

Use of Research Support Services in Higher Education: A Case Study of Forestry Research and Education Institutions in India

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ABSTRACT

The purpose of this paper is to help increase the awareness and use of research support services in academic institutions and to find out the usefulness of research support services of forestry research and education institutions for students in India, in hopes of improving the quality of research. A total of 457 Undergraduate, postgraduate, postgraduate diploma, and Doctor of Philosophy students, as well as faculty and scientists, randomly participated in this study of forestry research and education institutions in India. A survey method was used to assemble primary data through a questionnaire. The Analysis of Variance test is used in the context of the analysis. The study's findings revealed that students are aware of the services supporting research-related library services in forestry research and education institutions in India, but lack a thorough understanding. The results of the survey showed that the mean score for the service "Where could publish?" is 3.142, indicating that respondents use this service occasionally. The paper describes the awareness and use of research support services among students at forestry research and education institutions in India, and provides suggestions for enhancing library services utilization.

KEYWORDS: Research Support Service, Library Resources, Forestry Education, Higher Education, India.

1. INTRODUCTION

The foundation of every country and subject, whether it is in agriculture, forestry, science, or social science, is new knowledge and research in any area. Through open access systems and research support services, librarians and libraries play a crucial role in the advancement of research and share more useful and relevant material with the researchers. According to a study by Du and Evans (2011), university libraries are playing the growing role to researchers with their research support services outside of the typical teaching and learning context. The library also has a significant impact on students and researchers' knowledge of pertinent literature on study areas. Not even literary libraries assist researchers in their work through academic research support services (RSS). The RSS is described as "A package of services, tools, and facilities that aim to facilitate research work" by International General Insurance Co. Unsightly. The majority of reputable libraries support, offer bibliographical services,

plagiarism checks, citation services, and an expert librarian reference service. Academic libraries provide access to information in multiple formats, which can be accessed from anywhere and at any time MacColl (2010). Ask a Librarian is a virtual reference service that connects students, staff, and researchers from participating libraries with real-time research assistance through chat, according to Sankar and Kavitha (2016). Professionals provide academics more about RSS to help and enhance the standard of the research. Today's universities place a strong emphasis on research output, which is better led by libraries. Because they save both users' and researchers' time, open access systems and remote login services for researchers are particularly useful in research. According to their research, search engines contributed to a 10% rise in open access Nicholas, et al. (2007). Whereas Tiwari, Panda, and Biswas (2019), said that remote login has made life easier because it allows us to access services from anywhere at any time over the internet. The expectations of library users are also increasing day by day for need-based, effective delivery of information and quality research services. The best way to satisfy the library users is to only through the measuring the quality of service. Libraries play a vital role in offering high-quality research support services through access to library resources and services as well as other research instruments, according to Das and Banerjee (2021). Therefore libraries and librarians have to need the increasing the quality and use of the services which are provided in the library. Developments that affected our economy and society, both worldwide, during the past several years have been the key drivers of changes in research and development. According to Sinha and Sinha's (2024) study on academic libraries in South and Southeast Asia, both regions frequently provide services like training, data repositories, and the promotion of reusable data sources to support the researcher. Researchers can get research support services from a lot of libraries. To help scholars with these services, the Indian Institutions of Technology, New Delhi Centre Library, for instance, has established a special email address. In addition, users can access electronic resources through the library's Electronic Document Delivery Services (EDDS), Research Data Management Services, Remote Access Services, and Electronic Theses and Dissertations (ETDs) repository. In their study on the research support services offered by libraries, Singh, Raj, and Madalli (2024) stated that enchanting the RSS not only improved research but also contributed to the country's academic and development goals. The study has found out what has already been done on this problem by reviewing the numerous literature related to the article. The literature reviews that follow are listed below.

2. LITERATURE REVIEW

In the context of e-research and data-intensive research, academic libraries provide a wide range of research support services, some of which have been the subject of studies. Rubbia, Franco & Pellizzon (2014) found a significant improvement, with an increasing number of institutions increasing their investment both in human resources devoted to research support services and in Information Technology tools for the collection and management of internal information regarding projects. Kennan, Corral, and Afzal (2014) are already offering or preparing to provide services in the key areas of bibliometrics and data management. In addition, there was a rise in demand for non-study-related research support services such as grant writing assistance, journal publishing platforms, and research support. It is also discovered that libraries were questioned about specific information and skills needed when it was determined that further education and training were necessary. Most participants believed that knowledge of bibliometrics' methods and procedures (93%) and various uses and applications of bibliometrics (87.5%) were the most crucial areas of necessary knowledge for bibliometrics. Tenopiret. al., (2017) varieties of research data services are currently offered by or will be offered by academic research libraries throughout Europe. The vast

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majorities of library directors in Europe is aware of the expanding significance of research data and are searching for solutions that meet their institutions' demands and top objectives. Involvement in "policy development/planning related to RDS" (66.3%) and "discussing RDS with others on campus" (76.8%) is found to be the most common activity for libraries, which may indicate that many of them are still in the planning stages or that RDS demands extensive ongoing discussion and policy-making. Whereas, Ali and Naveed (2020) invested in university libraries, particularly from the public sector, because the majority of libraries do not offer state-of-the-art research support services to academics. The inability to provide state-of-the-art research support services may be caused by a lack of funding, staff, and resources. The majority of academic libraries in Australia, New Zealand, the UK, and Ireland that were surveyed. Krishnaiah (2021) studied patron satisfaction with Indian university libraries' materials and services. A mixed-methods approach was used to collect data via surveys and interviews to assess user satisfaction levels, identify the primary drivers of satisfaction, and identify areas that could be improved. The findings highlight how staff response, competency, and availability of electronic tools all affect customer satisfaction. The study looks at how it affects library management and how to employ technology to adapt to changing user needs, as well as how to strengthen information literacy programs and provide better services. According to the study, higher user satisfaction typically indicates that the library is meeting or exceeding patron expectations concerning quality of service. Conversely, lower satisfaction may point to poor service quality that requires enhancement.

According to Awan, Richardson, and Ahmed (2022) the majority of university libraries offer basic RSS and have significant collections of general and subject-specific literature to fulfill the demands of researchers. Additionally, it was found that the majority of respondents stressed the need for libraries to improve their holdings to better serve academics, in addition to their interest in offering RSS. In Nigerian university libraries, Friday and Afamukoro (2023) looked at the development of electronic theses and dissertations. The primary concentration was on federal university libraries in Nigeria. The study has made it clear that the policies for creating electronic theses and dissertations (ETDs) in university libraries call for students to submit electronic copies of their theses and dissertations, to involve digital/IR librarians in the development of ETDs, and to make ETDs freely accessible. In the conclusion of the literature review, a lot of research has been intended, but since researchers did not consider India's special libraries, a critical analysis of the situation with regard to ETDs in special libraries is necessary. A study by Dixit, et al. (2024) highlighted the crucial role that college libraries play in supporting academic and research needs. As per the report, university libraries provide resources such as books, journals, digital databases, study areas, and research support specific to their respective universities. Moreover, since their inception in India starting with the Serampore College library in 1818 college libraries have grown into crucial hubs for education and innovation. The survey indicates that they encompass the development of academic partnership as well as services such as skill-building seminars, citation management, and plagiarism checks.

However, problems such as scarce resources, outdated technology, budgetary constraints, and lack of space still exist. Hussain and Rafiq (2025) carried out a study on university libraries' offering of research support services throughout the research lifecycle. They discovered that university libraries in the private sector provided better research support services than those in the public sector. Additionally, as part of their future planning, libraries affiliated with public institutions demonstrated a greater propensity to provide these services. This study looked at

the state of research support services offered by Pakistani university libraries, categorized by research life-cycle stage.

3. OBJECTIVES OF THE STUDY

- ✓ To examine the use of the research support services at forestry research and education institutions in India.
- ✓ To be aware of the research support services to users and library professionals.
- ✓ To help the library professional to understand the concept of research support support services.

4. LIMITATION OF THE STUDY

The present study will focus on the users i.e., undergraduate, postgraduates, Research scholars, and Faculty/scientists of selected three forestry research and education institutions in India which do not reflect the whole situation of the Indian Scholars.

5. STRATIFIED SAMPLE OF POPULATION

A stratified sampling was done of the population from forestry research and education institutes, focusing on several academic and professional categories (B.Sc., M.Sc., PG Diploma, PhD, faculty, and scientists) as shown in Table 1.

Table 1 Stratified Sample of Population

Programme	Total Population	Forest Research Institute (Deemed to be University) (FRI)	Indian Institute of Forest Management (IIFM)	Dr. Yashwant Singh Parmar University of Horticulture & Forestry (YSPUHF)	Proposed Sample of Population
B.Sc. (UG)	257	N/A	N/A	$257 \times 310 / 1392 = 58$	58
M.Sc. (PG)	376	$268 \times 310 / 1392 = 59$	N/A	$108 \times 310 / 1392 = 25$	84
PG Diploma	240	N/A	$240 \times 310 / 1392 = 54$	N/A	54
PhD	252	$200 \times 310 / 1392 = 45$	$32 \times 310 / 1392 = 7$	$20 \times 310 / 1392 = 5$	56
Faculty	152	$39 \times 310 / 1392 = 8$	$31 \times 310 / 1392 = 7$	$82 \times 310 / 1392 = 18$	34
Scientists	115	$88 \times 310 / 1392 = 19$	$12 \times 310 / 1392 = 2$	$15 \times 310 / 1392 = 3$	24
Total	1392	595/131	315/71	482/109	310

Table 1 depicts the sample sizes and responses from each institution are provided, along with data based on their respective populations. This is done using the formula:

$$\text{Sample size for category} = \frac{(\text{Population of the category})}{\text{Total population}} \times \text{Total sample size}$$

For example, in the M.Sc. (PG) category for Forest Research Institute (FRI), the calculation is: $268/1392 \times 310 = 59$. The Forest Research Institute (FRI) has a population of 595, the Indian Institute of Forest Management (IIFM) has 315, and Dr. Yashwant Singh Parmar University of Horticulture and Forestry (YSPUHF) have 482. The sample sizes for each category are calculated by taking the percentage of the population that each institution contributes to the total population.

Table 2 Category Wise Sample of Population

Programme	Total Population	Stratified Proposed Sample Size	Responses Analysed
B.Sc. (UG)	257	58	71
M.Sc. (PG)	376	84	105
PG Diploma	240	54	108
PhD	252	56	99
Faculty	152	34	47
Scientists	115	24	27
Total	1392	310	457

Table 2 shows the population size, indicated sample size, and number of responses analysed for major academic and professional organisations. For the B.Sc. (UG) group, with a total population of 257, the projected sample size was 58, however only 71 replies were analysed. In the M.Sc. (PG) 81 individual samples was recommended from a population of 376, however only 105 answers were analysed. The PG Diploma consisted of 240 participants, with 54 intended samples and 108 replies analysed. For the PhD, the total population was 252, with 56 proposed samples and 99 responses analyzed. Among faculty, the population was 152, with 34 proposed samples and 47 responses analyzed. Lastly, the scientists had a population of 115, a proposed sample size of 24, and 27 responses analyzed.

Overall, the study involved a total population of 1392, with a proposed sample size of 310, but 457 responses were actually analyzed, indicating higher-than-expected participation across all categories. A total of 457 respondents were included and analysed in this study although Solvin’s formula, sample size of 310 or more was proposed.

6. Research Support Services

Research-related library services support scholarly research and will generally include primary as well as secondary sources. Research-related library service on the Internet requires many of the same qualities as traditional references: accuracy, promptness, courtesy, and understanding of the information needed. These types of library services are mainly focused on the demand of the researcher and fulfilling the researcher's informational needs. In this regard, the related service are categories into the three stages which are given below:

Table 3 Stages of the Research Support Services to researchers

Culture Identity	Research Stage	Research support services
Services and	Stage First	full text database
		data repository
		electronic theses & dissertations
		strategies for searching databases

information Need		database searching for research
		suggesting new resources to purchase
		library online databases
		keeping up to date to researchers
		recommending databases for research
		news online
		searching beyond google
		searching for evidence-based resources and systematic review
		patents
Services Use	Stage Second	how to write literature review
		referencing software
		data analysis
		citation databases
		using electronic analysis cited papers
		referencing style manuals
		discovering and analysis cited papers
Services Applied	Stage Third	measuring your research impact
		citation data and web analysis
		measuring journal impact
		plagiarism detection tool
		measuring quality journals and publications
		advising on locating journal impact factors and citation data
		where could i publish

Table 3 presented the stages of the research support services are depicted in the above table. When the researchers need information or services about primary, secondary, and tertiary sources, awareness, and looking for necessary information from databases and search engines are all factored into the equation in the first stage of research support services which is required for beginner researchers. The services that researchers need when doing research as well as the necessary practical research tasks are contained in the second stage, e.g. writing literature review, Referencing Style, and citation. The third stage of RRS contains the services/information that are applied and used independently by the students as well as almost close to completing the research work the research e.g. using of Plagiarism Detection Tool and Measuring Quality Journals and Publications.

7. RESULTS AND DISCUSSION

Table 4 Scale Statistics of Research libraries Support Services

Research Support Library Service	Mean	Std. Deviation	Skew	Kurt
How to Write Literature Review	3.9256	1.02755	-0.959	0.527
Full Text Database	3.4354	1.03061	-0.357	-0.112
Measuring Your Research Impact	2.8096	1.46332	-0.198	-1.560

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Citation Data and Web Analysis	3.1182	1.64478	-0.389	-1.604
Data Repository	2.8359	1.46501	-0.247	-1.555
Referencing Software	2.9475	1.52518	-0.347	-1.590
Data Analysis	2.9322	1.51520	-0.341	-1.589
Citation Databases	3.0503	1.65556	-0.232	-1.640
Measuring Journal Impact	2.0853	1.10389	0.616	-0.975
Referencing Style Manual	1.8140	0.92621	1.043	0.257
Electronic Theses & Dissertations	2.8490	0.86676	-0.495	-0.321
Plagiarism Detection Tool	3.0810	1.12780	0.089	-1.040
Library Online Databases	2.9781	.88578	-0.528	0.295
Database searching for research	3.6827	1.05235	-0.869	0.339
Strategies for searching databases	2.7090	.92988	0.462	0.706
News Online	2.6543	1.37121	-0.097	-1.533
Patents	2.7834	1.43542	-0.205	-1.537
Searching for evidence-based resources and systematic review	3.6433	1.35308	0.017	-0.817
Searching beyond Google	3.6761	1.00663	-0.884	0.217
Measuring Quality Journals and Publications	2.8906	1.55070	-0.199	-1.604
Discovering and analysis cited papers	2.9519	1.59147	-0.173	-1.595
Using electronic analysis cited papers	2.7002	1.39543	-0.101	-1.460
Keeping Up to date to researchers	3.8446	1.11013	-0.820	-0.183
Suggesting New resources to purchase	3.2954	0.95642	0.044	-0.092
Recommending databases for research	2.7002	0.66545	-0.247	0.048
Advising on locating journal impact factors and citation data	3.5755	1.06545	-0.761	-0.040
Finding theses/dissertation/journal	3.7090	1.18866	-0.413	-0.953
Where could I publish	3.1422	0.95485	-0.030	0.084
Scale Statistics (Mean=85.821 ; Variance=641.174; Std. Deviation=25.32; Mean inter-item correlation=0.495;N of Items=28; Cronbach's Alpha(α)=0.965; Scale; 5 point Likert)				
Note: Skew for skewness, Kurt for kurtosis				

Table 4 shows Scale statistics of research Support Services available in the libraries. The mean value of Std. Deviation, Skewness and Kurtosis so obtained are presented here. The items were rated on 5-point Likert scale. However, the overall scale had a mean of 85.821 out of 140, if all 28 variables were rated @ 5. It had explained 61 percent of the construct valuating the scale. Also Mean inter-item correlation=0.495; and Cronbach's Alpha (α) =0.965 explains reliability of the scale (Hair et al). The vales of Skewness range within +/-2 limits also Kurtosis had ranged within +/-7(Hair et al., 2017, p. 61). Hence, it meets all requirements to apply parametric test.

8. RESEARCH SUPPORT SERVICES AND INFORMATION NEED (STAGE FIRST)

ANOVA was conducted to compare the use of research Support Libraries Services. Comparisons were made between library users i.e., UG, PG, PGDFM, PhD, Faculty and Scientists.

Table 5 ANOVA of Research Support Library Service

ANOVA						
Research Support Library Service		Sum of Squares	df	Mean Square	F	Sig.
Respondents						
Full Text Database	Between Groups(Combined)	152.884	5	30.577	41.604	0.000
	Within Groups	331.462	451	0.735		
	Total	484.346	456			
Data Repository	Between Groups(Combined)	507.273	5	101.455	97.060	0.000
	Within Groups	471.418	451	1.045		
	Total	978.691	456			
Electronic Theses & Dissertations	Between Groups(Combined)	71.111	5	14.222	23.628	0.000
	Within Groups	271.471	451	0.602		
	Total	342.582	456			
Library Online Databases	Between Groups(Combined)	28.387	5	5.677	7.773	0.000
	Within Groups	329.395	451	0.730		
	Total	357.781	456			
Database searching for research	Between Groups (Combined)	155.800	5	31.160	40.245	0.000
	Within Groups	349.193	451	0.774		
	Total	504.993	456			
News Online	Between Groups(Combined)	309.219	5	61.844	50.882	0.000
	Within Groups	548.156	451	1.215		
	Total	857.374	456			
Patents	Between Groups (Combined)	361.151	5	72.230	56.320	0.000
	Within Groups	578.402	451	1.282		
	Total	939.554	456			
Searching for evidence-based resources and systematic review	Between Groups (Combined)	166.762	5	33.352	22.514	0.000
	Within Groups	668.100	451	1.481		
	Total	834.862	456			
Searching beyond Google	Between Groups (Combined)	78.145	5	15.629	18.360	0.000
	Within Groups	383.925	451	0.851		
	Total	462.070	456			
Keeping Up to date to researchers	Between Groups(Combined)	134.681	5	26.936	28.431	0.000
	Within Groups	427.289	451	0.947		
	Total	561.969	456			
Suggesting new resources to purchase	Between Groups(Combined)	68.885	5	13.777	17.843	0.000
	Within Groups	348.235	451	0.772		
	Total	417.120	456			

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Recommending databases for research	Between Groups(Combined)	31.979	5	6.396	16.973	0.000
	Within Groups	169.951	451	.377		
	Total	201.930	456			

1. The results show a statistically significant difference between the groups ($F(5,451) = 41.604, p < 0.001$). The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Practically, this means that the different groups of the Research Support Library Service have significantly different responses regarding the full text database. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
2. The results show a statistically significant difference between the groups $F(5, 451) = 97.060, p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the data repository. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
3. The results show a statistically significant difference between the groups $F(5, 451) = 23.628, p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the electronic theses & dissertations. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
4. The results show a statistically significant difference between the groups $F(5, 451) = 7.773, p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the library online databases. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
5. The results show a statistically significant difference between the groups $F(5, 451) = 40.245, p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the database searching for research. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
6. The results show a statistically significant difference between the groups $F(5,451) = 50.882, p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the Research Support Library Service have significantly different responses regarding the news online. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
7. The results show a statistically significant difference between the groups $F(5, 451) = 56.320, p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different

- groups of the research support library service have significantly different responses regarding the patents. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
8. The results show a statistically significant difference between the groups $F(5,451) = 22.514$, $p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the searching for evidence-based resources and systematic review. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
 9. The results show a statistically significant difference between the groups $F(5,451) = 18.360$, $p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the searching beyond google. The high f-value indicates that the variation between groups is much larger than would be expected by chance.
 10. The results show a statistically significant difference between the groups $F(5,451) = 28.431$, $p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the keeping up to date to researchers. The high f-value indicates that the variation between groups is much larger than would be expected by chance.
 11. The results show a statistically significant difference between the groups $F(5,451) = 17.843$, $p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the suggesting new resources to purchase. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
 12. The results show a statistically significant difference between the groups $F(5,451) = 16.973$, $p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the recommending databases for research. The high F-value indicates that the variation between groups is much larger than would be expected by chance.

Table 6 Services Use (Stage Second)

ANOVA						
Research Support Library Service Respondents		Sum of Squares	df	Mean Square	F	Sig.
How to Write Literature Review	Between Groups(Combined)	74.478	5	14.896	16.506	0.000
	Within Groups	406.993	451	0.902		
	Total	481.470	456			
Referencing Software	Between Groups(Combined)	441.380	5	88.276	64.280	0.000

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	Within Groups	619.359	451	1.373		
	Total	1060.740	456			
Data Analysis	Between Groups(Combined)	473.679	5	94.736	74.537	0.000
	Within Groups	573.218	451	1.271		
	Total	1046.897	456			
Citation Databases	Between Groups(Combined)	462.086	5	92.417	52.910	0.000
	Within Groups	787.756	451	1.747		
	Total	1249.842	456			
Referencing Style Manuals	Between Groups(Combined)	101.460	5	20.292	31.587	0.000
	Within Groups	289.731	451	0.642		
	Total	391.190	456			
Discovering and analysis cited papers	Between Groups(Combined)	388.842	5	77.768	45.782	0.000
	Within Groups	766.099	451	1.699		
	Total	1154.941	456			
Using electronic analysis cited papers	Between Groups(Combined)	362.179	5	72.436	62.137	0.000
	Within Groups	525.751	451	1.166		
	Total	887.930	456			

13. The results show a statistically significant difference between the groups $F(5,451) = 16.506$, $p=0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Practically, this means that the different groups of the research support library service have significantly different responses regarding the how to write literature review. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
14. The results show a statistically significant difference between the groups $F(5,451) = 64.280$, $p=0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the referencing software. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
15. The results show a statistically significant difference between the groups $F(5,451) = 74.537$, $p=0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the data analysis. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
16. The results show a statistically significant difference between the groups $F(5,451) = 52.910$, $p=0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different

groups of the research support library service have significantly different responses regarding the citation databases. The high F-value indicates that the variation between groups is much larger than would be expected by chance.

17. The results show a statistically significant difference between the groups $F(5,451) = 31.587$, $p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the referencing style manuals. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
18. The results show a statistically significant difference between the groups $F(5,451) = 45.782$, $p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the discovering and analysis cited papers. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
19. The results show a statistically significant difference between the groups $F(5,451) = 62.137$, $p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the using electronic analysis cited papers. The high F-value indicates that the variation between groups is much larger than would be expected by chance.

Table 7 Services Applied (Stage Third)

ANOVA						
Research Support Library Service* Respondents		Sum of Squares	df	Mean Square	F	Sig.
Measuring Your Research Impact	Between Groups(Combined)	509.502	5	101.900	98.423	0.000
	Within Groups	466.936	451	1.035		
	Total	976.438	456			
Citation Data and Web Analysis	Between Groups(Combined)	597.299	5	119.460	84.669	0.000
	Within Groups	636.320	451	1.411		
	Total	1233.619	456			
Measuring Journal Impact	Between Groups(Combined)	365.098	5	73.020	172.804	0.000
	Within Groups	190.573	451	0.423		
	Total	555.672	456			
Plagiarism Detection Tool	Between Groups(Combined)	51.048	5	10.210	8.705	0.000
	Within Groups	528.956	451	1.173		
	Total	580.004	456			
Measuring Quality	Between Groups(Combined)	385.697	5	77.139	48.942	0.000

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Journals and Publications	Within Groups	710.833	451	1.576		
	Total	1096.530	456			
Advising on locating journal impact factors and citation data	Between Groups(Combined)	100.772	5	20.154	21.804	0.000
	Within Groups	416.873	451	0.924		
	Total	517.646	456			
Where could I publish	Between Groups(Combined)	12.956	5	2.591	2.901	0.014
	Within Groups	402.799	451	0.893		
	Total	415.755	456			

20. The results show a statistically significant difference between the groups $F(5,451) = 98.423$, $p=0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the using measuring your research impact. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
21. The results show a statistically significant difference between the groups $F(5,451) = 84.669$, $p=0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the using citation data and web analysis service. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
22. The results show a statistically significant difference between the groups $F(5,451) = 172.804$, $p=0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the using measuring your research impact. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
23. The results show a statistically significant difference between the groups $F(5,451) = 8.705$, $p=0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the using plagiarism detection tool. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
24. The results show a statistically significant difference between the groups $F(5,451) = 48.942$, $p=0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the using measuring quality journals and publications. The high F-value indicates that the variation between groups is much larger than would be expected by chance.

25. The results show a statistically significant difference between the groups $F(5,451) = 21.804, p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the using advising on locating journal impact factors and citation data. The high F-value indicates that the variation between groups is much larger than would be expected by chance.
26. The results show a statistically significant difference between the groups $F(5,451) = 2.901, p = 0.000$. The very small p-value (reported as 0.000) indicates strong evidence against the null hypothesis that all group means are equal. Hence, the (H_0) was not accepted for this issue. Practically, this means that the different groups of the research support library service have significantly different responses regarding the using Where could I publish. The high F-value indicates that the variation between groups is much larger than would be expected by chance.

FINDING OF THE STUDY

1. according on the information gathered from the respondents. The significant findings from the examination have been made accessible. "How to Write Literature Review" has the highest mean score of 3.93, making it the most helpful research support library service. This indicates that the user is having trouble writing the literature review and mostly relies on the library staff to help them with their technical writing issues.
2. The study also found that "Keeping Up to Date to Researchers" (mean: 3.84), "Database Searching for Research" (mean: 3.68), and "Searching Beyond Google" (mean: 3.68) are the second most popular services among users. All of these services are practical in nature and help users in literature surveys that support daily research activities.
3. In contrast, the "Referencing Style Manual" service has the lowest mean score of 1.81, making it the least helpful of the research support services. This implies that users might rely on their supervisor or find this information readily available through other channels. Additionally, users may find it easy to cite sources using citation databases.
4. Comparatively speaking to other services, the mean scores for "Measuring Journal Impact" (mean: 2.09), "Strategies for Searching Databases" (mean: 2.71), "Using Electronic Analysis of Cited Papers" (mean: 2.70), and "Recommending Databases for Research" (mean: 2.70) were likewise comparatively low. One of the likely causes is that users may not find it helpful or interpret it as a lack of awareness.
5. Overall, the results indicate that services that provide useful, immediately relevant research support are better considered. In contrast, technical library services or broad reference tools could require further explanation to meet user expectations. Similar to the findings of Singh et al.'s (2024) study, the use of RSS in Indian academic libraries is still in the early stages and is limited. It's noteworthy that most libraries recommend research tools, but very few offer Research Data Management services.

SUGGESTION

The university should encourage the students' awareness program, such as conferences, lectures, courses, and even incorporate into the school and higher education curricula. Do some ground work target teachers to make awareness of the Research support services (RSS) and create more opportunities for students to use the research support service

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for students. Creates a special curriculum for the group to disciplines such as Plagiarism service how it works, and how to write and publish articles. Lecturers/Scientists should always act as a motivator for students to know more about Research support services available at the library and give students assignments and lectures this is the perfect way for students to disseminate information and build awareness. Teachers should understand the students' desire for RSS. Librarians need to add more resources, books, articles, and orientation programs to the students, which are very helpful in raising awareness among students. The library professionals also put more effort into the use and awareness of RSS among students. To understand better, students should have to self-learn about the RSS. The Students should attend conferences, special classes, seminars, and special courses and should not lose out on opportunities if they know more about the services related to research.

CONCLUSION

Libraries have always aided scholars in achieving their academic objectives in the same way libraries also provide services that support and aid researchers.

Libraries' primary goal is to close the knowledge gap by improving reference services and disseminating the skill of literature surveying, which enables researchers to locate relevant literature easily. Thus, the study helps to understand the requirements of the reader by using this service. The study emphasized the use of the services and discovered that the most beneficial services for users were composing the literature review and keeping up to date with researchers' mean score (3.8446), with a mean score of 3.9256. As a consequence, the survey also discovered that the referencing style manual (1.8140) and measuring journal impact (mean score of 2.0853) are the least useful resources for the respondents. This indicates that they are aware of these services or rely on the resources of other teachers. Finally, library professionals should be informed of the users of different activities to enhance the usage of these services. Overall, the study also suggested that additional research be done, particularly on the researcher, to determine the preferred outcome.

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