the name "Consortium of Academic Libraries of Catalonia (CBUC)".

Freeman, Patel, Routen, Ryan, and Scott (2013) pointed out the technologically based resource sharing network in "China Academic Library and Information System (CALIS)" situated in the western region of China. The eastern region of China is considered to be developed whereas the western region of China is not fully developed. This network has narrowed the gap between the academic libraries between the two regions using technological skills and a networked

environment for resource sharing. This network was established in 2003 and working as a national academic library consortium to preserve, share and acquire cooperatively foreign and Chinese periodical resources in the field of social science and humanities. Jablonski (2009) proposed cooperative networking for regional libraries in China by linking them together. Dillon, Wu, and Chang (2010) evaluated resource sharing networks in Taiwan and found that the "Interlibrary Cooperation Association (ILCA)" consisting of around 550 member libraries is using "National Document Delivery Services Platform (NDDS) for resource sharing. Libraries can place a request online. The document delivery service of Taiwan is a fee-based service. Hsu, Ke, and Yang (2006) reported another project of National Chiao Tung University (NCTU) for digital resource sharing namely "Info Spring" in Taiwan. The purpose of this project was to build mirror sites for online full-text journals. Around 250 e-journals from five information service providers and 100 reference databases are being hosted by National Chiao Tung University.

Ghosh reported a national resource sharing system "Thai LIS" in Thailand. This system incorporates a network of online catalogs of academic libraries in the Bangkok region. Another system namely PULINET in Thailand is a grouping of provincial libraries. McDonald (2003) elaborated the effort and practice of the National Library of New Zealand in detail. Anwar (2001) elaborated on the situation and state of resource sharing among major libraries in Kuwait. Tedd et al. (2009) reported a consortium of the Iranian library "CONSIRAN". More than 57 libraries of medical universities and universities working under the "Ministry of Science, Research, and Technology" are sharing licensed online resources through this network. McGoldrick (2005) documented the history, development, and status of the IRIS Consortium, a resource-sharing initiative in Ireland. Similar practices and plans are being proposed and implemented in developed countries around the globe.

Developing countries are striving to implement these procedures and policies at the national or local level. India's DELNET, the successful resource sharing and information provider in India is admirable in this regard. Al-Suqri (2013) described that DELNET is based on a self-sustainable model and is considered to be a role model for other library networks especially those in developing nations. Kaur and Verma (2009) -indicated another network of India "Information and Library Network (INFLIBNET)" which aimed at providing high-speed connectivity to 150

university libraries in its initial phase. Das (2014) penned an article on the information networks of libraries in Bangladesh.

Pre-Requisites for Resource Sharing in Pakistan

Provision of web-based catalogues, union catalogues, standards, and internet connectivity is considered as pre-requisites for resource sharing in advanced (automated) methods of resource sharing. This is the area where Pakistani libraries lag behind other countries. There is no National Union catalog, Marc based catalogs are not available. Hussain and Phase elaborated Pakistan Education and Research Network (PERN) program participating institutions were provided with Internet bandwidth. This program was established to bring all academic institutions onto the same node for ease of resource sharing. Efforts were made for the provision of a common integrated library system to libraries but in vain. Despite the unavailability of prerequisites, some efforts were made in Pakistan for resource sharing. The directorate of scientific information (DSI) and National Agricultural Research Council (NARC) tried at their level to start resource-sharing practice among libraries. DSI and NARC have established a national network of 35 libraries on agriculture and allied subjects (Khan, 2005).

The PARC-MART project was also initiated keeping in view the need to focus on resource sharing to overcome budgetary/finance constraints. This project was funded by USAID and 22 libraries of all four provinces and AJ&K were strengthened by providing funds in 1991-92. Tanvir (2005) said that the accumulative spending budget of this project was US\$ 1.00 million. Pakistan Scientific and Technological Centre (PASTIC) have undertaken screening and survey of Scientific and Technological Libraries of the country to collect information about their serial holdings to compile a union catalog. As per the official site of the institute PASTIC (2013), the present edition of the Union Catalogue covers holdings of 200 S&T libraries of the country and is available in print form and also on the PASTIC website.

The Lahore Business and Economic Libraries Network (LABELNET) funded by the International Development Research Centre (IDRC) Canada were established in 1990. Nine libraries from the field of business administration, economics, and allied subjects were part of this

consortium. Jaswal (2006) stated that it was the first and only example of a formal library resource-sharing network in Pakistan. Developing a regional network for socio-economic information for South Asia (DEVINSA) was another effort for the provision of a bibliographical networking system of South Asian libraries including Bangladesh, India, Nepal, Pakistan, Maldives, and Sri Lanka. Elldis (2013) uncovered the fact that the database is also offered online via the DELNET network in India. Sharif (2006) proposed a model for resource sharing among libraries. However, this model was never implemented. He also presented the status and modalities of resource sharing among libraries in Lahore. Due to the unavailability of pre-requisites and unsupportive organizational culture, there is no significant formal resource-sharing network.

Problems in Resource sharing

Going through the related literature and findings of this study it has been found that there are major problems in resource sharing especially among libraries lying within developing countries. Developed countries are successfully practicing and getting benefits from resource-sharing activities. An overview of common problems of resource sharing is as under:

- Lack of coordination and communication among libraries.
- The Organizational culture/ administration do not want to share their resources
- Unavailability of the formal agreement of resource sharing among libraries.
- Lack of financial support.
- Unavailability of web-based catalogs of libraries.
- Unavailability of union catalogs.
- Unavailability of a uniform system for all libraries.
- Unreliable postal service.
- Unavailability of trained manpower and experience of resource sharing.

RESEARCH METHODOLOGY:

Research Method:

An important method for measurement in social science research is the survey research method. Agarwal (2011) defines a survey as any measurement made by asking respondent's questions is called "Survey Research". Owing to the nature of this research, a quantitative research approach followed by a survey research design was selected.

Population:

A research population is known as a set of individuals with a common, binding characteristic or trait. The population of the research was teaching hospital medical libraries. There were twenty-six medical libraries in the public sector while 5 degree-awarding universities in Lahore, Pakistan. The sample of this study encompassed all government and private medical teaching libraries in Lahore. So, the results of this study can be generalized to encompass the medical teaching libraries of Pakistan as a major part of the population in terms of degree-awarding institutions and universities. It is important to note that the standards maintained by Higher Education Commission environmental variables are the same in all Pakistan for these institutions. Based on this study other types of libraries can also be able to get guidance for resource sharing among their resources. Hence this study is applicable or generalization in this area.

Sampling Technique

Sometimes, the entire population will be sufficiently small, and the researcher can include the entire population in the study. This type of research is called a census study because data is gathered from every member of the population. Kothari (2004) explains that a census is a study of every unit, everyone, or everything in a population. It is known as a complete enumeration which means a complete count. A sample is a subset of units in a population, selected to represent all units in a population of interest. The Census Sampling technique was applied to gather the required data.

Data Collection Instrument

Questionnaires are being used broadly in social science research and mostly in the field of library and information science. A questionnaire as a tool for data collection in survey research is very popular. Survey questionnaires present a set of questions to a subject who with his/her responses provides data to a researcher. The questionnaire was used as a data-gathering tool.

Data Collection Procedures

The data collection component of research is common in all fields of studies but data collection techniques vary with the nature and subject of the study. Quantitative data was gathered through a questionnaire. Copies of the questionnaire were distributed among the participants of the study.

Data Analysis

SPSS Software was utilized to analyze the gathered data. Descriptive statistics tests were applied to summarize the data.

DATA ANALYSIS & FINDINGS:

The data was collected through questionnaire from two types of medical teaching libraries public and private. The collected data was analyzed and interpreted in this section. Multiple questions related to the status of pre-requisites and challenges of resource sharing were asked through a survey using the questionnaire as an instrument. Statistical software (SPSS) was used to analyze the quantitative data acquired through the questionnaire. Statistical analysis and interpretation of acquired quantitative data were as under.

Availability-Status of Pre-Requisites for Resource Sharing

It was essential to measure the extent of medical libraries' willingness for resource sharing to know the existing situation of accessibility of pre-requisites in different institutions. A series of statements with possible answers were placed before the participants so that they could choose a suitable answer. After the collection of data and statistical analysis, it has been observed that there

is no significant variation of availability of prerequisites amongst different medical institutions. One of the most common requisites which are not available in most parts of the population is the unavailability of the catalog on the World Wide Web. Most institutions exhibited an unwillingness to bear a major part of the cost to build a shared collection in another library. Unavailability of Z39.50 friendly software and catalog has been seen as a missing pre-requisite in most cases.

The majority of the respondents showed their unwillingness to provide space and share the cost of hosting a shared collection. Similarly, the availability of travel allowances as well as daily allowances along with allied services provided to staff for training in other participating libraries was minimum at most. But with a to some extent better ratio, several institutes showed their availability/willingness to invite and pay the expense of experienced/ trained team members of other libraries for capacity building and remarked that they also had trained/experienced team members to train others as a part of a resource-sharing program. Availability of a machine-readable catalog is commonly present in most institutions. Unfortunately, funds are insufficient regarding payment of postal and handling charges of material sent to other libraries. Nevertheless, on the other hand, funds for payment of postal charges of material received from other libraries are mostly available in institutions. Institutions are willing to pay postal charges to fulfill their own needs and requirement but not be able to pay postal or handling charges on behalf of any other Institute. The following table represents the data and response from the institutions with frequency and percentage for several statements used in the instrument to collect data related to the availability of pre-requisites of resource sharing in libraries.

Table 1
Availability-Status of Pre-Requisites for Resource Sharing (N=65)

Sr.#	Statements	Mean	SD*
1	Our catalog and library software is Z39.50 compatible	3.06	1.014
2	Our library has its own OPAC	2.97	1.045
3	Our catalog is available on the world wide web and accessible through the internet	2.95	1.082
4	Our institute is bearing a major part of the cost to build a shared collection in other libraries	2.94	1.321
5	Our institute has enough funds to pay postage and handling charges for material received from other libraries	2.94	1.171
6.	Our institute can invite and pay the expense trained team members of other libraries for capacity building	2.91	1.169
7	Our library catalog is MARK based	2.83	1.193
8	our institute can pay travel/daily allowance and similar Facilities to their staff to send them to get trained from a participating library	2.82	1.379
9	Our institute can provide space and share the cost to host a shared collection in our institution	2.65	1.304
10	Our institute has enough funds to pay postage and handling charges to send material to other libraries as required	2.65	1.408
11	Our institute has experienced/trained team members to train other librarians as a part of the RS program	2.48	1.470
12	Our institution has resources to invite experienced/trained team members of other libraries to training your team as a part of the RS program	2.37	1.420

1 = Agree, 2 = strongly agree, 3= Disagree, 4= strongly disagree, 5= Neutral

The situation related to the availability of pre-requisites for resource sharing has been analyzed by the data collected from major libraries in Lahore. The situation of availability if the prerequisite is not so good. Pre-requisites are not available in more than fifty percent of the libraries. The statistical analysis can be interpreted as there is no significant difference between academic, public, and special libraries regarding the situation of availability of prerequisites for resource sharing but there was a slight difference of situation.

Problems in Resource Sharing

Statistical data was collected about the problems that institutions may have to face while participating in any activity of resource sharing. After systematical analysis, it has been observed that the majority of institutions agree with the statement that their library collection is not abundant or vibrant enough for other libraries to express a desire to share it. Furthermore, it is found that financial resources, shortage of staff, unsupportive organizational culture and unavailability of catalog, etc. are other major problems. A few libraries felt that they had the required resources but they didn't want to be a part of any resources sharing activity. Restrictions from administration or the confidential nature of the library collection are minor problems for resource sharing among libraries. Frequency distribution with the percentage of relevant response against each statement used in the instrument to collect data is reproduced below in table 2.

Table 2
Problems of Resource Sharing (N=65)

Sr.#	Statements	Mean	SD*
1	Our library collection is not as rich as others may want to share	2.89	1.382
2	Our institute has enough resources and does not want to be part of any RS activity	2.82	1.357
3	Organizational culture is not in favor of RS	2.80	1.405
4	Our library collection is confidential in its nature and could not be shared	2.55	1.031
5	Our institute does not have enough staff to handle this practice	2.50	1.285
6	Our administration will not allow you to share your resources	2.49	1.252
7	Financial resources are the main hurdles in the way of RS	2.32	1.359
8	Our institute is not yet ready for RS i.e. do not have a catalog etc	1.80	1.121

1 = Agree, 2 = strongly agree, 3= Disagree, 4= strongly disagree, 5= Neutral

Resource sharing is well perceived among major libraries of Lahore but analysis of data reveals that a lot of problems have been faced by the libraries in this regard. All institutions that participated in this research are facing extreme or major problems. Statistical data related to problems regarding resource sharing is represented in the following table. The overall situation of readiness for resource sharing among major libraries of Lahore seems satisfactory. The majority of libraries are partially ready to be a part of the resource-sharing activity.

DISCUSSION

There is no significant variation in the availability of prerequisites among different institutions. The findings of the study reveal that this is the area where the majority of institutions have missing elements. The most common requisite which is not available within a major part of the population is the unavailability of the catalog on the World Wide Web. Most institutions show this unavailability to bear a major part of the cost to build a shared collection in any other library to be detrimental to resource sharing. The unavailability of Z39.50 compatible software and catalog has been seen as a missing prerequisite in most cases.

The majority of respondents showed their absence to provide space and share cost for hosting a shared collection. Similarly, the availability of travel and daily allowances and allied facilities to staff for going on training in any other participating library was minimal in the institutions under study. With a slightly good ratio, several institutes showed their availability to invite and pay the expense of experienced/ trained team members of other libraries for capacity building and expressed that they also have trained/experienced team members to train others as a part of a resource-sharing program.

Availability of a machine-readable catalog is commonly present in most institutions. Enough funds for payment of postal and handling charges of materials sent to other libraries are not available in most of the libraries. On the other hand, funds for payment of postal charges of material received from other libraries are available in most institutions. With special reference to the statement regarding the availability of funds for postal charges analysis data is factually interpreted as institutions are willing to pay postal charges to fulfill their own needs and requirement but would not be able to pay postal or handling charges on behalf of any other institute. Institution wise finding reflects missing pre-requests in a larger number of the major libraries of Lahore. The Chi-square test was performed to find out library type situation of availability of prerequisites for resource sharing among major libraries in Lahore but no significant difference was found.

The findings of the study reflect that there are some common problems regarding resource sharing amongst almost all libraries. All participating institutions are facing major or extreme problems in this way. Their library collection is not as abundant or vibrant for other libraries to want to share it. It was found that financial resources, shortage of staff, unsupportive organizational culture and unavailability of catalog, etc. are other major problems. In few cases, institutions feel that they have enough resources but they do not want to be part of any resources sharing activity. Restrictions from administration or the confidential nature of library collection are minor problems for resource sharing among libraries.

Institution-wise analysis shows that every institution is facing problems and the conditions for resource sharing among libraries are not up to mark. It was also determined that there is no significant difference between public and private medical libraries. Both, public and private libraries are facing major or extreme problems in this context at variant levels. It is worth mentioning that there is a slight difference in the nature of problems with regard to the type of the library but problems at major or extreme levels are present in all types of libraries. It can be concluded that:

1. Most libraries do not have any web-based online public access catalog
2. MARC based catalogs are not available in all libraries
3. Z39.50 compatibility is also a missing element in libraries
4. Libraries are facing a shortage of staff
5. Trained and experienced persons are available in libraries to train others
6. Libraries are facing a lack of funds for resource sharing
7. Abundance and vibrancy of the collection to attract other libraries in a sharing practice is a missing element
8. Organizational culture and administrative restrictions are hurdles for resource sharing among libraries.

RECOMMENDATIONS:

1. Free postal service for delivery of books or printed material from one library to another library should be started.
2. Orientations, seminars, talk shows, documentaries, and related activities to promote the idea of resource sharing should be initiated.
3. Monthly, weekly or annual meetings of librarians of the same type of library should be organized to discuss the further possibilities of resource sharing.
4. The organizational culture of libraries and the typical mindset of librarians need to be changed.
5. Electronic tracking and monitoring of library artifacts will enhance the confidence of libraries to share their resources with others without fear of losing the item.

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