



Assessing the Role of Information Literacy Competencies in Enhancing University Library Usage

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Abstract

Purpose: This study explores how information literacy competencies influence university students' utilization of academic library services. It investigates multiple dimensions of user experience, including access to information resources, digital literacy, search behavior, awareness of library services, instruction programs, staff support, technological infrastructure, and overall satisfaction.

Design/methodology/approach: A quantitative descriptive survey design was adopted, collecting 380 valid responses from students at a Bangladeshi university. A structured questionnaire covering nine thematic areas was used to gather data, which was analyzed using descriptive statistics and reliability measures.

Findings: Results reveal that students demonstrate moderate to strong competencies in digital and information literacy, especially in locating and ethically using information. Awareness of core library services and satisfaction with staff support are high. However, gaps exist in advanced search skills, technological infrastructure usability, and awareness of specialized services. Findings suggest that library instruction programs, while impactful, require greater participation and visibility.

Practical implications: Academic libraries must enhance the visibility and customization of instruction programs, address gaps in digital search skills, and invest in technological infrastructure to meet users' evolving academic needs.

Originality/value: The study provides empirical evidence on how multidimensional information literacy skills shape library usage and satisfaction. It identifies actionable service improvement areas within the under-researched context of Bangladeshi university libraries.

Keywords: Information literacy, Academic libraries, Digital literacy, Library usage, User satisfaction, Library instruction, Bangladesh

Introduction

The modern university landscape is characterized by a rapidly evolving technological environment where access to information is crucial for academic success. As higher education institutions pivot towards digital resources to cater to diverse learning needs, the role of information literacy competencies becomes increasingly significant. Information literacy, defined as the ability to recognize when information is needed and to locate, evaluate, and effectively use this information, is essential for enhancing university library usage (Bulugu & Nkebukwa, 2024). University libraries play a critical role in fostering information literacy by providing access to diverse resources, instructional programs, and guidance that enable students to navigate and utilize information effectively.

Ukwoma et al. (2016) found that a significant portion of students at the University of Nigeria possessed digital literacy skills that enabled them to interact effectively with ICT tools, suggesting a strong correlation between digital competencies and academic performance. In this context, the ability to navigate library systems and access information reliably supports not only academic success but also fosters lifelong learning skills that are essential in today's information-rich society. Furthermore, digital literacy programs serve as vital channels through which individuals can access and share information, indicating that awareness of such competencies leads to greater library engagement (Bulugu & Nkebukwa, 2024). Moreover, effective library instruction programs are fundamental in equipping users with the necessary skills to utilize library resources. Universities are increasingly employing digital literacy training in response to evolving educational demands (Detlor et al., 2019). A critical examination of library instruction practices and their outcomes can help align user support with technological advancements and changing information landscapes. Additionally, awareness of available resources significantly influences users' engagement with library services. Insufficient knowledge about offerings can hinder library utilization, as observed during the transition to online services necessitated by the COVID-19 pandemic (Begum & Elahi, 2022). The discussion around user satisfaction also plays a pivotal role in understanding library efficacy. Libraries that deliver satisfactory services are integral to student retention and academic success, yet comprehensive assessments focusing on user feedback remain limited (Idhalama et al., 2025). Through measuring user satisfaction, libraries can gain insights into

the effectiveness of their programs and identify areas requiring enhancement, ultimately leading to improved library experiences and increased utilization.

This research aims to examine the critical intersection of information literacy competencies and library usage within the university context. It aims to provide empirical data to support enhanced resource accessibility and user engagement strategies while identifying existing service gaps in need of attention. By exploring these domains, the study aspires to navigate the evolving information landscape and reinforce the vital role of libraries in academia in the digital age.

Objectives of the Study

The primary objectives of this study are

- To evaluate access to library resources and technological infrastructure
- To assess users’ digital literacy and information searching skills
- To examine awareness and utilization of library services
- To analyze the role and effectiveness of library instruction programs and staff support
- To measure overall user satisfaction with library services

Literature Review

The exploration of information literacy competencies and their impact on university library usage is a crucial area of research as institutions seek to adapt to the changing educational landscape characterized by reliance on digital technology. The transition to e-learning has widened the scope of educational resources available to students, highlighting the necessity for robust access to both physical and digital library collections. Riyanto et al. (2023) emphasize that understanding data regarding library collections is essential for libraries to adapt their services to user needs, thereby ensuring they meet contemporary educational demands effectively. It is also noted by Wanyonyi et al. (2018) that employing modern digital technology in library operations significantly enhances user access to information and is critical for meeting the demands of a tech-savvy student body. The adequacy of library collections is crucial for user satisfaction, as users increasingly prefer electronic resources over print materials (Mairaj & Naseer, 2013). Considering these factors, a comprehensive evaluation of technological infrastructure is essential to ascertain how well libraries serve their users.

Digital literacy emerges as a fundamental competency that influences user engagement with library resources. The rapid development of digital resources necessitates adept

information-seeking behaviors among users, underscoring the shift towards online information retrieval (Niu & Hemminger, 2011). Alam (2020) posits that competencies in navigating digital environments directly impact user satisfaction, which correlates with access to quality information. Furthermore, the need for effective information literacy programs is echoed by Gunasekera (2010), who suggests that tailored literacy initiatives can significantly enhance awareness and utilization of library services. This emphasis on developing digital literacy skills is vital for empowering users, ultimately leading to increased library usage and satisfaction.

Assessing awareness and utilization of library services reveals the contiguity between the existence of resources and their effective absorption by users. The strategic directions in library services can greatly influence user satisfaction, particularly in light of external competition from online information providers (Choshaly & Mirabolghasemi, 2019). Effective marketing and service promotion are thus imperative for enhancing user engagement (Gibbons, 2013). The role of library instruction programs is critical; library staff's training in engaging users and promoting services directly correlates with increased user awareness and utilization (Hindagolla & Weerasinghe, 2022).

Library instruction programs play a pivotal role in cultivating information literacy among users. Hermansyah et al. (2022) advocate for a user-centric approach to service provision, signaling the need for libraries to reassess their instructional methodologies to enhance user satisfaction. The impact of personalized support from library staff has been emphasized by Ikolo (2015), who found that user satisfaction is significantly associated with the quality of interactions with library personnel. Moreover, consistent feedback from users regarding library services can guide libraries in improving their instructional offerings (Detlor and Ball, 2015).

User satisfaction is an essential metric for evaluating library efficacy. Several studies demonstrate that service quality directly influences user satisfaction levels. For instance, Alam and Mezbah-UI-Islam (2022) utilize structural equation modeling to reveal that various dimensions of service quality, including the familiarity of library staff and collection adequacy, significantly impact satisfaction. Additionally, the perceived adequacy of service offerings is closely tied to library users' satisfaction rates. Regular assessments of user satisfaction not only

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inform libraries about potential areas for improvement but also guide the strategic decision-making process to better serve users' needs (Hakala & Nygrén, 2010).

Research gap in existing literature: The review of the current literature surrounding information literacy and its implications for library usage highlights several notable research gaps that warrant further exploration. Here, we outline significant areas that require further inquiry, categorized based on the evolving roles of information literacy in academic settings, service effectiveness, instructional practices, and outreach efforts.

A considerable body of literature has focused on the integration of information literacy into academic curricula. However, there remains a shortfall in comprehensive studies that evaluate the practical execution and real-world impact of these literacy programs. The inconsistencies between theoretical frameworks and practical applications of information literacy education in academic libraries suggest a disconnect that needs to be better understood (Cuevas-Cerveró et al., 2023). Few studies address the literacy needs of diverse students, including non-traditional learners and those at different educational levels (Testers et al., 2024). This indicates a need for tailored approaches that accommodate unique learner profiles and assess their specific information literacy challenges. Although multiple studies have assessed the perceived quality of library services, little attention has been given to the operational effectiveness of such services across diverse user groups. Bangani (2024) highlights that there is less focus on public libraries than academic institutions in supporting information literacy and community engagement. Furthermore, information literacy programs in legal education indicate a gap in addressing the specific informational needs and literacy levels of professional fields outside academia, such as healthcare and public service (Golenko, 2023). Thus, further examinations measuring the effectiveness of outreach and service strategies designed to enhance user engagement across various professional backgrounds are warranted.

Current literature extensively reviews instructional practices in academic libraries; however, details on the pedagogical strategies employed in teaching information literacy remain limited. Library education programs should add practical teaching experiences, as reference roles and information literacy instruction continue to change (Caffrey et al., 2022). Moreover, there is a lack of empirical evidence comparing the efficacy of various instructional methods, such as in-person versus online delivery (Aharony et al., 2019). Addressing this gap

could enhance understanding of how different environments impact information literacy skill acquisition and retention among learners.

The distinct research gaps identified from the practical execution of information literacy programs to the effectiveness of library services and community engagement underscore the necessity for future studies focused on understanding the complexities of information literacy in an ever-evolving educational landscape. Addressing these gaps would help libraries improve service delivery and adapt their instructional practices to meet the diverse needs of their user base more effectively.

Methodology

This study employed a quantitative descriptive survey design to evaluate user perceptions across key domains of academic library service. The research tool was a structured questionnaire that captured self-reported responses on a five-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The study targeted users (students) from a university library in Bangladesh. A total of 380 valid responses were collected through random sampling. The questionnaire was structured into nine thematic sections, each representing a key domain: Access to Information Resources, Digital Literacy Skills, Information Searching Behavior, Awareness of Library Services, Library Instruction Programs, Staff Support and Guidance, Technological Infrastructure, Information Literacy, and User Satisfaction. Each section contained 4 to 6 items. The survey was distributed both in printed form inside the library premises and digitally through institutional email over four weeks. Before participation, all respondents were briefed about the study's purpose and assured of their anonymity and data confidentiality. The collected data were entered and analyzed using SPSS (Statistical Package for the Social Sciences). Descriptive statistics, mean scores, and standard deviations were computed for each item to evaluate the central tendency and dispersion of responses. The higher the mean, the more positively users perceived the corresponding aspect of library services. Standard deviation values provided insight into the variability of responses within each group. To ensure the internal consistency of the survey instrument, Cronbach's alpha was calculated for each of the nine thematic sections, each representing a distinct construct of library service quality. Reliability coefficients above 0.70 are generally considered acceptable for social science research (Mohamad et al., 2015). All scales in this study demonstrated

acceptable to high reliability, with alpha values ranging from 0.830 to 0.894. This indicates that the items within each construct consistently measure the intended underlying concept.

Data Analysis

Reliability Results Overview

The internal consistency of the constructs was validated using Cronbach’s alpha. Table 1 presents the reliability coefficients for each construct. The results confirmed strong reliability across all service dimensions. For example, the “Information Literacy” scale (6 items) yielded a Cronbach’s alpha of 0.894, and “Digital Literacy Skills” returned a coefficient of 0.831, both indicating good internal consistency. The lowest alpha was recorded for “Access to Information Resources” ($\alpha = 0.830$), which still falls within the acceptable range.

Table 1: Construct Reliability

Construct	No. of Items	Cronbach’s Alpha
Access to Information Resources	5	0.830
Digital Literacy Skills	5	0.831
Information Searching Behavior	5	0.862
Awareness of Library Services	5	0.853
Library Instruction Programs	5	0.884
Staff Support and Guidance	5	0.885
Technological Infrastructure	5	0.886
Information Literacy	6	0.894
User Satisfaction	5	0.861

Source(s): Author's own creation

Table 2: Access to Information Resources

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
The library provides sufficient print and digital resources for my academic needs.	10.8%	14.5%	24.2%	33.2%	17.4%	3.402	1.138
I can access library resources quickly and conveniently.	5.5%	10.3%	28.4%	36.8%	18.9%		
The library's collection covers various subjects relevant to my studies.	8.9%	11.3%	28.2%	35.0%	16.6%		

The availability of library resources meets my academic or research deadlines.	6.1%	14.7%	27.4%	37.1%	14.7%		
The library ensures the continuous availability of its online resources.	7.9%	11.6%	33.4%	30.0%	17.1%		

Source(s): Author's own creation

Table 2 shows that users generally perceive access to resources as adequate, though a notable number remain neutral, suggesting variability in availability or awareness. While digital and print resources are fairly accessible, there's room to improve coverage across subject areas and ensure consistent online availability.

Table 3: Digital Literacy Skills

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
I am proficient in using the library's digital catalog for resource searches.	9.2%	11.6%	24.7%	37.4%	17.1%		
I can efficiently navigate online academic databases.	6.6%	11.3%	37.4%	31.1%	13.7%		
I am confident in using digital tools to organize my academic information.	5.3%	12.4%	30.3%	35.0%	17.1%	3.462	1.1
I can resolve minor technical issues while accessing digital resources.	6.8%	8.9%	30.8%	36.1%	17.4%		
I can seamlessly integrate digital resources into my academic tasks.	6.1%	7.6%	28.7%	34.7%	22.9%		

Source(s): Author's own creation

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Most users feel confident navigating digital tools and platforms. However, the high neutral responses indicate that a segment of users may lack deeper digital skills, pointing to the need for more targeted support or training (see Table 3).

Table 4: Information Searching Behavior

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
I can identify effective keywords for my academic searches.	9.2%	10.3%	23.7%	37.9%	18.9%	3.486	1.0778
I utilize advanced search techniques (e.g., Boolean operators) to refine my searches.	6.8%	12.4%	38.4%	30.8%	11.6%		
I can differentiate between academic and non-academic sources of information.	6.1%	8.2%	30.8%	38.4%	16.6%		
I evaluate search results based on their relevance and reliability.	4.7%	8.7%	26.8%	43.2%	16.6%		
I know how to modify my search strategies if initial results are unsatisfactory.	6.3%	6.8%	30.0%	35.3%	21.6%		

Source(s): Author's own creation

In Table 4, respondents demonstrate solid foundational skills in searching for information, particularly in evaluating results and modifying strategies. However, fewer users report using advanced techniques, highlighting an area for skill development.

Table 5: Awareness of Library Services

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
I know the range of library services offered to students and faculty.	9.2%	8.2%	25.5%	35.3%	21.8%	3.562	1.0958

I know how to access specialized library services for my academic needs.	5.0%	14.5%	30.5%	33.4%	16.6%		
The library regularly informs users about updates or new services.	8.2%	9.5%	29.2%	35.3%	17.9%		
I know where to find guidance about using library services.	4.5%	7.1%	25.8%	43.7%	18.9%		
I understand the library's borrowing policies and resource access rules.	5.3%	6.3%	21.6%	41.3%	25.5%		

Source(s): Author's own creation

Here in Table 5, awareness is generally strong, especially regarding borrowing policies and how to seek help. Yet, awareness of specialized services and regular updates could be improved, indicating a gap in communication and outreach.

Table 6: Library Instruction Programs

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
I have attended training sessions organized by the library to improve my research skills.	15.0%	10.8%	20.5%	38.2%	15.5%	3.368	1.1572
The library's instruction programs have enhanced my ability to locate and use resources effectively.	8.7%	12.9%	34.7%	30.0%	13.7%		
I find the library's orientation programs helpful for new users.	8.2%	10.5%	28.2%	35.3%	17.9%		

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The library offers sufficient training on utilizing digital and online resources.	7.9%	11.1%	30.8%	37.4%	12.9%		
I feel library instruction programs are tailored to meet diverse user needs.	8.7%	7.9%	28.7%	34.7%	20.0%		

Source(s): Author's own creation

Table 6 depicts that while users value library instruction, participation appears limited. The impact is positive for those who attend, but expanding these programs and increasing engagement could enhance overall research skills across the user base.

Table 7: Staff Support and Guidance

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
Library staff are approachable and willing to help with my queries.	7.9%	6.6%	18.4%	41.8%	25.3%	3.656	1.1036
The staff provides clear and effective guidance on using library resources.	5.5%	6.8%	30.0%	33.2%	24.5%		
I receive timely assistance from library staff when I encounter issues.	6.1%	6.3%	27.4%	37.9%	22.4%		
Library staff are knowledgeable about the resources and services they offer.	6.1%	6.8%	27.6%	36.3%	23.2%		
The staff actively helps users improve their information literacy skills.	6.6%	6.3%	24.5%	39.5%	23.2%		

Source(s): Author's own creation

Staff are widely seen as approachable and helpful, contributing positively to the user experience. Their support appears consistent and effective, though continued training and visibility could help reach the less-engaged users (Table 7).

Table 8: Technological Infrastructure

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
The library provides sufficient computers and internet access for all users.	17.1%	10.8%	22.6%	34.7%	14.7%	3.26	1.1738
The library's technological tools (e.g., printers and scanners) are user-friendly and reliable.	12.9%	13.4%	35.0%	28.7%	10.0%		
The library's online catalog and databases are easy to navigate.	8.9%	13.4%	31.1%	32.6%	13.9%		
The library is equipped with modern technologies to meet academic needs.	9.5%	9.7%	32.1%	32.1%	16.6%		
The technological infrastructure supports a seamless and productive research experience.	9.2%	8.2%	35.0%	32.4%	15.3%		

Source(s): Author's own creation

Table 9 demonstrates that user feedback on infrastructure is mixed. While some tools are effective, concerns remain around computer availability and ease of use. This suggests a need for investment in both resources and user-friendly technologies.

Table 9: Information Literacy

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
I can independently locate and access information resources.	6.8%	7.6%	26.8%	36.8%	21.8%	3.585	1.033
I know how to evaluate the reliability and relevance of information critically.	4.7%	8.7%	40.5%	32.6%	13.4%		
I am skilled in synthesizing information from multiple sources.	3.7%	11.6%	31.3%	37.6%	15.8%		
I understand how to use information ethically and legally.	4.7%	8.4%	24.5%	43.2%	19.2%		
I feel confident in managing my information needs effectively.	4.2%	5.5%	29.7%	40.0%	20.5%		
I can adapt my information literacy skills to various academic tasks.	5.5%	5.5%	25.0%	41.3%	22.6%		

Source(s): Author's own creation

Table 9 shows that users report strong information literacy, particularly in ethical use and evaluating sources. However, some users still feel uncertain, reinforcing the importance of sustained instructional efforts to support varied academic needs.

Table 10: User Satisfaction

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
I am satisfied with the resources provided by the library.	8.4%	7.4%	19.7%	40.0%	24.5%	3.676	1.0636

The library environment meets my academic and personal needs.	3.9%	7.4%	31.8%	38.4%	18.4%		
The library services contribute to my academic success.	6.1%	6.3%	26.6%	39.2%	21.8%		
The library supports my learning and research goals effectively.	4.5%	6.6%	24.3%	44.9%	19.8%		
I recommend the library services to others.	5.3%	5.3%	21.1%	40.8%	27.6%		

Source(s): Author's own creation

Overall satisfaction is high, especially in how the library supports learning and research. Users feel the services are valuable and would recommend them to others, reflecting strong alignment between library offerings and user expectations (see Table 10).

Findings and discussion

Access to Information Resources: Users report moderate satisfaction with the library's print and digital resources, indicating that while many find them adequate, gaps remain that could affect academic performance. This aligns with Ibrahim and Aldawsari (2023), who highlight the link between resource quality and student outcomes, underscoring the need for libraries to regularly evaluate and expand their collections. Convenience of access also appears important, supporting Murtadho et al. (2023), who emphasize that easy access to information underpins digital literacy and academic achievement. The presence of neutral and negative responses suggests areas where operational improvements could enhance user experience.

Digital Literacy Skills: Regarding digital literacy skills, findings reveal a general confidence among users, with a mean of 3.462 when navigating the library's digital catalog. However, with only 22.9% feeling confident in integrating digital resources into their academic tasks, there is a clear signal that digital literacy education remains an area for growth. Higher levels of digital literacy are directly related to better academic performance, reinforcing the need for library programs that focus on enhancing these skills (Tezer et al., 2024). Furthermore, results are consistent with findings by Ussarn et al. (2022), who argue that students require more targeted practice to effectively develop their digital literacy skills. Hence, investing in user training and resources about digital literacy should be a priority to maximize student success.

Information Searching Behavior: Users demonstrate confidence in basic search tasks, such as identifying effective keywords, but show less skill with advanced techniques like Boolean operators. This aligns with Araniri et al. (2021), who note that students often recognize the importance of search strategies but lack the ability to apply them effectively. Similarly, the moderate ability to distinguish academic from non-academic sources reflects ongoing gaps in critical evaluation, consistent with Ngozi (2024), who emphasizes its importance for academic success. These findings highlight the need for libraries to implement targeted information literacy programs that strengthen both advanced search techniques and critical evaluation skills, supporting students' ability to locate and utilize relevant resources efficiently (Ibrahim et al., 2023).

Awareness of Library Services: The data indicates that awareness of library services among students is moderate, shown by a mean score of 3.562 for knowledge about the range of library services offered. Significant portions of users (35.3%) agree on their awareness of available services, but there remains a notable number who express uncertainty, as reflected in the 25.5% neutral responses. This aligns with findings from Jha (2023), who notes that effective orientation programs significantly raise awareness about available library services among users. Furthermore, the study by Jamali and Namande (2024) indicates that systematic library orientations enhance user awareness, resonating with the findings, supporting the importance of outreach efforts. However, the results point out a communication gap, as many users remain uncertain about specialized services, which echoes findings about the role of academic libraries in enhancing access to resources (Banleman, 2023). There is a need for better communication strategies in libraries to ensure users are aware of the extensive services available (Maina & Mwiti, 2024). These studies collectively indicate that despite efforts, libraries still face challenges in effectively communicating available services to their users.

Library Instruction Programs: Findings reveal mixed perceptions of training sessions, with a mean score of 3.368 reflecting moderate agreement that these programs enhance research skills. About 38.2% of respondents reported attending sessions, yet participation levels suggest a potential disconnect in fully engaging all users. This situation echoes the concerns raised by Shikali et al. (2024) who reported enduring challenges faced by libraries in engaging users through instructional programs, particularly during the transition to digital platforms. Moreover, Horban et al. (2024) highlight the positive correlation between library instruction and student success, suggesting that tailored instructional programs significantly influence user

engagement and resource utilization. The findings corroborate this notion, as they indicate users appreciate training but point to a need for libraries to enhance the delivery of these services to ensure that more students benefit from improved research skills.

Staff Support and Guidance: The survey indicates largely positive perceptions of library staff support, with a mean score of 3.656 for approachability and willingness to assist. Approximately 41.8% of respondents agree that staff are approachable, while 39.5% report active support in developing information literacy skills. This aligns well with findings from Idhalama et al. (2025) who underline the value of library staff's proactive involvement in cultivating information literacy. In comparison, the research by Abumandour (2020) illustrates that while supportive library staff are crucial, institutional factors such as training and resource allocation are equally vital for enhancing staff capacity to assist users effectively. This highlights a potential area for improvement; equipping library staff not only with the right tools but also with adequate training programs may empower them to provide even more meaningful support to users.

Technological Infrastructure: The data indicating that 34.7% of respondents agree that the library provides sufficient computers and internet access underscores the necessity for continued enhancements in technological resources to meet user demands. Meanwhile, a higher percentage of users expressed some dissatisfaction, as reflected in the 17.1% who strongly disagreed, which is consistent with Widowati et al.'s (2023) findings that highlight how inadequate technological infrastructure can hinder student engagement and academic performance. The average mean scores indicate general awareness of access issues, though they fall short of strong approval from most users. This aligns with Hassan and Akbar (2020), highlighting the critical role of technological literacy in academic success and emphasizing the need for continued investment in technology and infrastructure to support student performance.

Information Literacy Competencies: The results indicate that a significant portion of users feel moderately equipped in their information literacy skills, with mean scores hovering around the midpoint. 36.8% of respondents agreed that they can independently locate and access information resources, which resonates with the essential role that information literacy plays in enhancing student outcomes (Ngozi, 2024). However, many students still struggle with critical evaluation and synthesis of information, a sentiment mirrored in the only 37.6% of users who expressed confidence in synthesizing information from multiple sources (Feng & Liu, 2024). This suggests a gap in essential information literacy education that merits further

exploration, as improved training programs can foster better user engagement and library utilization.

User Satisfaction: In terms of user satisfaction, the findings indicate that 40.0% of respondents agreed with the statement regarding satisfaction with library resources. However, the findings also indicate notable areas for improvement, with significant portions of users expressing neutrality or discontent regarding the adequacy of library services. This scenario is consistent with various studies indicating that user satisfaction significantly affects library usage rates and academic engagement (Gaha et al., 2018). Insights from Rowe et al. (2021) support this correlation, emphasizing the role of effective library instruction in fostering a supportive learning environment and enhancing overall user satisfaction.

Recommendations

Based on the findings, the following recommendations are proposed to assess the role of information literacy competencies in enhancing university library usage:

1. **Improve Access to Resources**
Continuously evaluate and expand both print and digital collections based on user needs, and enhance discoverability through improved catalog systems.
2. **Strengthen Digital Literacy**
Implement targeted training programs focusing on the integration of digital resources into academic work, including self-paced tutorials and workshops.
3. **Enhance Information Searching Skills**
Provide practical sessions on advanced search techniques and create interactive resources to support independent research.
4. **Promote Source Evaluation Skills**
Integrate evaluation strategies into instruction to help students distinguish between credible and non-credible sources.
5. **Increase Awareness of Library Services**
Launch robust orientation programs and outreach campaigns to raise awareness and understanding of the full range of library services.
6. **Revitalize Library Instruction**
Redesign instructions to be more engaging and modular, and evaluate their effectiveness regularly through feedback and performance assessments.

7. **Empower Library Staff**

Offer professional development opportunities and provide the tools needed to support users effectively in digital and information literacy.

8. **Upgrade Technological Infrastructure**

Invest in faster internet, more computers, and user-friendly digital platforms to support effective access and academic work.

9. **Foster Information Literacy Competencies**

Introduce tiered training programs and consider credit-bearing courses to build comprehensive information literacy skills.

10. **Monitor User Satisfaction**

Establish regular feedback mechanisms and data-driven evaluations to continuously improve library services and user engagement.

Conclusion

This study set out to investigate the role of information literacy competencies in enhancing university library usage by evaluating user perceptions across nine interrelated dimensions: access to information resources, digital literacy, information-searching behavior, awareness and utilization of library services, effectiveness of library instruction programs, staff support, technological infrastructure, information literacy skills, and overall user satisfaction. These objectives guided a comprehensive analysis that revealed both strengths and areas for development in library service delivery within the context of a Bangladeshi university.

The findings largely support the initial objectives. Respondents generally acknowledged adequate access to digital and print resources, although neutral responses pointed to variability in either awareness or consistency of resource availability. This partially fulfills the first objective but highlights a need for improved discovery tools and communication. The second and third objectives focused on digital literacy and information-searching skills, were met with encouraging results. Students reported high confidence in basic digital tasks and ethical information use; however, less familiarity with advanced search strategies, such as Boolean operators, suggests the need for more targeted instructional support. Similarly, users showed a strong understanding of general library services, yet awareness of specialized or newly introduced services remained limited. This indicates that while foundational competencies are present, promotional efforts must be enhanced to ensure full utilization of available services.

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In alignment with the fourth objective, the study confirmed the importance of library instruction programs and staff engagement in supporting users’ academic and research activities. Those who participated in training sessions reported improved research abilities and increased confidence in navigating resources. However, participation rates were relatively low, signaling an opportunity for libraries to re-evaluate the accessibility, delivery methods, and marketing of such programs. Staff support emerged as a critical strength, with users consistently rating staff as approachable, knowledgeable, and helpful, a testament to the library’s role as an academic partner rather than a passive resource provider. Lastly, the high levels of reported satisfaction fulfill the fifth objective, affirming that when users can access the resources they need and receive proper guidance, they perceive the library as an effective contributor to their academic success.

Building on these findings, future research should adopt a broader comparative approach by involving multiple institutions or examining different demographic groups, such as non-traditional or postgraduate students. Longitudinal studies would be valuable in assessing how information literacy competencies evolve over time and in response to targeted interventions. There is also a need to explore the impact of alternative instructional methods, such as blended or flipped library instruction, and technological enhancements like interactive tutorials, virtual assistance, or personalized dashboards, on user engagement and skill acquisition. Furthermore, as AI becomes increasingly integrated into academic environments, future work should investigate AI literacy and its role in supporting effective information-seeking, critical evaluation, and digital learning. Finally, as academic libraries continue to adapt to shifting educational paradigms, research should consider the integration of emerging technologies and inclusive design strategies to support a diverse user base.

This research provides empirical insights that underscore the multifaceted nature of library usage and the central role of information literacy in shaping user experiences. The findings reaffirm that enhancing user competencies, expanding instructional outreach, and strategically improving infrastructure are vital for fostering deeper engagement with academic library services in the digital age.

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