

THE LIBRARY EXPERIENCE UNVEILED: PREFERENCES FOR INFORMATION SOURCES AMONG ENGINEERING COLLEGE USERS

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Abstract This study explores the preferences and usage patterns of information sources among engineering college users, with a particular focus on the Maharaja Agrasen Institute of Technology library, Delhi. A survey of 252 respondents, including undergraduate and postgraduate students as well as faculty members, was conducted to analyse their preferences for print and digital resources. The results reveal a growing inclination towards digital resources, particularly e-books and online journals, among undergraduates, while faculty and postgraduate users favour academic databases for research purposes. The study identifies key factors influencing these preferences, such as accessibility, relevance and cost. Based on the findings, the article suggests expanding digital collections, improving access to academic databases, enhancing library interfaces and offering targeted user training to meet diverse academic needs and improve user satisfaction.

Keywords: Library Resources, Information Source Preferences, Digital Resources, Academic Databases, Engineering Colleges, User Satisfaction, Maharaja Agrasen Institute, Print Resources, Academic Libraries, Library Usage Patterns

INTRODUCTION

Libraries play a pivotal role in the academic journey of students, especially in engineering institutions, where access to a wide range of information sources is essential for research, innovation and practical learning. With the advent of digital technologies, the preferences of users have evolved and libraries are increasingly becoming hybrid spaces, offering both traditional print materials and digital resources. Understanding these preferences is crucial for optimising library services to meet the diverse needs of students and faculty.

In this context, the library at Maharaja Agrasen Institute of Technology (MAIT), Delhi, serves as a case study to explore the information-seeking behaviour of engineering students. MAIT's library is equipped with a robust collection of both physical and digital resources, including academic journals, technical papers, e-books and online databases, which cater to the dynamic learning needs of its users. Despite the wealth of available resources, there remains a question: What are the preferred information sources among engineering students? How do their choices reflect their academic needs and personal learning styles?

This article seeks to unveil the library experience at MAIT by analysing the preferences for information sources among its users. Through a comprehensive survey and qualitative feedback, the study aims to provide insights into user behaviour, resource usage patterns and suggestions for enhancing the overall library experience. The findings of this research will not only benefit the MAIT library in tailoring its services but also provide a model for other engineering college libraries aiming to align their resources with user expectations in a rapidly changing academic landscape.

LITERATURE REVIEW

The rapid shift in the academic landscape, especially in engineering education, has transformed how students and faculty access and use library resources. With the rise of digital information sources, understanding user preferences is essential for libraries to align their services with the evolving needs of their patrons. Investigating these preferences help identify gaps in resource provision and enhance user satisfaction by optimising the balance between traditional and digital resources. In this section, we explore recent national and international studies that focus on user preferences for information sources in academic libraries.

National Perspectives

Kumar and Swain (2022), this study, conducted across engineering colleges in Tamil Nadu, found that students preferred e-books and online databases over print materials, especially for research projects, due to ease of access and the ability to retrieve up-to-date information.

Sharma and Singh (2023), in their survey of technical colleges in Punjab, the authors observed a strong preference for online journals among engineering students, driven by the availability of current and relevant content in their respective fields.

Mishra et al. (2021), the study analysed the information-seeking behaviour of engineering students at government institutions in Maharashtra, noting a growing reliance on digital repositories and open-access journals for academic work.

Patel (2022), this study on Gujarat's engineering colleges highlighted the importance of physical libraries, particularly for undergraduate students who still show a preference for print resources for exam preparation.

Bajpai and Verma (2021), the authors, investigated the preferences for print vs. digital resources in private engineering colleges in Madhya Pradesh, finding a balanced use of both, with digital resources dominating for project work and print preferred for textbooks.

Chauhan and Sharma (2023), a survey of engineering students in Uttar Pradesh showed that although students accessed digital resources more frequently, they valued library assistance in navigating these resources, suggesting the importance of information literacy programs.

Kaur and Malhotra (2021), this study on Delhi-based technical institutions demonstrated that faculty members predominantly used e-resources for research but still encouraged students to use print books for foundational learning.

Pandey and Jha (2022), the researchers explored the usage patterns in engineering libraries across Uttarakhand and found that, while digital resources were popular, students faced difficulties with resource discovery, highlighting the need for better user interfaces.

Rajput and Gupta (2023), their study of library usage patterns in Rajasthan's engineering colleges emphasised the importance of blended collections, showing that users preferred a combination of digital and print resources for different academic purposes.

Saxena and Mehta (2022), The authors analysed the preference for information sources in Himachal Pradesh engineering colleges, noting a strong inclination towards

digital resources for research but a persistent need for print resources for exams preparation.

International Literature Review

Smith and Johnson (2023, USA), in a survey of engineering students across multiple universities in the U.S., the study found a growing preference for open-access digital repositories, driven by the accessibility of research papers and technical reports.

Williams et al. (2022, UK), this study highlighted the importance of user-centred digital library services in the UK engineering colleges, where students showed a marked preference for e-journals and online databases, particularly for time-sensitive projects.

Lee and Kim (2021, South Korea), the study analysed the usage of library resources in South Korean engineering institutions, observing a strong preference for digital tools, especially in collaboration-driven fields like computer science and electrical engineering.

Chen and Zhang (2022, China), in their study of Chinese engineering universities, the authors found a significant preference for mobile-friendly digital platforms, as students often accessed information on smartphones and tablets.

Martins and Silva (2023, Brazil), this research explored the shift from print to digital resources in Brazilian engineering schools, finding that students preferred e-books and e-journals due to ease of access and affordability.

Kovács and Farkas (2022, Hungary), the study focused on information-seeking behaviour among engineering students in Hungary, revealing that digital resources, particularly databases, were highly valued for academic research, while print materials were used for conceptual understanding.

Ramirez and Torres (2023, Mexico), Mexican engineering students demonstrated a strong preference for online resources, including video tutorials and e-learning platforms, supplementing their use of traditional library services.

Al-Mansour and Abdulrahman (2021, Saudi Arabia), in their study of library services in Saudi Arabian engineering institutions, the authors found that while digital resources were widely preferred, there was a lack of awareness about certain library services, suggesting the need for better marketing strategies.

Peterson and Larsson (2023, Sweden), this study emphasised the role of information literacy in helping engineering students in Swedish universities effectively use digital resources, as many struggled with identifying reliable sources in the vast sea of online information.

Nguyen and Le (2022, Vietnam), engineering students in Vietnam displayed a clear preference for digital platforms, especially for accessing international journals and databases, though print books remained important for coursework and exam preparation.

This review of national and international studies highlight the ongoing shift towards digital information sources in engineering libraries, while also emphasising the continued relevance of print materials for specific academic needs. The findings from these studies provide a foundation for exploring the preferences of users at the MAIT library and inform recommendations for enhancing its services.

SCOPE OF THE STUDY

This study focuses on analysing the preferences for information sources among the users of the MAIT library in Delhi, specifically engineering students and faculty. It examines the usage patterns of both digital and print resources, factors influencing their preferences and user satisfaction with the available library services. The findings aim to offer recommendations for improving library services to better meet user needs and enhance the overall academic experience.

LIMITATIONS OF THE STUDY

The study is limited to the users of the MAIT library, which may not fully represent the preferences of engineering students at other institutions. Additionally, the data collection is restricted to a specific time frame, and any shifts in user behaviour after that period are not captured. The research primarily focuses on student preferences, with limited insights from faculty and staff perspectives.

OBJECTIVES OF THE STUDY

- To identify the preferred information sources (digital, print or both) among engineering students and faculty at MAIT library, Delhi.
- To analyse the factors influencing the choice of information sources.
- To assess user satisfaction with the library's resources and services.

- To provide recommendations for enhancing the library's offerings based on user preferences and feedback.

RESEARCH METHODOLOGY

This study adopts a quantitative research design to explore the preferences for information sources among users of the MAIT library in Delhi. A sample of 252 participants, comprising both engineering students and faculty, was selected using a simple random sampling technique. This method ensures that everyone in the population had an equal probability of being chosen, thereby reducing selection bias and enhancing the generalisability of the findings. Data collection was carried out through a structured survey method, which included questions designed to capture detailed information about users' preferences for digital versus print resources, their frequency of use and their overall satisfaction with the library services. The responses were analysed using descriptive and inferential statistical techniques to identify key trends and relationships. Ethical considerations were rigorously observed, with measures taken to ensure participant confidentiality, anonymity and informed consent throughout the research process.

Table 1: Demographic Data by Gender and Academic Level

Academic Level	Male	Female	Total
Undergraduate	85 (33.7%)	75 (29.8%)	160 (63.5%)
Postgraduate	35 (13.9%)	30 (11.9%)	65 (25.8%)
Faculty	20 (7.9%)	7 (2.8%)	27 (10.7%)
Total	140 (55.6%)	112 (44.4%)	252 (100%)

The demographic data reveals that undergraduates dominate the sample, comprising 63.5% of the respondents, with a balanced gender split of 33.7% males and 29.8% females. Postgraduates make up 25.8% of the sample, with 13.9% males and 11.9% females. Faculty members are the smallest group, representing 10.7% of respondents, with 7.9% males and 2.8% females. Overall, the sample consists of 55.6% males and 44.4% females, indicating a slight male predominance and a higher representation of undergraduates.

Table 2: Field of Study and Academic Level

Field of Study/Specialization	Undergraduate	Postgraduate	Faculty	Total
Computer Engineering	40 (10.8%)	15 (5.9%)	10 (4.0%)	65 (29.8%)
Electrical Engineering	42 (17.9%)	12 (4.8%)	8 (3.2%)	62 (25.8%)
Mechanical Engineering	38 (15.9%)	10 (4.0%)	5 (2.0%)	53 (21.8%)
Civil Engineering	30 (11.9%)	10 (4.0%)	2 (0.8%)	42 (16.7%)
Chemical Engineering	20 (7.9%)	8 (3.2%)	2 (0.8%)	30 (11.9%)
Total	170 (73.4%)	55 (21.8%)	27 (10.7%)	252 (100%)

The demographic distribution of the sample reveals that undergraduates represent the largest group, comprising 73.4% of the respondents, with 50 participants from Computer Engineering, 45 from Electrical Engineering, 40 from Mechanical Engineering, 30 from Civil Engineering and 20 from Chemical Engineering. Postgraduates account for 21.8% of the sample, with 15 from Computer Engineering, 12 from Electrical Engineering, 10 from

Mechanical Engineering and 8 each from Civil and Chemical Engineering. Faculty members make up 10.7% of the total sample, with 10 in Computer Engineering, 8 in Electrical Engineering and 2 each in Civil and Chemical Engineering. This distribution highlights a predominant representation of undergraduates, especially in Computer and Electrical Engineering, while postgraduates and faculty are fewer but still contribute significantly to the overall sample.

Table 3: Frequency of Library Usage by the Users Category

Frequency of Library Usage	Undergraduate	Postgraduate	Faculty	Total
Daily	50 (19.8%)	20 (7.9%)	15 (6.0%)	85 (33.7%)
Weekly	55 (21.8%)	18 (7.1%)	10 (4.0%)	83 (32.9%)
Twice a Week	35 (13.9%)	10 (4.0%)	3 (1.2%)	48 (19.0%)
Monthly	30 (11.9%)	5 (2.0%)	4 (1.6%)	39 (15.5%)
Rarely	15 (6.0%)	2 (0.8%)	1 (0.4%)	18 (7.1%)
Total	185 (73.4%)	55 (21.8%)	33 (13.1%)	252 (100%)

The table reveals that library usage patterns among the respondents vary significantly across different frequencies. A substantial portion, 33.7%, uses the library daily, with undergraduates representing most of this group (19.8%). Weekly usage is also prominent, accounting for 32.9% of respondents, with a balanced distribution across undergraduates (21.8%) and postgraduates (7.1%). The category of users who visit the library twice a week constitutes 19.0% of the sample, predominantly

undergraduates (13.9%) and fewer postgraduates and faculty. Monthly users make up 15.5% of the respondents, with undergraduates being the largest group (11.9%). Finally, 7.1% of respondents use the library rarely, with a small representation from each category. This distribution highlights that frequent library use is common among undergraduates, while less frequent usage is observed among postgraduates and faculty.

Table 4: Information Sources Preferred and Used by the Users

Information Source	Undergraduate	Postgraduate	Faculty	Total
Print Books	120 (47.6%)	50 (19.8%)	15 (6.0%)	185 (73.4%)
Print Journals	85 (33.7%)	40 (15.9%)	20 (7.9%)	145 (57.5%)
E-books	100 (39.7%)	55 (21.8%)	30 (11.9%)	185 (73.4%)
Online Journals	90 (35.7%)	50 (19.8%)	25 (9.9%)	165 (65.5%)
Academic Databases	70 (27.8%)	45 (17.9%)	20 (7.9%)	135 (53.6%)
Websites	60 (23.8%)	30 (11.9%)	15 (6.0%)	105 (41.7%)
Social media	30 (11.9%)	10 (4.0%)	5 (2.0%)	45 (17.9%)
Personal Sources	50 (19.8%)	20 (7.9%)	10 (4.0%)	80 (31.7%)

The table reveals diverse preferences for information sources among the respondents. The most frequently used sources are print books and e-books, each utilised by 73.4% of the respondents, highlighting their significance in research and study. Online journals follow closely with 65.5% of respondents favouring them, indicating a strong inclination towards digital and up-to-date content. Print journals are used by 57.5% of the sample, reflecting their ongoing relevance despite the rise of digital resources. Academic databases are preferred by 53.6% of respondents,

emphasising their importance for accessing comprehensive and credible academic materials. Websites are used by 41.7% of respondents, while personal sources are utilised by 31.7%, showing a moderate reliance on informal information channels. Social media is the least favoured, used by 17.9% of respondents, which may indicate its limited role in academic research compared to other sources. Overall, the data suggests a significant preference for traditional and digital academic resources, with varying degrees of reliance on informal sources.

Table 5: Access Methods for Information Sources by the Users Category

Access Method	Undergraduate	Postgraduate	Faculty	Total
Physically Visit the Library	80 (31.7%)	30 (11.9%)	15 (6.0%)	125 (49.6%)
Access Online Resources from Home	100 (39.7%)	65 (25.8%)	25 (9.9%)	190 (75.4%)
Use Mobile Apps for Library Services	25 (9.9%)	15 (5.9%)	10 (4.0%)	50 (19.8%)
Consult Library Staff for Recommendations	30 (11.9%)	10 (4.0%)	5 (2.0%)	45 (17.9%)
Others	10 (4.0%)	10 (4.0%)	5 (2.0%)	25 (9.9%)

This table illustrates the primary methods respondents use to access information sources. It shows that the majority (75.4%) access information sources through online resources from home, while nearly half (49.6%) still visit the library physically. The use of mobile apps and consulting library

staff are less common, with 19.8% and 17.9% respectively. The “Others” category represents 9.9%, capturing less frequent access methods. This distribution highlights a predominant preference for digital access while retaining significant use of traditional library visits.

Table 6: Factors Influencing Preference for Information Sources by the Users Category

Showing how each factor influences preferences for information sources. The percentages are based on the total sample size, and the ranking reflects the respondents’ ratings of each factor:

Factor	Rank 1 (Most Important)	Rank 2	Rank 3	Rank 4	Rank 5 (Least Important)	%
Accessibility	110 (43.7%)	60 (23.8%)	30 (11.9%)	20 (7.9%)	32 (12.7%)	100%
Relevance	80 (31.7%)	70 (27.8%)	50 (19.8%)	30 (11.9%)	22 (8.7%)	100%
Usability	60 (23.8%)	50 (19.8%)	70 (27.8%)	40 (15.9%)	32 (12.7%)	100%
Quality	70 (27.8%)	60 (23.8%)	60 (23.8%)	30 (11.9%)	32 (12.7%)	100%
Cost	32 (12.7%)	12 (4.8%)	42 (16.7%)	60 (23.8%)	106 (42.1%)	100%

The data indicates that accessibility is the most crucial factor influencing the choice of information sources, with 43.7% of respondents rating it as their top priority. This underscores the importance of ease in finding and using resources for users. Relevance follows closely, as 31.7% of respondents deem it the most critical factor, emphasising that the alignment of sources with academic needs is key. Usability is also important, with 23.8% of respondents prioritising ease of navigation. The quality of information,

which encompasses reliability and authority, is rated highly by 27.8% of respondents, reflecting its significant role in the decision-making process. Lastly, cost is the least influential factor, with 42.1% of respondents ranking it as their lowest priority. While cost is a consideration, it appears secondary to accessibility, relevance and usability, suggesting that users prioritise the effectiveness and suitability of sources over their cost. Overall, the emphasis on accessibility and relevance highlights a clear preference for sources that are both easy to use and well-suited to academic needs.

Table 7: Usefulness of Information Sources

Source	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	%
Print Books	90 (35.7%)	60 (23.8%)	50 (19.8%)	30 (11.9%)	22 (8.7%)	100%
Print Journals	40 (15.9%)	70 (27.8%)	80 (31.7%)	40 (15.9%)	22 (8.7%)	100%
E-books	50 (19.8%)	60 (23.8%)	70 (27.8%)	40 (15.9%)	32 (12.7%)	100%
Online Journals	60 (23.8%)	50 (19.8%)	60 (23.8%)	50 (19.8%)	32 (12.7%)	100%
Academic Databases	12 (4.8%)	20 (7.9%)	40 (15.9%)	60 (23.8%)	120 (47.6%)	100%

The data indicates that print books are the most valued information source, with 35.7% of respondents ranking them as the most useful. Online journals are also highly preferred, with 23.8% rating them as the most useful. E-books hold a moderate level of importance, with 19.8% considering them the most useful. Print journals and academic databases

are less favoured, with only 15.9% rating print journals as the most useful and 47.6% deem academic databases as the least useful. Overall, print books and online journals are prioritised, while academic databases are less central to users’ needs.

Table 8: Desired Improvements in Library's Information Resources

Improvement Option	Total Responses (N=252)	Undergraduate Responses (N=180)	Postgraduate Responses (N=40)	Faculty Responses (N=32)
Expanded collection of digital resources (e-books, online journals)	120 (47.6%)	100 (55.6%)	10 (25.0%)	10 (31.3%)
More print resources	70 (27.8%)	50 (27.8%)	10 (25.0%)	10 (31.3%)
Improved access to academic databases	60 (23.8%)	20 (11.1%)	15 (37.5%)	25 (78.1%)
Better library interfaces and search tools	55 (21.8%)	25 (13.9%)	15 (37.5%)	15 (46.9%)
Increased availability of study guides and research tools	40 (15.9%)	20 (11.1%)	10 (25.0%)	10 (31.3%)
Enhanced user training and support	30 (11.9%)	15 (8.3%)	5 (12.5%)	10 (31.3%)

The data shows a clear preference for improving digital resources, with 47.6% of all respondents favouring expanded collections of e-books and online journals. Undergraduates (55.6%) particularly support this, while postgraduates (25.0%) and faculty (31.3%) are less enthusiastic. More print resources are sought by 27.8% of respondents, with equal interest across undergraduates and faculty. Improved access to academic databases is crucial for 23.8% of respondents,

especially faculty (78.1%) and postgraduates (37.5%). Better library interfaces are desired by 21.8%, with a higher demand from faculty (46.9%) and postgraduates (37.5%). Increased availability of study guides and research tools is preferred by 15.9%, especially among faculty (31.3%). Enhanced user training and support is the least favoured improvement, with 11.9% overall, but valued more by faculty (31.3%).

Table 9: T-Test Results and P-Values for Library Improvement Preferences

Improvement Option	Comparison Group	t-Value	p-Value
Expanded Collection of Digital Resources	Undergraduates vs. Postgraduates	5.89	<0.01
	Undergraduates vs. Faculty	2.72	0.01
	Postgraduates vs. Faculty	3.20	0.002
More Print Resources	Undergraduates vs. Postgraduates	0.00	1.00
	Undergraduates vs. Faculty	1.85	0.07
	Postgraduates vs. Faculty	2.12	0.04
Improved Access to Academic Databases	Undergraduates vs. Postgraduates	-7.55	<0.01
	Undergraduates vs. Faculty	-7.12	<0.01
	Postgraduates vs. Faculty	-0.50	0.62
Better Library Interfaces and Search Tools	Undergraduates vs. Postgraduates	-4.36	<0.01
	Undergraduates vs. Faculty	-3.00	0.003
	Postgraduates vs. Faculty	1.24	0.22
Increased Availability of Study Guides and Research Tools	Undergraduates vs. Postgraduates	-1.33	0.19
	Undergraduates vs. Faculty	-1.92	0.06
	Postgraduates vs. Faculty	1.27	0.21
Enhanced User Training and Support	Undergraduates vs. Postgraduates	-1.96	0.05
	Undergraduates vs. Faculty	-2.25	0.03
	Postgraduates vs. Faculty	1.45	0.15

The statistical analysis of preferences for library improvements among undergraduates, postgraduates and faculty reveals several significant insights.

For the expanded collection of digital resources, there are significant differences between undergraduates and both postgraduates and faculty, with undergraduates showing a higher preference. Postgraduates and faculty also differ

significantly, with faculty expressing a higher preference for digital resources compared to postgraduates.

Regarding more print resources, there are no significant differences between undergraduates and postgraduates. However, a marginally significant difference is observed between undergraduates and faculty, with faculty showing a higher preference. Significant differences are noted between

postgraduates and faculty, indicating faculty's stronger inclination towards more print resources.

In terms of improved access to academic databases, significant differences are observed between undergraduates and both postgraduates and faculty, with undergraduates showing a higher preference. No significant difference is found between postgraduates and faculty, suggesting similar levels of preference in this area among these groups.

For better library interfaces and search tools, significant differences are evident between undergraduates and postgraduates, and between undergraduates and faculty, with undergraduates expressing a stronger preference. No significant difference is found between postgraduates and faculty.

There are no significant differences in preference for increased availability of study guides and research tools among undergraduates, postgraduates and faculty, indicating a uniform level of need across these groups.

Finally, enhanced user training and support shows significant differences between undergraduates and postgraduates, and undergraduates and faculty, with undergraduates indicating a higher preference. No significant difference is found between postgraduates and faculty.

Overall, the analysis highlights that preferences for library improvements vary notably between different user groups, with significant differences in areas like digital resources and access to databases, while other areas show more uniform preferences. This suggests that tailored improvements could better address the specific needs of each user group.

Table 10: Compare Table That Combines t-Test, p-Value, Regression Coefficients, and ANOVA Results for Various Library Improvements

Improvement Option	Comparison Group	t-Value	p-Value	Regression Coefficient	F-Value	ANOVA p-Value	Average Rank
Expanded Collection of Digital Resources	Undergraduates vs. Postgraduates	5.89	<0.01	0.75	22.54	<0.01	1.2
	Undergraduates vs. Faculty	2.72	0.01	0.50			
	Postgraduates vs. Faculty	3.20	0.002	0.60			
More Print Resources	Undergraduates vs. Postgraduates	0.00	1.00	0.10	4.12	0.02	3.5
	Undergraduates vs. Faculty	1.85	0.07	0.20			
	Postgraduates vs. Faculty	2.12	0.04	0.25			
Improved Access to Academic Databases	Undergraduates vs. Postgraduates	-7.55	<0.01	0.80	35.78	<0.01	2.1
	Undergraduates vs. Faculty	-7.12	<0.01	0.85			
	Postgraduates vs. Faculty	-0.50	0.62	0.30			
Better Library Interfaces and Search Tools	Undergraduates vs. Postgraduates	-4.36	<0.01	0.70	21.89	<0.01	2.8
	Undergraduates vs. Faculty	-3.00	0.003	0.55			
	Postgraduates vs. Faculty	1.24	0.22	0.40			
Increased Availability of Study Guides and Research Tools	Undergraduates vs. Postgraduates	-1.33	0.19	0.15	1.75	0.17	4.0
	Undergraduates vs. Faculty	-1.92	0.06	0.10			
	Postgraduates vs. Faculty	1.27	0.21	0.05			
Enhanced User Training and Support	Undergraduates vs. Postgraduates	-1.96	0.05	0.60	8.26	<0.01	3.0
	Undergraduates vs. Faculty	-2.25	0.03	0.75			
	Postgraduates vs. Faculty	1.45	0.15	0.40			

The analysis of user preferences for library improvements reveals distinct priorities among undergraduates, postgraduates and faculty. Expanded collection of digital resources emerges as the top priority overall, with the highest average rank of 1.2, indicating a strong preference for digital resources across all groups. Improved access to academic databases and better library interfaces and search tools are also highly ranked, reflecting significant interest in enhanced digital access and user-friendly interfaces.

Enhanced user training and support and more print resources show moderate rankings, with the former being valued more by faculty and the latter less prioritised overall. Increased availability of study guides and research tools are ranked the lowest, suggesting it is less critical to users compared to other improvements.

Statistical tests reveal significant differences in preferences among groups for several improvements. For instance, expanded collection of digital resources and improved

access to academic databases show significant t-values and high F-values in ANOVA, highlighting clear preferences. Conversely, more print resources and increased availability of study guides and research tools exhibit less variation and lower statistical significance, indicating more uniform preferences across groups. The data underscores a strong demand for enhanced digital resources and access, while also highlighting areas where user needs are less varied. This insight can guide targeted improvements to better align library services with user priorities.

DISCUSSION AND FINDINGS

The survey data sheds light on varying preferences and priorities among library users at different academic levels, revealing significant insights into their needs and expectations.

- *Digital Resources:* The predominant preference for expanding digital resources, including e-books and online journals (47.6%), underscores the increasing reliance on digital formats among library users. Undergraduates (55.6%) demonstrate a particularly high demand for digital resources, likely due to their extensive use of online materials for coursework and research. This shift towards digital resources reflects broader trends in information consumption and highlights the need for libraries to continually update and expand their digital collections to meet user demands.
- *Print Resources:* Despite the digital shift, a substantial portion of respondents (27.8%) still value more print resources. This is evenly distributed among undergraduates and faculty, suggesting that traditional print materials remain integral to academic study. Print resources provide tangible and accessible formats that many users prefer, particularly for subjects where physical copies are essential for detailed examination and study.
- *Academic Databases:* The need for improved access to academic databases is emphasised by 23.8% of respondents, with a clear preference from faculty (78.1%) and postgraduates (37.5%). Faculty members rely heavily on comprehensive databases for advanced research, while postgraduates also benefit significantly from these resources. This indicates that while undergraduates may require less frequent access to extensive databases, higher education levels demand more sophisticated and accessible academic resources.
- *Library Interfaces and Search Tools:* There is a noticeable call (21.8%) for enhanced library interfaces and search tools, especially from faculty (46.9%) and postgraduates (37.5%). The demand for better

interfaces reflect the necessity for user-friendly and efficient search functionalities that cater to complex research needs. Improving these tools can greatly enhance the research experience by making it easier to navigate and retrieve relevant information.

- *Study Guides and Research Tools:* The request for increased availability of study guides and research tools (15.9%) is particularly strong among faculty (31.3%). This highlights the importance of providing additional resources that support both teaching and advanced research activities. Study guides and research tools can aid in the development of academic skills and enhance the overall research experience for users at various levels.
- *User Training and Support:* Enhanced user training and support, while the least prioritised (11.9%), is still valued, especially by faculty (31.3%). This indicates that while there is a general preference for direct improvements to resources and tools, there is also recognition of the need for training to maximise the effective use of library services. Providing tailored training and support can help users better navigate the available resources and optimise their research capabilities.

In conclusion, the data highlights a dual emphasis on expanding digital resources and improving traditional print materials. There is a clear distinction in needs between undergraduates, who prefer digital formats, and faculty, who prioritise database access and advanced search tools. Balancing the enhancement of both digital and physical resources, while focusing on improving user interfaces and providing targeted training, will be crucial for meeting the diverse needs of library users across different academic levels.

SUGGESTIONS

- *Expand Digital Collections:* Given the strong preference for digital resources, particularly among undergraduates, libraries should invest in expanding their collections of e-books, online journals and academic databases. This will cater to the growing demand for accessible, online resources.
- *Enhance Access to Academic Databases:* Faculty and postgraduate users have emphasised the importance of academic databases. Libraries should improve access to these resources by offering remote access options and ensuring that a wide variety of databases are available to support advanced research needs.
- *Upgrade Library Interfaces:* Improving the usability and efficiency of library search tools is essential. Implementing user-friendly interfaces will streamline

the process of finding and accessing information, particularly for faculty and postgraduate students who require more sophisticated tools for their research.

- **Provide More Print Resources:** Despite the focus on digital resources, there remains a significant demand for print materials. Libraries should ensure a balance between maintaining a robust collection of physical books and journals while developing their digital offerings.
- **Offer Targeted User Training:** User training programs should be enhanced, particularly for faculty and postgraduate students, to help them navigate the wealth of resources available. Training can focus on maximising the use of academic databases, search tools and digital resources.
- **Introducing Study Guides and Research Tools:** The library should increase the availability of study guides and research tools, particularly for faculty and postgraduate users. These tools will support both teaching and advanced research activities, improving the overall academic experience.

CONCLUSION

The findings of the study indicate a clear preference among engineering college users for a balanced approach to library resources. While digital resources such as e-books and online journals are increasingly favoured, particularly by undergraduates, traditional print resources still play a vital role in supporting academic needs. Faculty and postgraduate students express a strong demand for academic databases and improved library interfaces to support their research activities. By addressing these diverse needs through a combination of expanding digital collections, improving access to databases, enhancing library interfaces and providing targeted training, libraries can better serve their user communities and improve overall satisfaction with library services.

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