

Satisfaction of Library Users for Exploring The Use of Research Data Management Services in Subject-Related Special Libraries

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Abstract: The study examines the satisfaction of library users in exploring the use of Research Data Management System in subject related special Library in Colombo district Sri Lanka. The study was done six libraries in Colombo district Sri Lanka. Because of most library have out of Colombo district and most of subject related libraries have not proper Research Data Management Systems. Therefore, the study has been selected six subject related research libraries. Research data are the raw materials gathered, produced, and reviewed during the course of a study. Research data management with could be defined as to the collection, organization, storage, and preservation of data during and after a research activity. Special Collections on a given subject are available in examined related libraries. User satisfaction refers to how well users perceive a library's offerings. Exploring research data is crucial part for the library users. Therefore, the study will be focused on what are the ways of exploring research data for library users. The general objectives of the study is to identify satisfaction of Library users in exploring the use of Research data management system in subject related-related-special Libraries in Colombo District.

The method of data collection is a structured, printed questionnaire. According to findings 368 questionnaires were issued to respondents, but only 293 (79%) were returned. Male respondents were 119 (40.6%), and female respondents were 174 (59.4%).

Keyword: Colombo District, Research Data, Research Data Management Systems, Subject related special Library

BACKGROUNDS OF THE STUDY

All academic fields collect and use research data, which could be in the form of numbers in a spreadsheet or a variety of other media like videos, photos, artifacts, and diaries (Villagett Willage Library,2021). Research data are the raw materials that are obtained, prepared, and reviewed while a study is being conducted. They act as the substantiating proof for the results of the published study. Analog and digital unprocessed research data can be divided approximately into five kinds, including observational, experimental, simulation, derived or compilation, and reference data. (Darby,2022). Research data are facts that must be in order to achieve the objectives of the research study. They have been gathered using various technologies and scientific procedures. Depending on the nature and forms of study, they may be qualitative, quantitative, or a mix of both. Both secondary sources and primary sources, which are exams, can provide the necessary data.

The handling of data (collection, organization, storage, and documentation) during and after a research activity is referred to as research data management. Effective data management contributes to ensuring that researchers share their data in a FAIR manner (findable, accessible, interoperable, and reusable). Research organizations are increasingly requiring their researchers to create a data management plan to guarantee that all factors are taken into account from the beginning of an activity (Science Europe,2022). Special Collections pertaining to the specific special library in subject-related . Research data management presents various difficulties for staff and librarians. Because a wide range of subject-related organizations consistently provides a considerable amount of research data each year. Most of the data come from science. Academic libraries have handled a lot of research data with metadata because the environment became available to them via managing research data management systems. (Mulian,2021) refers to Institution library Malianstic and

abroad that have conducted a great deal of research and practice regarding scientific research data under the e-science environment, administrative service. This type of subject and service exists based on the subject service system at the library. Libraries are involved in the scientific research environment for gathering, separating, mining, classifying, and storing scientific research data, after which the high-value data that has been processed is shared with the scientific research personnel. To offer individualized advice and information services over the entirety of the data life cycle.

Users' satisfaction could be viewed as the satisfaction they experience after using the library's various informational re users and services to meet their desires for knowledge on their various daily activities. The fulfillment of library patrons is crucial to the creation and operation of the library. Feedback from prospective users evaluating the available resources, services, and facilities should be taken into consideration for supply g the library with the required equipment and facilities (Ningoji & Sadashivappa,2020).

OBJECTIVES OF THE STUDY WERE

- To identify the Purpose of exploring research data
- To identify the Ways of exploring research data
- To enhance the new ways of exploring research data for subject related special libraries

RESEARCH QUESTIONS

- What is the Specific Purpose of exploring research data?
- What are the ways of exploring research data ?
- How does subject related libraries enhance new ways of exploring research data ?

LITERATURE REVIEW

Gmage, (2022) has discussed, academic libraries all over the world are increasingly inclined to implement various research support services (RSS). Ideally, libraries should offer RSS to meet the information needs of scholars, Wijethunga.p et al (2020) have discussed

Within the scholarly institution and beyond, an institution's research output has become an important factor of funding. Such as Universities have considered in improving research Productivity. the study of research productivity at the state university of Sri Lanka has indicated paying attention to the growth in scholarly publication. such as the Scopes index and expanding the number of writers who contribute to academic periodicals, the study has mentioned that universities should create more targeted methods to support scholarly works and conduct research by offering advice and instruction in the field. A strategic plan is recommended to do this.

The Union catalogue compiles bibliographic records from various libraries that have been merged into signal data bases to create a signal data base. On the other hand in Global Scenario Amanullah. & Abrizah.(2023) has discussed the duties of academic librarians in research data management (RDM) services. Research Data should discoverable, accessible, interoperable, and reproducible. The study used Metadata analysis and PRISM Guidelines with three research databases. A mixed method was used for investigating RDMS initiatives.

When examine the Exploration of research data in special libraries, Sing et al.,(2022) have identified an evaluation of Research Data Management services in academic libraries in India. The lack of RDM Policy, Institutional Support, and technological barriers have identified as problems for RDM exploration. but Cox.et al,(2019) have discussed Maturing Research services and the transformation of Academic Libraries. In this study, these trends have the potential to change how academic libraries operate. It is also possible to view academic libraries' involvement in RDM as essentially an expansion of their current services, such as advisory and support services, and information literacy training. A Web-based survey was used for data collection in a large number of Academic Libraries in the globe.

Sri Lanka situation is support institutional research, academic libraries offer a grade service called "Research Support Service." The academic libraries throughout the world offer a variety of services under the research support service. Sanatharoban. (2022) has identified a Model for Research data support to academic libraries. In this research, the home page of the library,

brochures, official letters, and student feedback were all analyzed. By planning a series of sessions in response to requests from students, the research support service of the EUSL library concentrated more on educating undergraduates in research-related topics.

The library has also expanded its research support services by introducing a new one called individual research consultation, in which scholars can meet with librarians alone or in groups to receive individualized help with their study. The study of the feedback revealed that the undergrads highly valued the service for its utility.

Narasappa. & Kumar, (2020) have discussed how pre-university colleges in Karnataka, India, use library resources and services. The studying and teaching processes are always greatly assisted by academic libraries for both students and instructors.

According to the Table 1, most of users have used research data for their literature reviews. That means 47.1% were expressed their ideas. 30.4% were stated that the purpose was for Research reports. Others are for assignments and dissertations.

METHODOLOGY

Questionnaires were distributed among 368 respondents in Six subject related specific special libraries in Colombo District Sri Lanka. Although 293 (79%) respondents were answered out of 368. Quantitative data and Qualitative data were to analyzed the expecting results. The preset age of the Male 40.6 % and Female 59.4%. The Study is based on the survey and Interview method for using data collection. The data Collection instrument method is Printed Questionnaire.

The analysis method is SPSS Software. Mix Method was used for the study. The approach is Inductive approach and Realism has defined philosophy. The theories about the nature of the reality under investigation and how knowledge of that reality is produced and justified. The Study is based on the way of thinking and it is developed through the Scientific method. Time Horizon is Cross sectional study.

The population of the study is composed of subject-specific registered library users in the Colombo district. As a target population, six libraries have been selected. there are around 120 Special Libraries in Sri Lanka (Directory of Libraries, 2015).

There are approximately 95 libraries in the Colombo District. However, the majority of subject-specific libraries have branch libraries outside of the Colombo district of Sri Lanka, and the majority of libraries include only subject-related material rather than research collections. As a result, the study has chosen six research-related institute registered library users as responders.

RESULTS

SPECIFIC PURPOSE OF USING RESEARCH DATA

According to the Table 1 most of users stayed that their specific purpose was Literature reviews (47.1%). Others are for Research reports (30.4%). Some of respondents have expressed their ideas for assignments and dissertations.

Specific research Purpose for using research data	Respondents	Percentage
Specific research publication	20	6.8%
For Literature reviews	138	47.1%
For Assignment	27	9.2%
For Research Reports	89	30.4%
For dissertation	19	6.5%
Total	293	100%

Table 1

FREQUENCY OF LIBRARY VISIT

According to Figure 1 Most of users visit the Library once a month (46.08%). Others are once week or Twice a week or daily

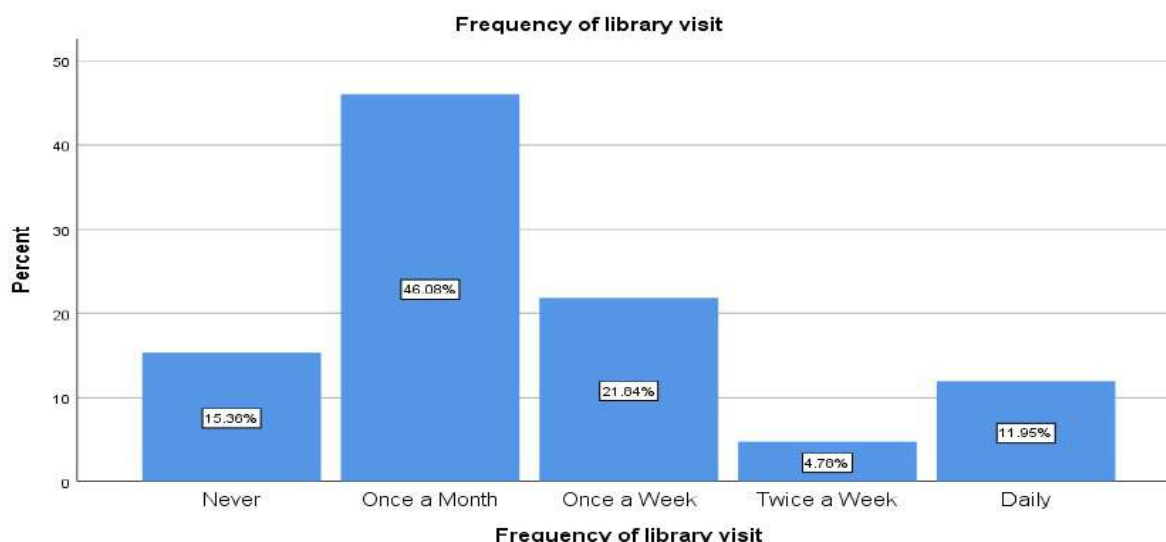


Figure 1

FREQUENCY OF LIBRARY WEBSITE ACCESS

Most of Respondents used Library Website daily for their research purposes. Some of respondents those who are in members of the Library web site used once a week or twice a week.

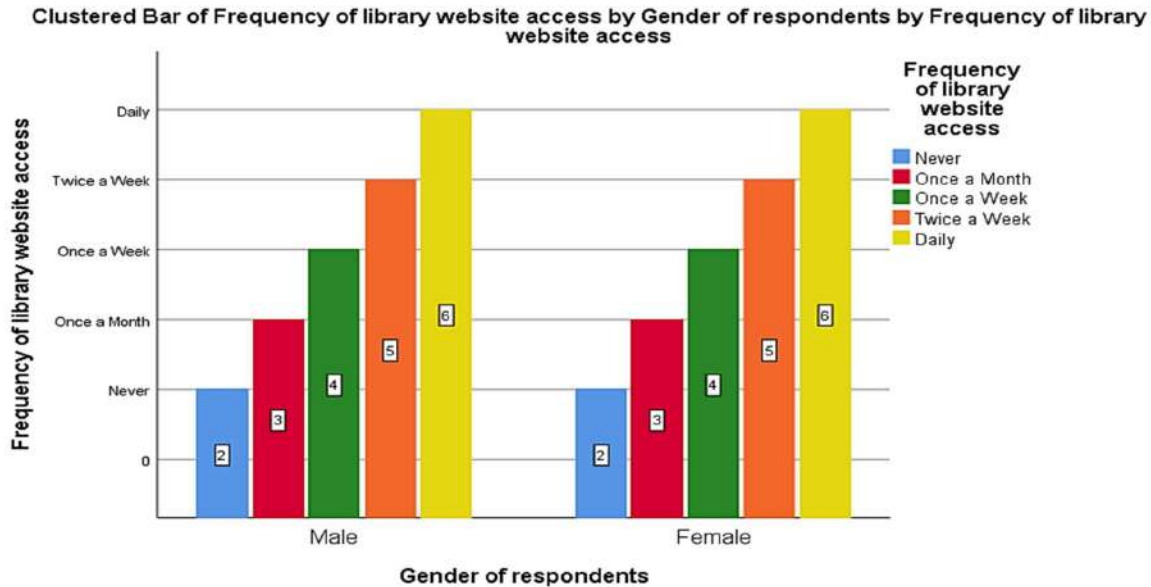


Figure 2

USAGE OF RESEARCH DATA, FORMAT AND NATURE

As following table most of users have used Textural data 52.9%. 21.5% used numerical data. Some are used Audiovisual and Multimedia. Most of uses used data Bases.57.7%.Few respondents stayed that 21.8% used images. when consider the nature of research data , most of users used digital format.

	Type	Number of Respondents	Percentage
Usage of Research Data	Numerical	63	21.5%
	Textural	155	52.9%
	Audiovisual	9	3.1%
	Multimedia	64	21.8%
Usage of Format of Research Data	Spread Sheet	63	21.5%
	Data Bases	169	57.7%
	Images	60	20.5%
	Audio Files	0	0.0%
Nature of Research Data	Digital	133	45.4%
	Non-digital	158	53.9%

Table 3

RECOMMENDATION

The majority of Registered Library users (46.1%) visit the library at least once every month. Several people prefer to come once or twice a week. When the frequency of use of the library Website is evaluated, 45.7% access it once a month. 30.4% of people never utilized the library's website. Researchers have to have access to databases. Open-access databases were used by 68.9% of users. Textual data was used by

the majority of respondents (52.9%). Databases were used by 57.7% of respondents, and the majority of respondents explained why they used RDMS services. It is used for literary reviews by the majority of users (47.1%). Research reports are used by 30.4% of people. According to the findings, 53.9% of respondents used a non-digital format.

Conclusion

As per analyzed results majority of respondents stayed that Digital research management tools should be developed. The majority of Registered Library users (46.1%) visit the library at least once every month. Several people prefer to come once or twice a week. When the frequency of use of the library Website is evaluated, 45.7% access it once a month. 30.4% of people never utilized the library's website. Researchers have to have access to databases. Open-access databases were used by 68.9% of users. Textual data was used by the majority of respondents (52.9%). Databases were used by 57.7% of respondents, and the majority of respondents explained why they used RDMS services. It is used for literary reviews by the majority of users (47.1%). Research reports are used by 30.4% of people. According to the findings, 53.9% of respondents used a non-digital format. Therefore exploring research data by developing digital repositories and online access database facilities. Textual data should be developed more than other formats. Register access to library database facilities should be increased. Most of the available research data collection should be increased with updated research data. The bibliography data, indexing systems, and digital content management systems need to be expanded. Librarians want to be attractive to new collaborators and research partners. The bibliography data, indexing systems, and digital content management systems need to be expanded. Librarians want to be attractive to new collaborators and research partners. The majority of the respondents are dissatisfied with Plagiarism checking systems. It should be updated and expanded. Providing training facilities should be increased with the introduction of new research tools. IT infrastructure facilities should increase with modern technology like IoT. Librarians should be better decision-makers. Research data preservation systems and regular power supplies should be increased. Online information systems should be increased.

Modern information tools should be integrated. The library should think about updating or modifying the information. Technology tools for handling online requests. The information technology tools missed the library staff, affecting library users who were unable to get their required information resources on time. Due to the delay in providing information resources, library users missed deadlines. Therefore Modern information tools should be increased. Web indexing systems and subject-related directories should be increased.

REFERENCES

- [1] Abraham,P and Sabu,D. (2022, 1 30). User Satisfaction on Library Resources and Services: A Case. *Library Philosophy and Practice*, pp1-19.
- [2] Ashiq .M and Warraich N.F. (2022). Librarian's perception on data librarianship core concepts: a survey of motivational factors, challenges, skills and appropriate trainings platforms. , *Library Hi Tech*.
- [3] Ahmad.N.M. (2021). Current Status of Special Libraries' Resources and Services in Faisalabad. *Library Philosophy and Practice*. doi:https://www.researchgate.net/publication/359865733_Current_Status_of_Special_Libraries%27_Resources_and_Services_in_Faisalabad
- [4] Amaresan,S. (2022, 5 23). 28 Questionnaire Examples, Questions, & Templates to Survey Your Clients. Retrieved from Hub Spot: https://blog.hubspot.com/service/questionnaire?hubs_content=blog.hubspot.com%2Fservice%2Fquestionnaire&hubs_content-cta=Questionnaire%20Definition
- [5] Ashiq,M ,Usmani,M.H & Naeem.M. (2022). A Systematic Literature review on reserach data mangement Practicesand services. *Global Knowledge Memory and Communication*, 71(8/9), pp649-671. doi: <https://doi.org/10.1108/GKMC-07-2020-0103>

- [6] Ayiah E.M and Tamakloe .E. (2023). Users' Perception of Library Resources in Academic. *International Journal of Innovative Science and Research Technology*, pp601-615. Retrieved from <https://ijisrt.com/assets/upload/files/IJISRT23FEB403.pdf>
- [7] Birkbeck,G et al. (2022, 5 16). Challenges in research data management. *JOURNAL OF DECISION SYSTEMS*, pp1-16.
- [8] Chandrashekara,M et al. (2022, March). Awareness and satisfaction of r eness and satisfaction of research scholars using libr ch scholars using library. *Library Philosohy and Practice*, pp1-9.
- [9] Darby.R. (2022, 10 14). Reserach Services. Retrieved from University of REading: <https://www.reading.ac.uk/research-services/research-data-management/about-researchdata-management/the-research-data-lifecycle>
- [10] Dew Wallage Library. (2023, 1 13). Research Guide. Retrieved from MAX: <https://libguides.macalester.edu/data1>
- [11] Donnar, K. (n.d.). Research & management systems and the organization of universities and research institutes: A systematic literature review. *Journal of Librarianship and Information Science*. doi:<https://doi.org/10.1177/09610006211070282>
- [12] Frederick.A & Run,Y. (2019). The Role of Academic Libraries in Research. *Open access Library Journal*, 6, pp1-16. Retrieved from https://www.scirp.org/pdf/OALibJ_2019032810262834.pdf.
- [13] B Ganasha H. R & Aithal P.S. (2022, 10 28). Approaching Research in Different Ways - How to Choose an Appropriate Research Approach/Reasoning During Ph.D. Program in India? *International Journal of Philosophy and Languages (IJPL)* 2, 1(1), PP 59-74. Retrieved 12 9, 2022, from [tts://papers.ssrn.com/sol3/papers.cfm?abstract_id=4263413](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4263413).
- [14] Gyau,E.B,Liu.J & Kwakye,O. (2021). Evaluation of User Satisfaction with Academic Libraries Services Based on on Students' Perspectives. *Open Access Library Journal*, 8(8).
- [15] Joo, S. & Schmidt, G.M. (2021). "Research data services from the perspective of academic librarians. *Digital Library Perspectives*, 37(3), pp. 242-256. doi:<https://doi.org/10.1108/DLP-10-2020-0106>.