Perception of Library Professionals towards Library Research Support Services

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Abstract

Library Research Support Services (LRSS) encompass a range of valuable resources and assistance provided by libraries to help researchers at every stage of their scholarly pursuits. The present cross-sectional study is primarily aimed at understanding library professionals' perceptions of LRSS and identifying their problems. The study is based on the responses received from the library professionals of select universities of the National Capital Region (NCR), India. The results of the study indicate that the most preferred service was 'Database Services' having the highest average mean score of 4.58, followed by 'Infrastructure Facilities' (4.51) and 'Institutional Repositories' (4.43). The least preferred service was 'Scholarly Publishing Services' which had the lowest mean score (3.98). In terms of problems faced, the most significant problems reported were financial problems/ lack of budget (mean = 4.04) and short age of library staff (mean = 3.92). Other problems included speed and connectivity of Internet, multifarious user demand across different academic departments, the inadequacy of infrastructure and the special needs of the researchers. The value of this research lies in its unique contribution to studying the perspectives of library professionals regarding LRSS, especially in the Indian context.

Keywords: Academic libraries, Database services, Library research support services (LRSS), Research data management (RDM), Research support

1.   Introduction

Libraries have evolved their roles to support research and research-related activities, especially with the advent of technology (Forsman, Ndinoshiho, & Poteri, 2012). McRostie (2016) noted that global research and changing research practices have necessitated the transformation of services offered by research libraries. Borrego and Anglada (2018) emphasised that academic libraries should shift towards becoming service providers to aid users' activities. The primary aim of an academic library is to "support teaching, learning and research" (Adeniran & Oyovwevotu, 2019). Therefore, apart from the traditional services, the new research support services are the priority of an academic library.

LRSS are specialised information services strategically designed to meet the unique needs of researchers within an academic institution. Research Support

Services can be viewed as "specific information services provided by a particular library to promote research by meeting the unique information needs of the researchers within a particular institution" (Forsman, Ndinoshiho, & Poteri, 2012). Research support "is help given to researchers during the research process" (Pasipamire, 2015). LRSS encompasses a variety of resources and assistance, including literature searches, research data management, citation tools, copyright guidance, open access publishing, and database access. These services contribute to the researchers' success and foster a culture of innovation and discovery in academic and research communities.

2. Review of related literature

After exploring several academic databases, some pertinent articles were selected based on their alignment with the subject matter and the calibre of their research and discussed in the following text.

The technological advancements have impacted researchers' information needs and behaviours (Zhao, 2014) and libraries engage with their research communities, necessitating the development of new service models to support evolving research needs (Brown et al., 2015). Stating that research support and reference services are now indispensable for the efficient functioning of modern libraries (Xi et al., 2019) acknowledged that these services have evolved with advancements in computer technology and the internet. The researchers require support from research librarians throughout the entire research process (Liu, 2017).

Many services come under the purview of LRSS including institutional repositories, access to databases, open access, bibliometrics, enhancement of research impact, support for research students, scholarly publishing, digital scholarship services, research data management and procurement of research funds (Zhao, 2014; Kennan, Corrall, & Afzal, 2014; Keller, 2015; Raju et al. 2016; Borrego & Anglada, 2018; Brown et al., 2018; & Patra, 2021). The world-class academic libraries are positioning research support services as a pivotal direction for future development (Si et al., 2019).

Hanif and others (2018), while examining the librarians' perceptions, revealed a strong consensus regarding the importance of research support services. Howie and Kara (2020) highlighted significant progress in the development of research impact and research data management services in studied New Zealand university libraries. Awan and others (2022) found that most university libraries in Pakistan predominantly offer fundamental research support services but lack advanced research support services.

It is clear from the literature review that previous research examined the services provided by libraries focusing on their importance. However, perspectives and opinions of library professionals were missing from most studies. So, the present study specifically focused on gathering insights from library professionals to gain a more comprehensive understanding of the area of research.

3. Objectives of the study

The present study is undertaken with the following objectives:

- To know the perceptions of library professionals towards LRSS
- To explore the problems faced by library professionals on LRSS.

4.   Research methodology

A cross-sectional investigation was carried out among library professionals of eight government-funded universities in the National Capital Region (NCR), India. The study focused on seven LRSS domains: Database Services, Research Data Management, Scholarly Publishing, Research Impact Measurement, Research Tools, Institutional Repository, and Infrastructure Facilities. The data was collected through a structured questionnaire distributed to 132 library professionals. After excluding two incomplete questionnaires, 72 questionnaires were analysed using statistical tools such as MS Excel and SPSS and the findings are showcased through tables and figures.

5.   Analysis and discussion

5.1   *Demographic profile*

The demographic composition of the respondents is outlined in table 1 which is self-explanatory.

Table 1: Demographic profile of respondents

Variables	Values	Numbers	Percentage
Gender	Male	46	63.9
	Female	26	36.1
Designation	Librarian	4	5.6
	Deputy Librarian	8	11.1
	Assistant Librarian	8	11.1
	Information Scientist	4	5.6
	Professional Assistant/Semi Professional Assistant	48	66.6
Age	Below 30 Years	5	6.9
	31-40 Years	21	29.2
	41-50 Years	27	37.5
	Above 50 Years	19	26.4
Qualification	Post-Graduate	47	65.3
	M.Phil.	5	6.9
	Ph.D.	20	27.8
Experience	Below 5 Years	7	9.7
	6-10 Years	18	25.0
	11-15 Years	19	26.4
	Above 15 Years	28	38.9

5.2 *Perception of library professionals on LRSS*

The participants were surveyed to gauge their viewpoints concerning the LRSS and statements about its seven dimensions were prepared using a five-point scale.
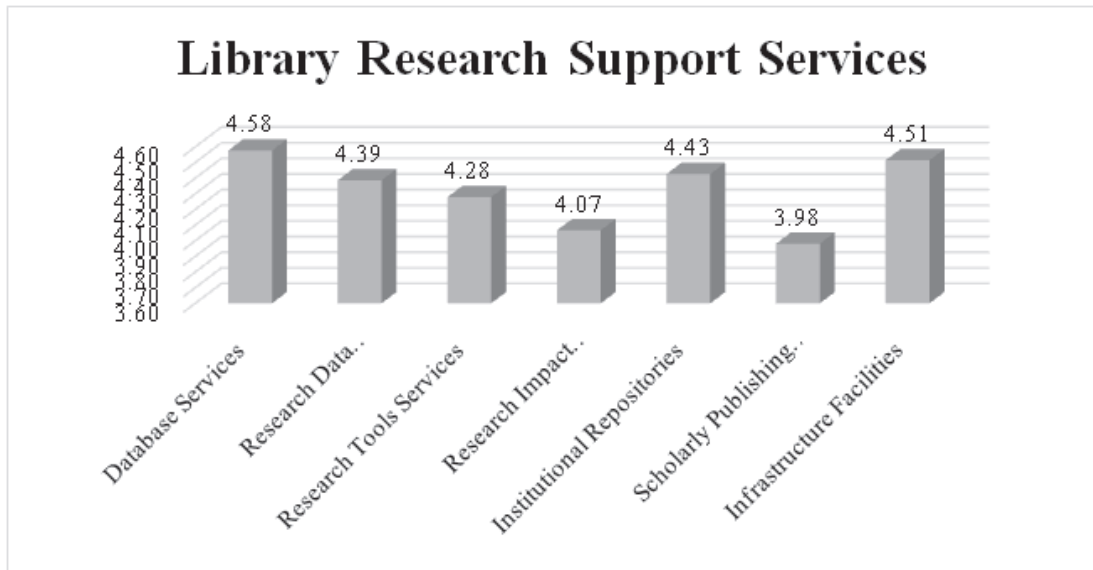

Figure 1: Perception of library professionals towards LRSS

The average mean of each dimension of LRSS considered for the study is presented in figure 1 revealing that the most favoured service was 'Database Services,'(4.58), followed by 'Infrastructure Facilities' (4.51) and 'Institutional Repositories' (4.43). On the other hand, the service with the least preference was 'Scholarly Publishing Services,' (3.98). This was succeeded by 'Research Impact Measurement Services' (4.07), 'Research Tools Services'(4.28), and 'Research Data Management Services' (4.39).

However, a detailed analysis for each service on a statement-by-statement basis is provided in the up coming sub-headings.

5.2.1 *Database services*

The analysis of library professionals' perception of database services is presented in table 2. The table outlines various services covered under the statements listed, and the mean scores for each service indicate the level of agreement or disagreement among the respondents.

Table 2: Perception of library professionals towards Database Services

Statements	Responses					Mean
	SA	A	N	D	SD	
Library should provide access of indexing and abstracting databases	49 (68.06%)	22 (30.56%)	0 (0%)	1 (1.39%)	0 (0%)	4.65
Library should provide access of full-text e-journals	44 (61.11%)	27 (37.5%)	1 (1.39%)	0 (0%)	0 (0%)	4.60
Library should provide access of full-text e-books	49 (68.06%)	19 (26.39%)	1 (1.39%)	3 (4.17%)	0 (0%)	4.58
Library should provide access of full-text e-theses/ dissertations	47 (65.28%)	17 (23.61%)	4 (5.56%)	3 (4.17%)	1 (1.39%)	4.47
Average Mean						**4.58**
"SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree"						

Among the listed services, the highest mean score of 4.65 was obtained for the statement "library should provide access to indexing and abstracting databases". 68.06% of the respondents strongly agreed, while 30.56% agreed with the statement. The statement "library should provide access of full-text e-journals" received a 4.60 mean score, followed by "library should provide access of full-text e-books"(mean=4.58). The lowest mean score 4.47 was found for the statement "library should provide access of full-text e-theses/ dissertations". Thus, library professionals believe that the provision of access to various databases should be a priority of the library for providing LRSS.

5.2.2 *Research data management (RDM) services*

As presented in table 3, analysing library professionals' perception offers valuable insights into their attitudes towards RDM.

Table 3: Perception of library professionals towards RDM services

Statements	Responses					Mean
	SA	A	N	D	SD	
Library should assist researchers to use available technology, infrastructure, and tools for research data	46 (63.89%)	25 (34.72%)	1 (1.39%)	0 (0%)	0 (0%)	4.63
Library needs to provide guidance/ training to handle and manage unpublished research data	31 (43.06%)	34 (47.22%)	6 (8.33%)	1 (1.39%)	0 (0%)	4.32
Library needs to provide guidance/ training to deposit data in data repository	31 (43.06%)	35 (48.61%)	6 (8.33%)	0 (0%)	0 (0%)	4.35
Library needs to provide guidance/ training to find relevant external data sets	25 (34.72%)	34 (47.22%)	11 (15.28%)	2 (2.78%)	0 (0%)	4.14
Library should build Institutional Data Depository to preserve research data	44 (61.11%)	22 (30.56%)	4 (5.56%)	2 (2.78%)	0 (0%)	4.50
Average Mean						4.39
"SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Stron gly Disagree"						

The highest mean score, 4.63 was for the statement "library should assist researchers to use available technology, infrastructure, and tools for research data" where most respondents strongly agreed (63.89%) or agreed (34.72%). This is followed by the statement "library should build Institutional Data Depository to preserve research data" with a mean score of 4.50 for which 61.11% of respondents strongly agreed, and 30.56% of respondents agreed. The next were"library needs to provide guidance/ training to deposit data in data repository" and "library needs to provide guidance/ training to handle and manage unpublished research data" with

mean scores of 4.35 and 4.32, respectively. The lowest mean score, 4.14 was for the statement, "library needs to provide guidance/ training to find relevant external data sets". These findings underscore the library's pivotal role in supporting researchers' data-related needs and indicate a robust consensus on establishing essential research data management services and resources.

5.2.3 *Research tools services*

Table 4 presents the responses of respondents towards various research tool services.

Table 4: Perception of library professionals towards research tools services

Statements	Responses					Mean
	SA	A	N	D	SD	
Library should provide Plagiarism Detection Tools	45 (62.5%)	25 (34.72%)	1 (1.39%)	1 (1.39%)	0 (0%)	4.58
Library should provide Bibliography & Citation Management Tools	35 (48.61%)	32 (44.44%)	4 (5.56%)	1 (1.39%)	0 (0%)	4.40
Library should provide Qualitative Analysis Tools	21 (29.17%)	38 (52.78%)	12 (16.67%)	1 (1.39%)	0 (0%)	4.10
Library should provide Quantitative Analysis Tools	18 (25%)	39 (54.17%)	11 (15.28%)	4 (5.56%)	0 (0%)	3.99
Library should provide Writing Assistance Tools	35 (48.61%)	34 (47.22%)	1 (1.39%)	2 (2.78%)	0 (0%)	4.42
Library should provide Online Survey Tools	15 (20.83%)	41 (56.94%)	11 (15.28%)	5 (6.94%)	0 (0%)	3.92
Library should provide Remote Access Tools for accessing e-resources outside the University Campus	50 (69.44%)	20 (27.78%)	2 (2.78%)	0 (0%)	0 (0%)	4.67
Library should provide Federated/ Common Search Tools	38 (52.78%)	22 (30.56%)	8 (11.11%)	4 (5.56%)	0 (0%)	4.31
Library should provide Bibliometrics & Altmetrics Tools	18 (25%)	32 (44.44%)	20 (27.78%)	2 (2.78%)	0 (0%)	3.92
Library should provide training to use above mentioned tools	42 (58.33%)	25 (34.72%)	3 (4.17%)	2 (2.78%)	0 (0%)	4.49
Average Mean						**4.28**
"SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree"						

The highest mean score 4.67 was for the statement "library should provide remote access tools for accessing e-resources outside the university campus". 69.44% of respondents strongly agreed, and 27.78% agreed with this statement, while none of the respondents disagreed or strongly disagreed. This is followed by the statement "library should provide plagiarism detection tools" with a mean score of 4.58 for which 62.5% of respondents strongly agreed, and 34.72% agreed. The next line was "library should provide training to use above-mentioned tools", "library should provide writing assistance tools" and "library should provide bibliography & citation management tools" with mean scores of 4.49, 4.42, and 4.40 respectively. The lowest mean score of 3.92 was for both the statements "library should

provide online survey tools" and "library should provide bibliometrics & altmetrics tools".

Thus, the analysis reveals that remote access tools, plagiarism detection tools and writing assistance tools should be among the top priorities of a library to increase the university's research output. Other tools like bibliography and citation management tools, qualitative and quantitative analysis tools, federated search, etc., also need the focus of the library as such tools benefit the researchers in terms of time-saving and improved productivity.

5.2.4 *Research impact measurement services*

Responses of library professionals towards research impact measurement services are presented in table 5.

Table 5: Perception of library professionals towards research impact measurement services

Statements	Responses					Mean
	SA	A	N	D	SD	
Library should provide bibliometrics training	19 (26.39%)	46 (63.89%)	5 (6.94%)	2 (2.78%)	0 (0%)	4.14
Library should provide training for Altmetrics	19 (26.39%)	34 (47.22%)	15 (20.83%)	4 (5.56%)	0 (0%)	3.94
Library should provide assistance/ training in finding h-index, IF, etc. (Research Impact)	28 (38.89%)	28 (38.89%)	14 (19.44%)	2 (2.78%)	0 (0%)	4.14
Library should provide disciplinary research trend reports	16 (22.22%)	44 (61.11%)	11 (15.28%)	1 (1.39%)	0 (0%)	4.04
Average Mean						**4.07**
"SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree"						

The highest mean score 4.14 was found for two statements "library should provide bibliometrics training" and "library should provide assistance/ training in finding h-index, impact factor, etc.". This is followed by "library should provide disciplinary research trend reports" with a mean score of 4.04. The least mean score of 3.94 was for the statement "library should provide training for Altmetrics". By offering research impact measurement services, libraries can help researchers enhance the visibility and impact of their work and contribute to the advancement of knowledge in their fields.

5.2.5 Institutional repositories (IRs)

The attitudes of library professionals toward IR services are displayed in table 6.

Table 6: Perception of library professionals towards IR

Statements	Responses					Mean
	SA	A	N	D	SD	
Library needs to build IR to preserve and share research output	43 (59.72%)	26 (36.11%)	3 (4.17%)	0 (0%)	0 (0%)	4.56
Library should provide training to access/ use IR	42 (58.33%)	25 (34.72%)	3 (4.17%)	1 (1.39%)	1 (1.39%)	4.47
Library should assist/ train to deposit documents in IR	28 (38.89%)	37 (51.39%)	4 (5.56%)	3 (4.17%)	0 (0%)	4.25
Average Mean						**4.43**
"SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree"						

The highest average score of 4.56 was observed for the statement "library needs to build IR to preserve and share research output". Subsequently, the next statement "library should provide training to access/ use IR" achieved an average score of 4.47. On the other hand, the statement with the lowest average score of 4.25 was "library should assist/ train to deposit documents in IR".

Thus, library professionals believe that each library should have their own IR for preservation and dissemination of the research output of the institution.

5.2.6 Scholarly publishing services

The perception of library professionals toward scholarly publishing services is displayed in table 7.

Table 7: Perception of library professionals towards scholarly publishing services

Statements	Responses					Mean
	SA	A	N	D	SD	
Library should assist researchers in literature search	35 (48.61%)	29 (40.28%)	7 (9.72%)	0 (0%)	1 (1.39%)	4.35
Library should assist researchers in writing research proposals/ synopsis	20 (27.78%)	36 (50%)	14 (19.44%)	1 (1.39%)	1 (1.39%)	4.01
Library should assist researchers in locating research grants	21 (29.17%)	27 (37.5%)	21 (29.17%)	2 (2.78%)	1 (1.39%)	3.90
Library should provide help in journal selection for publishing articles	15 (20.83%)	46 (63.89%)	5 (6.94%)	4 (5.56%)	2 (2.78%)	3.94
Library should provide help in selecting publishers for book publishing	19 (26.39%)	37 (51.39%)	11 (15.28%)	3 (4.17%)	2 (2.78%)	3.94
Library should provide guidance to obtain funding/ support for Article Processing Charge (APC) from the parent institution	22 (30.56%)	24 (33.33%)	22 (30.56%)	3 (4.17%)	1 (1.39%)	3.88
Library should help to identify grants/ funding agencies to publish articles/ books	14 (19.44%)	37 (51.39%)	17 (23.61%)	3 (4.17%)	1 (1.39%)	3.83
Library should assist researchers in the online manuscript submission	13 (18.06%)	44 (61.11%)	11 (15.28%)	3 (4.17%)	1 (1.39%)	3.90
Library should assist in the publicity/ marketing of research publications through social media, library websites, etc.	20 (27.78%)	22 (30.56%)	25 (34.72%)	3 (4.17%)	2 (2.78%)	3.76
Library should provide training for making profiles on Research Network Portals	32 (44.44%)	28 (38.89%)	8 (11.11%)	3 (4.17%)	1 (1.39%)	4.21
Library should help in exploring possible research collaborations	22 (30.56%)	35 (48.61%)	13 (18.06%)	1 (1.39%)	1 (1.39%)	4.06
Average Mean						**3.98**
"SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree"						

The highest average score of 4.35 was found for the statement "library should assist researchers in literature search" for which 48.61% of respondents strongly agreed, while 40.28% agreed. Subsequently, the next average score of 4.21 was for the statement "library should provide training for making profiles on Research Network Portals". This is followed by the statement "library should help in exploring possible research collaborations" (mean=4.06), "library should assist researchers in writing research proposals/ synopsis" (mean=4.01). On the other hand, the statements with the lower average score were"library should assist in the publicity/ marketing of research publications through social media, library websites, etc." (mean= 3.76),"library should help to identify grants/ funding agencies to publish articles/ books" (mean=3.88) and "library should guide to obtain funding/ support for APC from the parent institution" (mean=3.88).

5.2.7 *Infrastructure facilities*

The perception of library professionals regarding infrastructure facilities is outlined in table 8.

Table 8: Perception of library professionals towards infrastructure facilities

Statements	Responses					Mean
	SA	A	N	D	SD	
Library should provide high Internet speed/ bandwidth	51 (70.83%)	20 (27.78%)	1 (1.39%)	0 (0%)	0 (0%)	4.69
There should be Wi-Fi facility in the library	46 (63.89%)	25 (34.72%)	0 (0%)	1 (1.39%)	0 (0%)	4.61
There should be separate reading room facility in the library for the researchers	50 (69.44%)	17 (23.61%)	3 (4.17%)	2 (2.78%)	0 (0%)	4.60
There should be separate Computer Lab for the researchers	41 (56.94%)	27 (37.5%)	3 (4.17%)	1 (1.39%)	0 (0%)	4.50
Separate room/ space for intellectual discussion should be provided in the library	29 (40.28%)	27 (37.5%)	15 (20.83%)	1 (1.39%)	0 (0%)	4.17
Average Mean						**4.51**
"SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree"						

The statement garnering the highest average score, 4.69, pertains to "library should provide high Internet speed/ bandwidth" while the statement "there should be Wi-Fi facility in the library" attained an average score of 4.61. This is succeeded by the assertion "there should be separate reading room facility in the library for the researchers"(mean=4.60). Conversely, the statement achieving the lowest average score of 4.17 was "separate room/ space for intellectual discussion should be provided in the library". The statement "there should be separate computer lab for the researchers"

attained an average score of 4.50.

Thus, sufficient infrastructure facilities are a prerequisite for providing a better research environment where the researchers can easily utilise the available facilities and services without any inconvenience.

5.3   *Problems faced by library professionals on LRSS*

Participant perspectives on issues and problems concerning LRSS were also gathered. The outcomes of these responses are presented in table 9.

Table 9: Problems faced by the library professionals

Statements	Responses					Mean
	SA	A	N	D	SD	
Financial problems/ Lack of budget	25 (34.72%)	32 (44.44%)	9 (12.5%)	5 (6.94%)	1 (1.39%)	4.04
Internet connectivity and speed	20 (27.78%)	34 (47.22%)	11 (15.28%)	6 (8.33%)	1 (1.39%)	3.92
Shortage of library staff	27 (37.5%)	25 (34.72%)	15 (20.83%)	5 (6.94%)	0 (0%)	4.03
Lack the knowledge/ Skills/ confidence to provide such services	9 (12.5%)	25 (34.72%)	16 (22.22%)	21 (29.17%)	1 (1.39%)	3.28
Special needs of the researcher that are difficult to fulfil	3 (4.17%)	35 (48.61%)	21 (29.17%)	11 (15.28%)	2 (2.78%)	3.36
Different levels of demand across academic departments	4 (5.56%)	39 (54.17%)	18 (25%)	8 (11.11%)	3 (4.17%)	3.46
Research Support Services are not the priority of the library	4 (5.56%)	22 (30.56%)	6 (8.33%)	20 (27.78%)	20 (27.78%)	2.58
Research Support Services are not a priority of the University	7 (9.72%)	15 (20.83%)	7 (9.72%)	19 (26.39%)	24 (33.33%)	2.47
Adequate Infrastructure is not available in the library	14 (19.44%)	26 (36.11%)	13 (18.06%)	14 (19.44%)	5 (6.94%)	3.42
Shortage of computers in the university library	5 (6.94%)	28 (38.89%)	11 (15.28%)	23 (31.94%)	5 (6.94%)	3.07
Lack of ICT Skills in the library staff	4 (5.56%)	22 (30.56%)	22 (30.56%)	21 (29.17%)	3 (4.17%)	3.04
"SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree"						

Based on the obtained mean scores shown in table 9, it can be inferred that the most significant problem reported by the respondents was financial problems/ lack of budget as the mean score was highest (4.04) for the statement. The next problem, rated highest by the respondents, was "shortage of library staff" with a mean score of 4.03. Other significant problems reported by the respondents included "internet connectivity and speed" (mean = 3.92), "different levels of demand across academic departments" (mean = 3.46), "adequate infrastructure is not available in the library" (mean = 3.42), "special needs of the researcher that are difficult to fulfil" (mean = 3.36), and "lack the knowledge/ skills/ confidence to provide such services" (mean = 3.28).The lowest mean score (2.47) was for the problem statement "research support services are not a priority of the university". Other problems for which a lower mean score was found included- "research support services are not the priority of the library" (mean = 2.58), "lack of ICT skills in the library staff" (mean = 3.04) and "shortage of computers in the university library" (mean = 3.07).

From the above, we can infer that LRSS is a priority among libraries and universities. However, hindrances like lack of budget/ finance and shortage of human resources need to be addressed to provide better library services in general and LRSS in specific.

6. Discussion

The outcomes of the obtained responses demonstrate that the library professionals' emphasised the importance of all the LRSS, among which the top priority was given to 'Database Services' and 'Infrastructural Facilities'. This indicates their emphasis on the significance of robust library infrastructure and subscriptions to scholarly databases in bolstering research initiatives. In descending order of priority, other anticipated services include 'Institutional Repositories', 'Research Data Management (RDM) Services', 'Research Tools Services', 'Research Impact Services', and 'Scholarly Communication Services'. Library professionals also encounter distinct challenges regarding LRSS. Among these challenges, respondents identified financial constraints and budgetary limitations as the foremost concern, succeeded by the insufficiency of library personnel. Noteworthy concerns encompassed internet connectivity and speed, alongside variations in demand across diverse academic departments.

7. Conclusion and suggestions

The present study is aimed to know the perception of library professionals regarding LRSS and the problems associated with these services. Considerable emphasis was placed by respondents on digital resource accessibility and technological infrastructure, both pivotal for effective research. Furthermore, the study implies the need for libraries to enhance awareness and underscore the value of services like RDM, institutional repositories, research tools, research impact assessment, and scholarly communication to provide heightened support for research undertakings. It is imperative for university libraries to address challenges on priority and proactively.

Based on the insights from the study, several suggestions are enumerated below for enhancing LRSS:

- Libraries should enhance database services and ensure robust access to these resources.

- Libraries should provide extensive training and guidance on research data management.

- Libraries should facilitate training and support for the effective utilisation of the available research tools.

- Training on bibliometrics and research impact metrics should be a priority.

- Libraries should actively build and maintain institutional repositories.

- Comprehensive scholarly publishing support should be provided by libraries.

- To create a conducive research environment, libraries should maintain high-speed internet access, Wi-Fi facilities, and other technological infrastructure.

- To address financial constraints and staffing shortages, libraries can advocate for increased resources, including budget allocations and personnel support.

- Libraries can foster research culture by helping researchers identify grants, funding agencies, and opportunities for collaboration.

- Gathering feedback from library professionals and researchers to improve services.

By taking these suggestions into account, libraries can effectively cater to the needs of researchers, contribute to the research landscape, and play a pivotal role in supporting academic excellence.

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